

CONTENTS

Learning Goals	3
Art Classroom Resources	13
Geography Classroom Resources	22
History Classroom Resources	56
Information and Communications Technology (ICT) Classroom Resources	74
International Classroom Resources	89
Music Classroom Resources	100

Physical Education (PE) Classroom Resources	112
Science Classroom Resources	126
Technology Classroom Resources	148
Record Sheet for Classroom Use	166

Art Learning Goals

MILEPOST 3

By the end of the school year in which they are 12, the vast majority of children will:

- 3.1 Know that the study of art is concerned with visual and tactile expression and communication
- 3.2 Know how artists, craftspeople and designers from a variety of traditions – including those of their home country and the host country – use materials, forms and techniques to express their emotions, observations and experiences
- 3.3 **Be able to use a wide variety of materials, forms and techniques to express their emotions, observations and experiences**
- 3.4 **Be able to communicate through visual and tactile forms**
- 3.5 Be able to improve their own work
- 3.6 Be able to make judgements about works of art, showing understanding, appreciation, respect and enjoyment as appropriate
- 3.7 Be able to consider works of art in terms of meaning, design, materials, technique, place and time
- 3.8 Understand that the work of artists is influenced by their environment and that artists have an effect on the environment

Geography Learning Goals

MILEPOST 3

By the age of 12, the vast majority of children will:

- 3.1 Know that the study of geography is concerned with places and environments in the world around them
- 3.2 Know about the main physical and human features and environmental issues in particular localities
- 3.3 Know about similarities and differences between particular localities
- 3.4 Know how the features of particular localities influence the nature of human activities within them
- 3.5 Know about recent and proposed changes in particular localities
- 3.6 Know about the major geographical features of the host country
- 3.7 Know about the geography of the area around the school
- 3.8 Know about the major geographical features of their home country
- 3.9 Know about the weather and climatic conditions in their home country and how they affect the environment and the lives of people living there
- 3.10 Know about the weather and climatic conditions in the host country and how they affect the environment and the lives of people living there
- 3.11 Know how people affect the environment
- 3.12 Be able to enquire into geographical factors and their effects on people's lives
- 3.13 Be able to use a variety of sources to gather geographical information
- 3.14 Be able to collect and record evidence to answer geographical questions**
- 3.15 Be able to identify geographical patterns and to use their knowledge and understanding to explain them**
- 3.16 Be able to use appropriate geographical vocabulary to describe and interpret their surroundings**
- 3.17 Be able to use instruments to make measurements**
- 3.18 Be able to use appropriate techniques to gather information**
- 3.19 Be able to make plans and maps in a variety of scales using symbols and keys**
- 3.20 Be able to use and interpret globes and maps in a variety of scales**
- 3.21 Be able to use maps in a variety of scales to locate the position and geographical features of the host country and town, their home country and town, other countries and towns in which they and their peers have lived
- 3.22 Be able to explain how physical and human processes lead to similarities and differences between places**
- 3.23 Be able to explain how places are linked through movement of goods and People**
- 3.24 Be able to communicate their knowledge and understanding of geography in a variety of ways**
- 3.25 Understand how localities are affected by natural features and processes
- 3.26 Understand how and why people seek to manage and sustain their environment
- 3.27 Understand how the geographical features of the host country affect the lives of the people who live there

History Learning Goals

MILEPOST 3

By the end of the school year in which they are 12, the vast majority of children will:

- 3.1 Know that the study of history is concerned with the past in relation to the present
- 3.2 Know about the characteristic features of particular periods and societies
- 3.3 Know about the general history of the host country
- 3.4 Know about the general history of their home country
- 3.5 Know about the characteristic features of a particular period in the history of the host country
- 3.6 Know about the ideas, beliefs, attitudes and experiences of people in the past
- 3.7 Know about the social, cultural, religious and ethnic diversity of the periods studied
- 3.8 Know the terms associated with the periods they have studied
- 3.9 Be able to enquire into historical issues and their effects on people's lives
- 3.10 Be able to find out about aspects of the past from a range of sources**
- 3.11 Be able to describe and identify reasons for and results of historical events, situations, and changes in the periods they have studied**
- 3.12 Be able to describe and make links between the main events, situations and changes both within and across periods
- 3.13 Be able to describe how the history of the host country affects the lives of people who live there now**
- 3.14 Be able to describe how the history of one country affects that of another**
- 3.15 Be able to ask and answer questions about the past
- 3.16 Be able to select and record information relevant to an historical topic
- 3.17 Be able to place the events, people and changes in the periods they have studied into a chronological framework**
- 3.18 Be able to use dates and terms relating to the passing of time
- 3.19 Be able to communicate their knowledge and understanding of history in a variety of ways, making appropriate use of dates and historical terms
- 3.20 Understand how some aspects of the past have been represented and interpreted in different ways
- 3.21 Understand that historical sources can be different from and contradict one another and that they reflect their context of time, place and viewpoint

Information and Communications Technology (ICT) Learning Goals

MILEPOST 3

By the end of the school year in which they are 12, the vast majority of children will:

- 3.1 Know that the study of ICT is concerned with applying technology to gather, use and exchange information
- 3.2 Know about an increasing number of applications of ICT for leisure, communication and work
- 3.3 Be able to frame questions appropriately when gathering and interrogating information
- 3.4 Be able to interpret their findings**
- 3.5 Be able to identify whether their findings are valid**
- 3.6 Be able to manipulate and combine different forms of information from different sources**
- 3.7 Be able to use ICT to present information in a variety of forms**
- 3.8 Be able to exchange information and ideas in a number of different ways
- 3.9 Be able to use ICT to control events
- 3.10 Be able to use ICT to sense physical data
- 3.11 Be able to use ICT-based models and simulations
- 3.12 Understand that the quality of information affects the results of any enquiry
- 3.13 Understand the importance of considering audience and purpose when presenting information

International Learning Goals

MILEPOST 3

By the end of the school year in which they are 12, the vast majority of children will, through their study of The International Primary Curriculum:

- 3.1 Know about the key features related to the lives of people in their home country and, where appropriate, their parents' home countries
- 3.2 Know about the key features related to the lives of people in the host country and/or, where appropriate, other countries in which they have lived
- 3.3 Know about ways in which the lives of people in the countries they have studied affect each other
- 3.4 Know about similarities and differences between the lives of people in different countries
- 3.5 Be able to explain how the lives of people in one country or group are affected by the activities of other countries or groups**
- 3.6 Be able to identify ways in which people work together for mutual benefit**
- 3.7 Understand that there is value both in the similarities and the differences between different countries

Music Learning Goals

MILEPOST 3

By the end of the school year in which they are 12, the vast majority of children will:

- 3.1 Know that the study of music is concerned with musical expression and communication
- 3.2 Know how a number of musicians – including some from their home country and the host country – combine musical elements within a structure
- 3.3 Be able to sing songs in unison and in two parts
- 3.4 **Be able to play tuned and untuned instruments with control and rhythmical accuracy**
- 3.5 **Be able to perform as part of an ensemble**
- 3.6 Be able to perform with an awareness of audience
- 3.7 **Be able to compose musical pieces combining musical elements within a structure**
- 3.8 Be able to improve their own work having regard to purpose
- 3.9 Be able to listen attentively with attention to detail
- 3.10 Be able to make judgements about pieces of music, showing understanding, appreciation, respect and enjoyment as appropriate
- 3.11 Be able to consider pieces of music in terms of meaning, mood, structure, place and time
- 3.12 Understand that musicians use music to express emotions and experiences
- 3.13 Understand that the work of musicians is influenced by their environment

Physical Education (PE) Learning Goals

MILEPOST 3

By the end of the school year in which they are 12, the vast majority of children will:

- 3.1 Know that the study of physical education is concerned with healthy lifestyles and performing a range of movement activities
- 3.2 Know the principal rules of established sporting and athletic activities
- 3.3 Know the principles of water safety
- 3.4 Be able to perform with control, coordination, precision and consistency
- 3.5 Be able to plan their own performance**
- 3.6 Be able to participate in small-side team games**
- 3.7 Be able to use tactics to improve their own performance and that of a team
- 3.8 Be able to identify the features of a good performance
- 3.9 Be able to evaluate their own performance
- 3.10 Be able to refine and improve their performance based on their understanding of what is needed**
- 3.11 Be able to apply the rules and conventions of a range of sports and activities
- 3.12 Be able to use movement as a means of expression and communication
- 3.13 Be able to swim a distance of at least 100 metres
- 3.14 Understand how physical activity affects the body
- 3.15 Understand the importance of dressing appropriately for physical activity
- 3.16 Understand the importance of hygiene
- 3.17 Understand the importance of safety procedures

Science Learning Goals

MILEPOST 3

Enquiry

By the end of the school year in which they are 12, the vast majority of children will:

- 3.1 Know that the study of science is concerned with investigating and understanding the animate and inanimate world around them
- 3.2 **Be able to conduct scientific investigations**
 - posing scientific questions
 - choosing an appropriate way to investigate a scientific issue
 - using their scientific knowledge and understanding to predict the outcome
 - relating the outcome to their original prediction
 - making systematic and accurate measurements from their observations
 - drawing conclusions based on the evidence
 - explaining and justifying their predictions, investigations, findings and conclusions
 - recording and communicating their findings accurately using the most appropriate medium and the appropriate scientific vocabulary and conventions
 - repeating investigations, observations and measurements to check their accuracy and validity
 - identifying patterns in the results
 - using scientific language to explain any differences found in the results of investigations
 - suggesting ways in which their investigations and working methods could be improved
 - relating their own investigations to wider scientific ideas
- 3.3 Be able to gather evidence from a variety of sources
- 3.4 Be able to discriminate between evidence and opinion
- 3.5 Understand the importance of using evidence to test scientific ideas
- 3.6 Understand some of the effects of what they learn on people's lives

Living things

By the end of the school year in which they are 12, the vast majority of children will:

- 3.7 Know about the major classifications of living things
- 3.8 Know about the effects of food chains in a variety of environments
- 3.9 Know that changes in the environment have effects on living things
- 3.10 Know about the nature, functions and effects of micro-organisms
- 3.11 Be able to recognise and name the major plants and animals in the host country
- 3.12 Be able to classify locally occurring plants and animals according to their features
- 3.13 Be able to recognise and name the major plants and animals in their home country
- 3.14 Understand the relationship between living things and the environment in which they live

- 3.15 Know about the structure of the human body
- 3.16 Know the functions of the major internal and external parts of the human body
- 3.17 Know about similarities and differences between humans and other creatures
- 3.18 Know about the effect of exercise on the human pulse rate
- 3.19 Know about the effect of drug misuse on the human body
- 3.20 Know about the ways in which humans and other animals reproduce
- 3.21 Know that some characteristics of humans and other animals are inherited from their parents
- 3.22 Know that some characteristics of humans are influenced by their environment
- 3.23 Understand the importance of an appropriate diet for the health of humans and other animals
- 3.24 Know that some characteristics of plants are inherited from their parents
- 3.25 Know about the functions of the major parts of a plant
- 3.26 Know about factors that affect the growth of plants
- 3.27 Know about the function of roots in anchoring and feeding plants
- 3.28 Know about ways in which plants reproduce
- 3.29 Know about the effects of seed dispersal
- 3.30 Know about the conditions needed for germination

Materials

By the end of the school year in which they are 12, the vast majority of children will:

- 3.31 Know the distinctive properties of different materials
- 3.32 Know about the principles of materials acting as thermal insulators
- 3.33 Know what happens when materials are heated and cooled
- 3.34 Know about the principles of condensation and evaporation
- 3.35 Know about differences between metals and other materials
- 3.36 Know that matter is made up of particles
- 3.37 Know about the different arrangements of particles in solids, liquids and gases
- 3.38 Be able to compare and group rocks and soils according to their properties
- 3.39 Be able to group and classify materials according to their properties
- 3.40 Be able to identify changes that are reversible or irreversible
- 3.41 Be able to separate simple mixtures
- 3.42 Be able to recover dissolved solids through evaporation

Physical processes

By the end of the school year in which they are 12, the vast majority of children will:

- 3.43 Know that heat is often produced as a by-product when one form of energy is converted to another
- 3.44 Know that heat can move from one object to another by conduction
- 3.45 Be able to represent electrical circuits in drawings using conventional symbols
- 3.46 Be able to construct circuits on the basis of drawings using conventional symbols
- 3.47 Be able to vary an electrical circuit to change its effect
- 3.48 Know about the nature and effect of gravitational force
- 3.49 Be able to identify the effects of physical forces
- 3.50 Be able to measure forces
- 3.51 Be able to identify the direction of forces

- 3.52 Know that light travels in a straight line until it strikes an object
- 3.53 Know that light can be reflected, refracted or absorbed
- 3.54 Know that light travels through some materials and not through others
- 3.55 Know that we see things when light from them enters our eyes
- 3.56 Know how sounds are changed by altering the nature and frequency of the vibrations
- 3.57 Know that vibrations from sound sources travel through a medium to reach the ear
- 3.58 Be able to identify the effects and uses of light and sound
- 3.59 Know about the relationship between the Earth and the rest of the solar system
- 3.60 Know that day and night are related to the Earth spinning on its axis
- 3.61 Know about the time taken for the Earth to orbit the sun and for the moon to orbit the earth
- 3.62 Know about the effects caused by the Earth moving
- 3.63 Know that patterns of stars in the sky stay the same
- 3.64 Be able to identify the major constellations
- 3.65 Know about the major sources of energy
- 3.66 Know how energy sources occur
- 3.67 Know how energy sources are obtained
- 3.68 Know how energy sources are used
- 3.69 Know the basic principles of renewable and sustainable energy

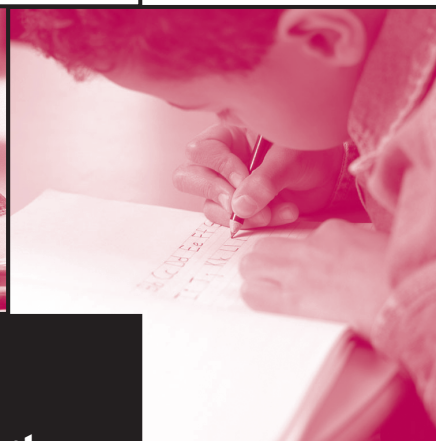
Technology Learning Goals

MILEPOST 3

By the end of the school year in which they are 12, the vast majority of children will:

- 3.1 Know that technology affects people's lives
- 3.2 Know how the lives of people in the host country are affected by the extent of technological advance
- 3.3 Know how the lives of people in their home country are affected by the extent of technological advance
- 3.4 **Be able to respond to identified needs, wants and opportunities with informed designs and products**
- 3.5 **Be able to gather and use information to suggest solutions to problems**
- 3.6 **Be able to devise and use step-by-step plans**
- 3.7 Be able to consider the needs of users when designing and making
- 3.8 Be able to select the most appropriate available tools and materials for a task
- 3.9 **Be able to work with a variety of tools and materials with some accuracy**
- 3.10 **Be able to test and evaluate their own work and improve on it**
- 3.11 Be able to investigate the way in which simple products in everyday use are designed and made and how they work
- 3.12 Be able to evaluate the effectiveness of simple products in everyday use
- 3.13 Understand the need for accurate design and working
- 3.14 Understand the ways in which technology can be used to meet needs, wants and opportunities
- 3.15 Understand that different techniques, tools and materials are needed for different tasks
- 3.16 Understand that the quality of a product depends on how well it is made and how well it meets its intended purpose

MILEPOST 3



Art

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Be able to use a wide variety of materials, forms and techniques to express their emotions, observations and experiences

SCENARIOS – Examples of the skill in action:

In *Artists' Impressions Of The World (They See The World Like This)* Task 4, the children work with a partner to produce a piece of abstract art in a style similar to Australian aboriginal artists. They decide on a "dreaming" theme or story, and choose the materials and colours they are going to use. They think about how their art will be interpreted by other children and whether the meaning of the art will be understood by everyone, or only to a smaller group of people.

In *Feelings* Task 2, the children look at different types of art by different artists, including paintings, sculptures, photographs, architecture, etc. The children think about how the art makes them feel. They think about how the artist has used colour, shape and design to provoke emotional response. The children then identify any particular shapes, colours, patterns, images, etc that make them feel a certain way, for example happy or angry. The children then produce their own piece of art using materials, forms and techniques that they feel are suitable to represent a feeling, or a "journey" through feelings. The children display their work and talk about the choices they made in their art to represent certain emotions.

In *Location (The Holiday Show)* Task 2, the children look at the work of artists who have used their observations and experiences of their local environment as a stimulus to their work. The children then look at their own natural environment, using real-life images, photographs, other artists' work or their memories to produce their own piece of art.

TEACHERS' RUBRIC

Beginning	Developing	Mastering
The child can use at least one material, form and technique to represent emotion, experience and observations. The child has difficulty explaining his/her choices and is often unable to explain why a piece of art makes him/her feel a certain way. The child's choices often need to be modified by the teacher.	The child can use a range of materials, forms and techniques to represent emotion, experience and observation. The child can explain his/her choices, though they are sometimes unsuccessful. The child sometimes needs help from the teacher or another child.	The child can use a range of materials, forms and techniques to represent emotion, experience and observation. The child's choices are usually successful. He/she can work independently.

CHILDREN'S RUBRIC:

I'm getting used to it	I'm getting better	I'm really getting it
I can use different types of art and materials to show something I have seen or experienced. I have to ask my teacher for help to use art to show how I feel. Sometimes, my teacher tells me how to change my ideas to make my work better.	I can use different types of art and materials to show something I have seen or experienced, or a feeling I have. I can tell my teacher why I have used materials and techniques. Sometimes my work doesn't turn out the way I wanted it to and my teacher or a friend helps me make it better.	I can use different types of art and materials to show something I have seen or experienced, or a feeling I have. I can work by myself and usually my work turns out the way I want it to. When I show my work to my friends they understand what I want it to say.

LEARNING ADVICE:

How To Progress From Beginning To Developing

Suggest the following to the children

- Look at lots of different types of art and think about how they make you feel. Do any make you feel happy, or angry, or sad? Think about why they make you feel this way? Is it the colour? The shape? The subject? Are there any colours or shapes or styles that always make you feel the same way? Make a list to use in your future work.
- Work with a friend. Talk about art that makes you happy. Do you have the same ideas, or do very different types of art make you happy? Try to explain why the art makes you feel like this.
- Look at a piece of art you made. Try to remember how you felt when you made it. Now show it to another child. How does it make them feel? Does the art make you both feel the same way?

How To Progress From Developing To Mastering

Suggest the following to the children

- Think of things that make you happy, sad, laugh, feel scared, etc. Make a list. Now think how you could use art to show these experiences and make another child feel the same way as you. Try one out – do other children feel the same?
- Look at lots of different materials. Is there anything about their texture or colour that can represent a certain thing? Try to use materials that are as realistic as possible in your work, for example, if making a piece of art to represent a beach holiday you went on, you could use sand, wood, water, etc in your work.
- Look at the work of artists who used many different forms, techniques and materials in their work, for example the Renaissance artists Michelangelo, or Da Vinci. Find out as much as you can about these artists and why they produced such different works of art.

Be able to communicate through visual and tactile forms

SCENARIOS – Examples of the skill in action:

In *Historical Overview (The Big Picture)* Task 3, the children use art to communicate something from their own history. They choose the forms, techniques and materials they will use and produce their art. They then give their art to another child to see if they can “read” the story from their history.

In *Myths, Legends and Beliefs* Task 1, the children look at a range of art resources representing different myths and legends. The children then choose a myth or legend they would like to represent and choose suitable visual and tactile forms to do this. Each child then displays their work and explains the choices they made.

TEACHERS' RUBRIC

Beginning	Developing	Mastering
The child is able to communicate using some visual forms. He/she needs help working in a tactile medium. The child needs help to express his/her ideas and to choose suitable forms in his/her art.	The child uses at least one visual and one tactile form to communicate. His/her work is often successful, though he/she needs some help to broaden the range of forms that he/she uses.	The child uses a range of visual and tactile forms to communicate successfully. He/she chooses the form most suited to the work and needs little help.

CHILDREN'S RUBRIC:

I'm getting used to it	I'm getting better	I'm really getting it
I have some ideas to communicate with art. My teacher helps me to work with materials as I am not sure which ones to use. My teacher often tells me what type of art I should make.	I can use different types of art to communicate, including different materials. I would like to learn how to use different types of art as I often use the same one.	I can make lots of different art to communicate. I use different materials in my work and don't usually ask for help.

LEARNING ADVICE:

How To Progress From Beginning To Developing

Suggest the following to the children

- Work in a small group with other children and share your ideas about what materials to use and what type of art you are going to make.
- When you are given a topic or an art assignment by your teacher, write down as many different ways of producing the art as you can. Think about different styles, mediums and materials that you could use. Try to use a style, medium or material that you haven't used before or don't usually use.
- Look at the work of different artists. Consider how they have used their art to communicate. What are they communicating? What is the art "about"? What materials did they use? Why do you think this is? Use some of these ideas in your work.

How To Progress From Developing To Mastering

Suggest the following to the children

- Ask another child to show you how to use a material or to work in a medium that you haven't used before. Look at examples of the other child's work and try to produce a similar piece of work, before using the material or medium to create an original piece of art.
- Look around your school art room. What resources do you have available? Have you used all of them before? Do you work better using some resources than others? Practise using a resource that you have difficulty using or haven't used before.
- When planning your work, think about what you are trying to communicate. Talk to your teacher about your ideas of how you could communicate. Are some materials more suitable than others? Why do you think this is? Try communicating the same idea using different materials, styles and art medium and ask other children to comment on your work.

END-OF-MILEPOST ASSESSMENT CONFIRMATION

Art

By the time you come to the end of each milepost you will have watched the children doing art lots of times. You will have a record that hopefully shows them progressing from beginning, along the continuum towards mastering stage. This progression is unlikely to be smooth. Children will go the other way sometimes as we all do with skills practice, but there will probably be a general trend.

You will have played an important role in this progression as you will have been able to offer helpful advice to each child based on what you have seen. That's what we mean by *assessment for learning* and why the IPC Assessment for Learning Programme is so important.

In looking at this trend you will be able to make a judgment about whether each child is generally at beginning, developing or mastering stage in each of the important art skills and what overall stage of art skill development each child is at.

It is helpful at the end of each milepost to have one overall check on how well the children can work as artists. This overall check isn't a test. It's a way for you to check your own judgments by letting the children carry out some activities without your intervention. If, watching children's performance in this end-of-milepost assessment confirmation activity, you think that your overall judgment is inappropriate you might want to let the children do another activity. However, two days of activity won't give you better evidence than two years of closely watching the children at work. In the end, you will have to make a judgment based on all the evidence you have, not just one small part of it.

Try to make the end-of-milepost assessment confirmation activity as much fun as possible. Have an art day. Let the children think up their own activities.

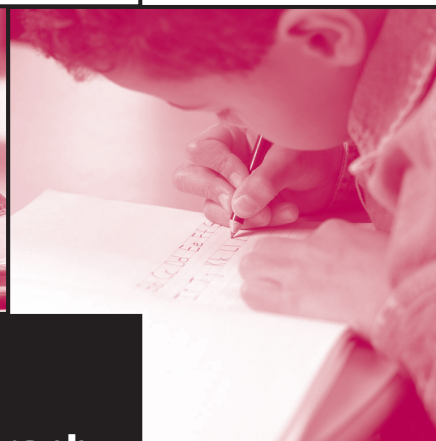
Try some of the following.

- Visit an art gallery or museum in your local area. The children can look at all the different types of art and think about their likes and dislikes. The children can talk to another class about what they saw at the museum and create their own versions of art they have seen to enhance their presentation.
- Create a class art gallery of all the art work the children have produced throughout the milepost. Invite parents and other children and teachers to visit the art gallery one day after school. The children can act as gallery guides, explaining their work, the materials and processes they used and what influenced them. Take pictures and create a class art brochure that can inspire their future work or the work of other children.

- Ask the children to create a fact sheet concentrating on one area of art to help other children. The children should include a step-by-step guide of how to use the material or process they have chosen and include examples. For example, if a child chooses colour, they could detail primary colours and how to mix colours to make new shades. They could list what they think each colour could be used to represent and how colours work together. They could also include a colour chart of all the colours that are available in the school as well as examples of their work.

Each of these activities requires the use of a number of the skills that have been focused on over the course of the milepost. Let the children carry out their activities. Observe them closely. Compare what you see to the judgments you have made from your evidence at the end of the milepost.

MILEPOST 3



Geography

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Be able to collect and record evidence to answer geographical questions

SCENARIOS – Examples of the skill in action:

In *The Big Geographical Picture (What Does Our World Look Like?)* Task 3, the children find out about major geographical features in the home country by using and comparing maps, aerial photographs, satellite images, tourist brochures, reference books and CD-ROMs. They find out about any mountain ranges, volcanoes, river systems, lakes, caves and coastal features, etc to build up a picture of the environment so they can answer geographical questions. They then make links between human activities and settlements and the physical geography of the area.

In *Investigating Rivers (Go With The Flow)* Task 5, the children find out what different types of activities take place along different parts of a river. They look at the upper, middle and lower river, as well as deltas. The children then use this knowledge to answer questions about why different parts of a river are better suited to different activities.

In *Migration (Moving People)* Task 1, the children research migratory patterns to build up a picture of movement around the world and the reasons for it. They can then answer questions about common factors between countries that a lot of people move to, and those that a lot of people move from.

TEACHERS' RUBRIC:

Beginning	Developing	Mastering
<p>The child identifies, with some support, one source of evidence needed to answer a geographical question.</p> <p>The methods he/she suggests for collecting and recording evidence may need some modification.</p>	<p>The child can independently identify one or more sources of evidence needed to answer an initial question.</p> <p>He/she can suggest appropriate collection or recording methods, but requires some support with his/her investigation.</p>	<p>The child can independently identify one or more sources of evidence needed to answer an initial question.</p> <p>He/she can suggest appropriate and accurate methods for collecting and recording the evidence he/she needs.</p>

CHILDREN'S RUBRIC:

I'm getting used to it	I'm getting better	I'm really getting it
<p>My teacher helps me to find and record evidence to answer questions and we work together to change some of my ideas.</p> <p>I can make some suggestions by myself, but I find it a bit difficult.</p>	<p>I usually work on my own at the beginning and understand what I have to do to find and record evidence to answer questions.</p> <p>My teacher tells me that the ideas I suggest are good, but I sometimes need to change them a little to make them better.</p>	<p>I usually work by myself to find and record evidence to answer questions.</p> <p>I can identify what information I need to collect to answer a question and have my own ideas about how I am going to do this.</p> <p>I can explain all of my ideas to my teacher.</p>

LEARNING ADVICE:

How To Progress From Beginning To Developing

Suggest the following to the children

- Try to identify what you need to find out to answer a geographical question.
- Remember that there may be more than one way to answer a question so don't be put off if you have different ideas to your friends.
- Think about the evidence you want to collect — can you do this easily? If you think of a way to collect evidence make sure it is practical and possible with equipment you know you have in school.
- Imagine you have collected your evidence. Would it answer the question?
- Discuss your ideas in a group. Make suggestions about how to improve ideas before your teacher asks for details.

How To Progress From Developing To Mastering

Suggest the following to the children

- When you think of a way to collect information, think carefully. Will the information you collect help you answer the question?
- Try to think of different methods you could use to gather the same evidence. Choose one that is simple, but that will give you accurate results.
- Explain to your teacher or to another child why you have chosen the different methods of collecting and recording.
- Can you think of any problems you might have collecting or recording this evidence?

Be able to identify geographical patterns and to use their knowledge and understanding to explain them

SCENARIOS – Examples of the skill in action:

In *Weather and Climate* Task 2, the children find out about the Earth in space using a variety of secondary sources. They identify and explain why the surface of the Earth does not have the same temperature all over, why there are hot and cold temperatures in specific places and why some countries have seasonal variations in temperature.

In *Host Country & Home Country (Here and Now, There and Then)* Task 3, the children think about how the home and host countries are connected. They use their knowledge of geographical patterns to identify any similarities in terms of human movement, the movement of goods, geographical features, etc and back up these ideas with relevant research.

TEACHERS' RUBRIC:

Beginning	Developing	Mastering
<p>The child finds it difficult to identify any geographical patterns independently.</p> <p>Once these are made explicit the child attempts to give an explanation but does not show sufficient geographical knowledge and understanding to do so successfully.</p>	<p>The child independently identifies geographical patterns in given information and attempts to give an explanation based on developing knowledge and understanding.</p> <p>This explanation may need a little adjustment.</p>	<p>The child can identify a range of geographical patterns from a variety of sources of information.</p> <p>The child can provide a detailed explanation, which is based on his/her geographical understanding and knowledge.</p>

CHILDREN'S RUBRIC:

I'm getting used to it	I'm getting better	I'm really getting it
<p>I find it difficult to identify geographical patterns, but when my teacher helps me I find it easier to understand.</p> <p>I usually try to give an explanation for the pattern, but I need to work with other people to do this properly.</p>	<p>I can work on my own and can identify at least one geographical pattern.</p> <p>I usually try to give an explanation for this, but I need a little help from my teacher.</p>	<p>I can identify geographical patterns in different types of information.</p> <p>I can give reasons for these patterns.</p> <p>I am happy to explain my ideas to my teacher, who says that I show a good understanding of the work.</p>

LEARNING ADVICE:

How To Progress From Beginning To Developing

Suggest the following to the children

- Look at geographical information with a friend and work together to look for geographical patterns. Look at the information and try to group together different topics that you can look at, for example, land formation, climate, land-use, etc.
- Talk about the patterns you have identified. Work together to think of explanations for what you have found. Think about living and non-living features, location, etc. Share your ideas with another pair – are your ideas similar?

How To Progress From Developing To Mastering

Suggest the following to the children

- Think about the subject and what you already know about it. What patterns might you expect to find in the information you have been given?
- Draw a mind map of the geographical subject that includes everything you know about it. Look carefully for any ideas that might help you to explain the geographical patterns you have identified.
- Think about how you will explain your ideas to the teacher — is there anything else you need to find out about the subject?

Be able to use appropriate vocabulary to describe and interpret their surroundings

SCENARIOS – Examples of the skill in action:

In *Weather and Climate* Task 5, the children listen to recordings of weather forecasts and discuss the terminology and symbols used in the reports. The children then work together to produce weather forecasts for a chosen country, using appropriate vocabulary.

In *Location (The Holiday Show)* Task 3, the children use appropriate vocabulary to describe holiday locations, including information about climate, physical features, visitors, etc. They look at a range of holiday destinations, including coastal resorts, cultural centres, theme parks, etc.

TEACHERS' RUBRIC:

Beginning	Developing	Mastering
<p>The child uses simple geographical terms to interpret their surroundings.</p> <p>The interpretation or use of specific vocabulary may not always be accurate.</p>	<p>The child independently interprets more than one feature of his/her immediate surroundings using appropriate terms and vocabulary.</p> <p>Although this is usually accurate the range of words used could be developed further.</p>	<p>The child independently describes main geographical features of his/her surroundings using an appropriate and wide range of vocabulary.</p> <p>The child shows thorough understanding of terms and consistently uses them accurately.</p>

CHILDREN'S RUBRIC:

I'm getting used to it	I'm getting better	I'm really getting it
<p>I find it difficult to think of different words that I can use unless my teacher helps.</p> <p>Sometimes I get the meanings a bit mixed up.</p>	<p>I work on my own most of the time and am able to use some geographical words.</p> <p>My teacher says I could learn some new words which would help me to explain my ideas in more detail.</p>	<p>My teacher says I show a very good understanding of the geographical words I use.</p> <p>I can explain what they all mean and know how to use them.</p>

LEARNING ADVICE:

How To Progress From Beginning To Developing

Suggest the following to the children

- Think about different ways in which you could describe the immediate locality. This might be in terms of land use and jobs, weather or landforms, etc. List words you know to describe these features.
- Look carefully at different photographs or pictures of localities. Think of different words to describe the features shown.
- When you think of different nouns, try also to think of adjectives, which could help you give greater detail to your explanations.
- Write simple sentences using new words to show your teacher you understand them.
- Keep a record of new words in a "wordbook". Use this to help your written work.

How To Progress From Developing To Mastering

Suggest the following to the children

- When you start a new unit keep a geographical glossary of all the words and terms you use. The glossary should include a definition of what each word means.
- Brainstorm all the things you know about a subject and use this to help you think of different words you could use.
- Try not to use the same words all the time. Think of different words to describe the features you are interested in.
- Work with a friend, and take turns to explain what different words mean from your glossary, or give the meaning and ask your friend for the word you have defined.

Be able to use instruments to make measurements

SCENARIOS – Examples of the skill in action:

In *Weather and Climate* Task 8, the children make simple thermometers in class to measure minimum and maximum temperatures in different areas of the school.

In *Energy and Fuels (Making Things Go)* Task 2, the children use anemometers to measure wind speed on the school site, to check whether the school is in a suitable place to install a wind turbine. The children use a variety of different anemometers in this activity.

In *Looking At The Evidence (The Investigators)* Task 4, the children use a variety of instruments to plan an extension to their school. They gather measurements regarding the size of the site, the direction of the Sun and other weather effects, and compass readings to provide an accurate plan of the proposed extension.

TEACHERS' RUBRIC:

Beginning	Developing	Mastering
<p>The child uses simple measuring instruments with some teacher support.</p> <p>The results obtained may not always be accurate.</p> <p>The child does not give a confident explanation of how to use the equipment.</p>	<p>The child independently uses simple measuring instruments.</p> <p>The child may need support to explain how he/she is using the instrument, or to be able to obtain accurate results.</p>	<p>The child can use a range of measuring instruments appropriate to the investigation.</p> <p>The child can explain what he/she is trying to do and usually obtains accurate results.</p>

CHILDREN'S RUBRIC:

I'm getting used to it	I'm getting better	I'm really getting it
<p>I can record some measurements using some equipment.</p> <p>My teacher helps me to choose what to use and shows me how to use it properly.</p>	<p>I can work on my own to use some different instruments to make measurements.</p> <p>My teacher gives me some help to make sure I use the equipment properly and that my results are accurate.</p>	<p>I can use different types of equipment well and my results are usually accurate.</p> <p>I can explain how to use the instruments for different types of measurements and choose the best one to use for my investigation.</p>

LEARNING ADVICE:

How To Progress From Beginning To Developing

Suggest the following to the children

- Learn the names of different instruments and practise using them to take measurements before you use them for an investigation.
- Try to decide what evidence you are trying to collect and which instrument you can use for this purpose.
- Talk to another child about what you are going to do and give reasons for choosing the instrument and an explanation of how to use it properly.

How To Progress From Developing To Mastering

Suggest the following to the children

- Ask your teacher to check your measures and show you ways to take more accurate measurements.
- Take turns to demonstrate to a group how to use different instruments. Explain how you can take your measurements more accurately.
- Make a list of different instruments that you have in school and that you know how to use. Write down when you could use them for taking measurements. Label each of the instruments with this information to help other children.
- Whilst you are learning a new topic, keep a record of the instruments you learn how to use and when you use them.

Be able to use appropriate techniques to gather information

SCENARIOS – Examples of the skill in action:

In *Investigating Rivers (Go With The Flow)* Task 3, the children gather information about a river using a variety of appropriate techniques. They gather information about what the river looks like, the height of the river banks, the speed of the water, whether there are any whirlpools or other features, where sediment is deposited, how the river is used by people and any ways there are to cross the river. The children make sketches, take samples and other measurements in this activity.

In *Home Country & Host Country (Here and Now, There and Then)* Task 5, the children use appropriate techniques of their choosing to gather information about climate, economic activities, people, the physical landscape and environmental issues.

In *Location (The Holiday Show)* Task 3, the children use a variety of techniques to gather information about different holiday destinations, including where these places are located and the climate.

TEACHERS' RUBRIC:

Beginning	Developing	Mastering
<p>The child can suggest some simple techniques to gather information with teacher support.</p> <p>He/she may need further support when gathering the information.</p>	<p>The child produces an activity plan that incorporates appropriate data gathering techniques.</p> <p>The techniques suggested can be followed after some adjustment.</p>	<p>The child independently produces an activity plan describing appropriate techniques to gather information.</p> <p>The plan is feasible and can be followed to gather relevant information.</p>

CHILDREN'S RUBRIC:

I'm getting used to it	I'm getting better	I'm really getting it
<p>I need some help from my teacher to develop my ideas about techniques I could use for gathering my information. I like to check with my teacher when I collect the information to make sure I am doing it well.</p>	<p>I have my own ideas for ways I can gather information and I write these down to show my teacher.</p> <p>My teacher sometimes suggests some changes to my ideas which make them better. I can use my plan to collect the information I need.</p>	<p>I can work by myself to gather information. I usually write down what I am going to do and when I show my teacher he/she says that my plan is good.</p> <p>I use my ideas to collect the information I need.</p>

LEARNING ADVICE:

How To Progress From Beginning To Developing

Suggest the following to the children

- Think about what you have to find out and then try to identify a way in which this can be done.
- Work with a partner. Try to develop your ideas together.
- Imagine you are gathering the information. Is there any way you could get hurt doing it this way? If there is then you need to change your idea.
- Read plans written by other children who have mastered this skill and watch how they gather their information. Follow these techniques yourself in a new place or for a new investigation, or change them slightly if you need to.

How To Progress From Developing To Mastering

Suggest the following to the children

- Once you have thought of a technique, think about what could go wrong if you are not careful. This will give you ideas on how to keep safe.
- Compare your work with that of a friend and make helpful suggestions to improve each other's ideas.
- Talk to children who have mastered this skill and find out how they thought about the techniques they would use and how they gathered their information.

Be able to make maps and plans in a variety of scales using symbols and keys

SCENARIOS – Examples of the skill in action:

In *Weather and Climate*, Task 1, the children make large-scale climate maps. They decide on suitable symbols, keys and materials to use. They show hot and dry places, hot and wet places, cold and dry places, cold and wet places, temperate places, etc.

In *Location (The Holiday Show)* Extension Activity, the children produce maps of their ideal holiday locations. They decide on symbols to represent all of the facilities their location will have and include a key to explain these.

TEACHERS' RUBRIC:

Beginning	Developing	Mastering
<p>The child can make simple maps or plans with identifiable features with teacher support.</p> <p>Some map features may be missing, such as the scale or the key.</p> <p>The scale used may not be appropriate to the purposes of the map.</p>	<p>The child independently produces maps using a variety of scales and symbols. The scales and symbols are appropriate to the purposes of the map.</p> <p>The child may need some support with the details of their map or plan. This may involve adjusting the scale, symbols, or the details shown in the key.</p>	<p>The child independently produces a variety of maps and plans of different scales. The scale is clearly shown and accurate for the purposes of the map.</p> <p>The features and symbols shown on the map are all identified in keys which are clearly constructed and sensibly located.</p>

CHILDREN'S RUBRIC:

I'm getting used to it	I'm getting better	I'm really getting it
<p>I can make different maps and plans with my teacher.</p> <p>I find it hard to remember the different things to put on my maps and plans.</p> <p>My teacher says I could use different maps and plans to show my ideas more clearly.</p>	<p>I can work on my own to draw maps and plans.</p> <p>I use some symbols to show the different places and features and try to put these into a key.</p> <p>My teacher helps me improve my maps.</p>	<p>I can make maps and plans by myself.</p> <p>I use symbols and a key to show what the symbols mean.</p> <p>I draw my maps to the scale shown.</p> <p>My teacher says my maps include everything I need to show.</p>

LEARNING ADVICE:

How To Progress From Beginning To Developing

Suggest the following to the children

- Decide on the scale of your map. Draw in specific points and then add the details in between.
- Think about what you have to show. If you have to show different features of a country draw a new map. Don't try to put everything on one map.
- Write a checklist to help you remember to include a title, scale and a key to explain any symbols you use.
- Ask a friend to look at your map before you ask the teacher. Can they use and understand it, or do you need to make a few changes?

How To Progress From Developing To Mastering

Suggest the following to the children

- Look carefully at your map or plan. Check you have a title that explains what you have shown, a scale that is accurate for your map and a key showing all the symbols on the map.
- Compare your map or plan with that of a friend. Discuss the features shown on each of your maps/plans and change or correct your information.
- Think carefully about the area of land you need to show for the purposes of the map. Use the largest scale possible, as this will help you to produce a clear map.
- Only include the features that you need to or the map or plan may appear too cluttered and will be difficult to read.

Be able to use and interpret globes and maps in a variety of scales

SCENARIOS – Examples of the skill in action:

In *Host Country & Home Country (Here and Now, There and Then)* Task 1, the children use globes, maps, atlases and satellite images at a variety of scales to locate their home and host countries. They use the same materials to look at countries, continents and features between the host and home countries.

In *Investigating Rivers (Go With The Flow)* Task 1, the children use maps and globes at different scales to identify major rivers throughout the world. They look at the world's longest rivers, where they begin and where they end, as well as the countries they pass through.

In *Global Swap Shop (Trading)* Task 1, the children write down everything they use and eat in a day and find out where each thing comes from. They then use maps and globes to record this information and identify trade links around the world.

TEACHERS' RUBRIC:

Beginning	Developing	Mastering
<p>The child can locate places on given maps and the globe with teacher help. He/she needs support to interpret different maps and the features they show.</p> <p>He/she may find it difficult to find the same location on maps of different scales or different projections.</p>	<p>The child can use given maps and globes of different scales and locate places and extract information with a little support.</p> <p>He/she can locate the same place on maps of different scales and projections.</p>	<p>The child can confidently locate places and extract information from maps and globes of different scales. The child understands that different scales are used for different purposes and that distortions and generalisation can affect the accuracy of the information shown on the map.</p>

CHILDREN'S RUBRIC:

I'm getting used to it	I'm getting better	I'm really getting it
I can find some places on a world map or the globe if someone helps me.	I can find places on the globe and get different types of information from a map.	I can find places on the globe and on maps of different scales. I can find the maps I need to get my information. I know that maps sometimes show
I find it hard to use different maps to find the same place and to explain what each map shows.	I can use one map to find places on another map.	information in different ways, and that some are more accurate than others. I understand what the scale means and that it is difficult to accurately show the Earth on a sheet of paper.
My teacher says I can answer some of his/her questions about each map correctly.	I understand that different scales mean that a map covers large or small areas of land.	

LEARNING ADVICE:

How To Progress From Beginning To Developing

Suggest the following to the children

- Use a globe to locate a country and then find it on a world map; and vice-versa.
- Look at a country map. Find the lines of latitude and longitude and use these to locate it on the globe.
- Play “I spy a country” with friends using two identical maps or globes. Take turns to ask your friends to identify your chosen country by giving clues about its location. Try to give three accurate clues to help the others guess which country you have chosen.
- Use different maps that show cities and towns in your host country to play “I spy a city/town”.
- Use the given scale to find the distance shown by 1 centimetre on different maps. How do the distances shown change between maps of different scales?

How To Progress From Developing To Mastering

Suggest the following to the children

- Collect maps of different projections and scales that show the same places and features. Discuss how they are the same and how they are different.
- Trace over the shape of a country and where it is on a continent. Repeat this using a different map. What do you notice about the shape of the country, the continent and the areas they cover in each map?
- Use the scale on a map to calculate distances between capital cities. Compare how accurate you can be using maps of different scales.
- Get a cheap inflatable globe that shows the surface of the Earth. Cut it open until it lays flat on a rectangular sheet of paper. Compare it to printed world maps of different projections. How have mapmakers changed the shapes of countries so they “fit” onto a sheet of paper? (Some countries appear stretched whilst others are smaller, or they may be in different places relative to one another.)

Be able to explain how physical and human processes lead to similarities and differences between places

SCENARIOS – Examples of the skill in action:

In *Investigating Rivers (Go With The Flow)* Task 6, the children find out about flood defences used on different rivers. They also find out how human processes, such as building and cutting down trees, can contribute to flooding. They look at flood defences in poorer countries compared to richer countries and how this leads to similarities and differences between places.

In *Weather and Climate* Task 3, the children find out how early people were able to meet their basic needs in the places they were, including shelter, food, clothing, transport, etc. The children then relate what they found out to the weather and climate of the areas, to identify how physical processes lead to similarities and differences between places.

In *Global Swap Shop (Trading)* Extension Activity, the children “design” a new country in close geographical proximity to a named place. Their imagined country would share similar physical patterns to their named place, e.g. climate, physical features, natural resources and other processes. When designing their new country, the children identify how where their country is situated leads to similarities and differences with other places, including trading links, population demographics, shortages of specific goods, etc.

TEACHERS' RUBRIC:

Beginning	Developing	Mastering
The child can identify similarities or differences between two places with some support.	The child can identify similarities or differences between two or more places independently.	The child can independently interpret a variety of sources of geographical information to identify human and physical processes which result in similarities or differences between a variety of places.
He/she finds it difficult to explain how these are due to physical or human processes.	He/she needs help to link these to similarities and differences in physical and human processes.	

CHILDREN'S RUBRIC:

I'm getting used to it	I'm getting better	I'm really getting it
I can explain how two places are the same and how they are different.	I can find differences and similarities between at least two different places.	I can find some different ways in which nature or the activities of people make places the same or different.
I find it difficult to say why they are like this until my teacher helps me.	I can explain why I think the places are like this but I sometimes have to ask for help.	I can give examples from at least three different places.
		I can do this work by myself.

LEARNING ADVICE:

How To Progress From Beginning To Developing

Suggest the following to the children

- Look at two pictures or pieces of information about different places. List the similarities and differences between them. Then find similar information about a third place. Show how this new place is similar or different to your two other places.
- Look at the things that places have in common. Does one thing, such as the weather, influence anything else, such as what the people do, or the plants that grow?
- Look at differences between places. Think of reasons why they might be different because of what people are doing, or natural things like the weather or landscape.

How To Progress From Developing To Mastering

Suggest the following to the children

- Try to identify activities that people are doing in the same way in different places. Think of reasons why they might behave like this — is it due to the shape of the land, the climate or the local resources?
- Try to find natural links between three places — e.g. they might all be near a river on flat land. Then identify natural differences such as types of weather or vegetation. How do these affect each of the three places and make them more similar or more different?
- Ask yourself what you want to find out about the human or physical environment. Think where that information might be found and what form it might take. Try to find sources of information for yourself before you ask for help.
- Share your ideas about different places with a friend. Have you thought of different things? Put your ideas together to help you explain in more detail.

Be able to explain how places are linked through movement of goods or people

SCENARIOS – Examples of the skill in action:

In *Global Swap Shop (Trading)* Task 2, the children find out what things the host country imports and exports. They then try to identify any patterns, before looking at the imports and exports of their home countries. They then compare and contrast the host and home countries to identify any similarities and differences and explain how places are linked through the movement of goods.

In *Migration (Moving People)* Task 1, the children identify countries where migrants move from and countries where migrants move to, to identify how places are linked through the movement of people.

In *Location (The Holiday Show)* Task 1, the children survey the types of holidays they, and children like them, take and the places they go to. They collate this information and identify how places are linked through the movement of people as tourists.

TEACHERS' RUBRIC:

Beginning	Developing	Mastering
<p>The child can give a basic explanation of how he/she and other people are linked to places through the movement of the goods they use or the people they know (friends and family).</p> <p>The child is unable to explain why these places are linked.</p>	<p>The child is able to describe how places are linked through the movement of goods and people in a simple way.</p> <p>The child needs support to develop his/her ideas of why places are linked.</p>	<p>The child can describe and explain the movement of goods or people around the world.</p> <p>The child can discuss some examples of economic or historical links which influence patterns of movements.</p>

CHILDREN'S RUBRIC:

I'm getting used to it	I'm getting better	I'm really getting it
<p>I can explain how I am linked to different parts of the world through the things I use or the people I know.</p>	<p>I can talk about some places that are linked through the movement of different people and the things they need.</p> <p>I need a bit of help to explain why these movements happen.</p>	<p>I can explain how some places are linked through the movement of goods and people.</p> <p>I can give some reasons for these present day links.</p>

LEARNING ADVICE:

How To Progress From Beginning To Developing

Suggest the following to the children

- Identify one place you have links to through something that you use, such as food or clothes. Find out some other countries that these materials are exported to. Do any of these countries export other materials back to the original country?
- Make a list of all the countries you have lived in or visited. Find out why your family moved and why they went to certain countries.
- Ask another member of your family or a friend to name the countries they have been linked to. Ask them why they had to move between countries. Are any of the countries that you named the same as the ones your friend named? Are your reasons for moving similar?
- Choose an item that is made from many parts, such as a cake. List all the ingredients and find out where they came from originally.

How To Progress From Developing To Mastering

Suggest the following to the children

- Look for patterns in the movements of goods and people in a particular country. Research the country further to identify any special historical links between places.
- Listen to the news or read newspapers to find out what is being moved into or out of the country where you live.

Be able to communicate their knowledge and understanding of geography in a variety of ways

SCENARIOS – Examples of the skill in action:

In *Weather and Climate* Task 5, the children present their own weather forecast. They include geographical terms related to the weather, international weather symbols and present their reports using video, as a live-action event, or using ICT.

In *Looking At The Evidence (The Investigators)* Task 3, the children use surveys they have conducted about what there is in their local area. They communicate their findings using graphs, and can also include maps and other visual aids and use these as the basis of a class presentation.

TEACHERS' RUBRIC:

Beginning	Developing	Mastering
<p>The child, with some support, can communicate simple geographical knowledge and information in at least one way.</p> <p>He/she does not demonstrate a complete understanding of concepts or give accurate and detailed information when asked questions.</p>	<p>The child can communicate geographical knowledge in more than one way.</p> <p>He/she shows understanding of some concepts when questioned, although some guidance is needed to develop accuracy and detail.</p>	<p>The child is able to work independently or as part of a group, and demonstrates through communicating confidently, both verbally and graphically, a broad understanding of concepts and accurate geographical knowledge.</p>

CHILDREN'S RUBRIC:

I'm getting used to it	I'm getting better	I'm really getting it
<p>I don't always understand what I have to do.</p> <p>I find it difficult to think of what to say, write or draw without help from my teacher.</p> <p>My teacher tells me that I can give information in at least one way.</p>	<p>My teacher tells me I can give information in more than one way.</p> <p>I work by myself most of the time, but my teacher sometimes helps me to add details or find out more information.</p>	<p>I can use different methods to communicate my information.</p> <p>I understand what I am trying to say and am able to give explanations or answer questions about my work.</p>

LEARNING ADVICE:

How To Progress From Beginning To Developing

Suggest the following to the children

- Work with a partner and ask each other questions about places shown in photographs, statistics shown in graphs, or features shown on maps. Check your partner has answered the question properly by asking them to explain how they know the answer. You can help each other to learn in this way.
- Find different ways to communicate your ideas — for example, draw a picture or diagram, write a few sentences, speak about your ideas or draw a map which relates to a picture/photograph.
- Always find ways to check your information. For example, you could refer to a photo or map to show where you got the information.
- Use different resources to help you remember what you have found out. Draw a sequence of pictures and explain what each one shows, or draw a map and talk about it using the features that are shown in the key to remind you of what you need to say.
- If you do not understand during the lessons, ask your teacher to explain again. They may not know you did not understand or that you need some help.

How To Progress From Developing To Mastering

Suggest the following to the children

- Practise presenting your information in front of friends. Ask them if they understood what you said. Have you used the most appropriate methods to demonstrate your knowledge?
- Make sure that what you say is accurate and that you refer to sources of information if you can — don't make wild guesses! Use pictures, diagrams, photographs, charts and graphs and real objects to help you to communicate ideas in different ways.
- If you have already shown that you can use maps confidently, use a different way of communicating your next piece of information.
- Ask yourself questions about your work or ask others to ask you questions. If you don't know the answer, find out from books or the Internet. Then practise answering the question clearly.

MILEPOST ASSESSMENT ACTIVITIES

MP3

Geography

By the time you come to the end of each milepost you will have watched the children doing geography lots of times. You will have a record that hopefully shows them progressing from beginning, along the continuum towards mastering stage. This progression is unlikely to be smooth. Children will go the other way sometimes as we all do with skills practice, but there will probably be a general trend.

You will have played an important role in this progression as you will have been able to offer helpful advice to each child based on what you have seen. That's what we mean by *assessment for learning* and why the IPC Assessment for Learning Programme is so important.

In looking at this trend you will be able to make a judgment about whether each child is generally at beginning, developing or mastering stage in each of the important geography skills and what overall stage of geography skill development each child is at.

It is helpful at the end of each milepost to have one overall check on how well the children can work as geographers. This overall check isn't a test. It's a way for you to check your own judgments by letting the children carry out some activities without your intervention. If, watching children's performance in this end-of-milepost assessment confirmation activity, you think that your overall judgment is inappropriate you might want to let the children do another activity. However, two days of activity won't give you better evidence than two years of closely watching the children at work. In the end, you will have to make a judgment based on all the evidence you have, not just one small part of it.

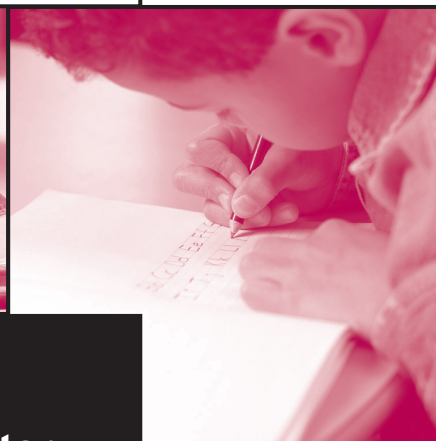
Try to make the end-of-milepost assessment confirmation activity as much fun as possible. Have a global awareness, international, or map-work day. Let the children think up their own activities related to the theme or their interests. If they can't, write different activities on cards and let them draw one out of a hat individually or as a small group.

Try some of the following ideas.

- The children could design their dream holiday location. Where would it be? What geographical features would it have (mountains, beach, etc)? The children can draw maps of the location and then compare each other's ideas.
- The children could work as a class to find out about an organisation that supports human migration. What do they do? How are they funded? Where are they based? Are they active in the host country? The children could do a case study to raise awareness of migration issues.
- Identify ways in which the children are linked to places around the world (clothing, food, music, languages, places they have family). Find these places on different maps and globes.

Each of these activities requires the use of a number of the skills that have been focused on over the course of the milepost. Let the children carry out their activities. Observe them closely. Compare what you see to the judgments you have made from your evidence at the end of the milepost.

MILEPOST 3



History

ASSESSMENT FOR LEARNING
beginning... developing... mastering

programme

ipc International
Primary Curriculum
great learning, great teaching, great fun

Be able to find out about aspects of the past from a range of sources

SCENARIOS – Examples of the skill in action:

In *Global Swap Shop (Trading)* Task 1, the children conduct a research case study of a particular civilisation and its trading – what did it trade, with whom and how? Each group then prepares a poster presentation of their research findings, to include a map showing the location and trading routes, and a clear indication of the time being studied. They then answer the questions: What effects did trading have on these civilisations? How have the societies changed? The children use a range of resources in their research, including web-based resources, maps, globes, reference books and encyclopaedias, etc.

In *Historical Overview (The Big Picture)* Task 6, the children are allocated a region, country or continent, and create a historical timeline showing the main events and people in this part of the world. The children find pictures that depict people and events in history for their chosen area and research historical terms associated with this. The children are encouraged to use the Internet, magazines, brochures and other resources in their research.

In *Current Affairs And The Media (Making the News)* Task 3, the children research how people in the past would have found out about local, national and international news. They research the type of events that would have been communicated, and the different communication methods that were available 50, 100 and 500 years ago. The children use a variety of resources to find out this information for the host and home countries, before presenting their findings as an information sheet.

TEACHERS' RUBRIC:

Beginning	Developing	Mastering
The child uses a range of different sources with some help and guidance. The child knows how and where to access these sources.	The child uses a range of sources with no prompting or help. The child is able to find some answers to most historical questions and has some initial understanding of the usefulness of different sources.	The child works independently with a range of sources to answer his/her questions. The child compares the different sources in terms of their usefulness and uses them appropriately. The child's answers are thoughtful and reflect the source used.

CHILDREN'S RUBRIC:

I'm getting used to it	I'm getting better	I'm really getting it
I am able to find many different sources of information to answer my questions, but I still need some help to find the right source to answer my questions.	I can use lots of different sources of information and most of the time I am successful in answering my questions. I still need some help to talk about which source is the most useful.	I feel quite happy using many different sources of information to answer my questions. I have a good idea of what sources are going to be the best ones to use, and I am able to include a detailed answer for my work.

LEARNING ADVICE:

How To Progress From Beginning To Developing

Suggest the following to the children

- List all of the different sources that you have used to answer your questions. Now talk to other children about the ones they use. Ask other people about the sources they find most useful.
- Talk to friends about how they find out from sources. For example, do they have a list of questions that they always use? Is there a special technique that they use? Can they tell you about any technique they use and why it is useful?
- Create a class list of all the sources the children use. Have a class discussion about which sources the children use and how useful they are. Try to use some of the listed sources that you haven't used before in an upcoming activity.
- When you are reading, looking at pictures, using the computer, watching TV, talking to friends, etc, always think about whether this is a particular way that you like to find out about things – keep using your favourite way.

How To Progress From Developing To Mastering

Suggest the following to the children

- Make a mind-map detailing all of the different ways that you have used to find out about the past in one unit. Add details about the most effective ways. Make a mind-map for each different unit and use them to keep a check on effective research sources and strategies.
- Compare your research methods with other people's. Are there any new research methods or sources you could use in future? Try to use a new method or source each time you work.
- Keep your own record (on a computer or a card index) of good research sources that you have used. Go back to them for other research – are they still effective?

Be able to describe and identify reasons for and results of historical events, situations and changes in the periods they have studied

SCENARIOS – Examples of the skill in action:

In *Development (What Price Progress?)* Task 2, the children research a large theme, such as agriculture, industry or education, in their home or host country, as well as any international developments with regards to the topic. The children then record their findings on a timeline. They go on to draw parallels between the different aspects of the theme and discuss matters such as: how innovations in one aspect of the theme may have influenced other developments; how the innovation was developed and spread throughout the world; how innovations have affected human lifestyles and the environment.

In *Global Swap Shop (Trading)* Task 3, the children continue their research into foods that are widely available in the host country, when they first became available in the host country, and where they originated. The children then place the introduction of these foods to the host country on a chronological timeline and add information to show what else was happening in the society at these times. They then discuss how historical events, situations and changes in the society affected the types of food available in the host country at the time. They think about wars, trading agreements, natural disasters, periods of prosperity, etc.

TEACHERS' RUBRIC:

Beginning	Developing	Mastering
The child is able to describe and give some reasons for events, situations and changes with teacher help. The reasons given are often irrelevant or are contextually inaccurate.	The child is able to give a range of descriptions and reasons for events, situations and changes. The child draws on their knowledge of other historical situations and much of his/her work is historically accurate and appropriate.	The child is able to offer a range of possible descriptions and reasons for events, situations and changes. The child draws on many other situations and is able to make historical connections between the events and changes.

CHILDREN'S RUBRIC:

I'm getting used to it	I'm getting better	I'm really getting it
I think I know why some things happened or changed in the past, but I'm not really sure yet. My ideas are usually clearer when my teacher has helped me with my work.	I can offer lots of different descriptions and reasons why some things happened in the past. I remember what I have learnt from other units and use some of these ideas again.	I can offer many different ideas from different activities and from my own learning. I can sometimes see a pattern in the reasons why things have happened. I can usually see a connection between an event and something that changed after it.

LEARNING ADVICE:

How To Progress From Beginning To Developing

Suggest the following to the children

- Have a think about why things happen today in your own life. List some things that have happened and also list why you think they happened.
- Now try this out with things in the past. Perhaps think about a significant person that you have learnt about – what happened to them and why? Make a mind-map showing some major events in the life of this person, showing some of the reasons and the outcomes.
- Talk with your teacher and friends about why events happen. Can you begin to see some patterns from your discussions? Are there some reasons that you can group together?
- Think of words that we use when talking about reasons – words such as *motive* and *consequence*. Listen out for people using these words and why they are using them.

How To Progress From Developing To Mastering

Suggest the following to the children

- Make a timeline of a significant person in history who you know quite a lot about. Think about how different events in their life brought about or influenced any changes.
- Make up a game where you list some imaginary and real reasons why something happened in the life of a significant person. Ask a friend to try to guess the right answer. Make this into a game for a group of your friends.
- Collect information from global news stories about why things happen today and the reasons people give for events. Are some of these reasons the same as ones in the past?
- Think about why some things change and why some things stay the same. Talk with your teacher and your friends. Try to give examples for these ideas.

Be able to describe how the history of the host country affects the lives of people who live there now

SCENARIOS – Examples of the skill in action:

In *Development (What Price Progress?)* Task 3, the children find out about historical, economic and social changes brought about in the host country by profit-making companies. They find out about a company or industrial process that has had a significant impact on the historical development of the host country. The children consider how this has affected the availability of raw materials, plant life and the environment, how the workforce has changed or been influenced and how the company or process has shaped the society as they see it today.

In *Migration (Moving People)* Task 1, the children visit a local town in the host country to look for and record links with other countries and cultures. They find out about any changes brought about by the movement of people in the past and think about how this affects the food, language, signs, currency, religion and dress in the host country today.

In *Home Country and Host Country (Here and Now, There and Then)* Task 9, the children compile a history of the host country, using information they have researched using maps, photos and other images, the buildings of the country, written texts, museum visits and by talking to other people. They build up a detailed picture of the history of the host country and can discuss how this affects the lives of the people who live there now.

TEACHERS' RUBRIC:

Beginning	Developing	Mastering
The child has some idea of how what happened in the past and the role individuals played in this might have some effect on the country today. He/she can begin to make some connections and give simple ideas about this. When helped, the child draws on his/her own knowledge of the host country.	The child is able to give a fairly detailed description of how something in the past links to the present. Some prompting and help is still needed, but he/she is able to draw on his/her own knowledge of the host country.	The child is able to work independently and give a detailed list of possible connections between past events and the present day in the host country. The child draws on his/her own knowledge of the host country and augments this with his/her own research.

CHILDREN'S RUBRIC:

I'm getting used to it	I'm getting better	I'm really getting it
I know something about the history of the host country and I am able to use this information when learning about how the past has affected the present. I still need some help to guide me in the right direction for my answers.	I can use everything I know about where we live now to answer the questions about how the past has influenced what is happening in the host country at the moment. I can usually offer several different ideas with some help from my teacher.	I use what I already know about my host country and add to this with my own research. I feel that I have quite a good idea about what happened in the past in the country we live in now and how this has affected the lives of people here today.

LEARNING ADVICE:

How To Progress From Beginning To Developing

Suggest the following to the children

- Draw a mind-map of your host country. On one side of the mind-map, write about things that happened in the past. On the other side of the mind-map, concentrate on the things that are happening now. Can you see any connections between them? Draw some lines between things that might be connected. Talk to your friends and to the teacher about your connections.
- If possible, talk to a national from your host country. Ask them about things that have happened in the past and how these might have affected the present. Do other people agree with this?

How To Progress From Developing To Mastering

Suggest the following to the children

- Work in pairs and take it in turns to defend or justify the reasons you give for how something from the past has affected the present. Make sure that you each ask difficult questions and ask for the evidence to support the other person's view. Don't let them get away with an answer you are not convinced about!
- If possible, talk to a national from your host country. Ask them about things that have happened in the past and how these things might have affected the present. Do other people agree with this?
- Think of other ways that you can record what you know about the history of your host country. Compare your recording with that of friends. What is similar and what is different in your recorded work? Compare how your information helps you to find out how the past affects the present in your host country.

Be able to describe how the history of one country affects that of another

SCENARIOS – Examples of the skill in action:

In *Development (What Price Progress?)* Task 2, the children find out about one theme of everyday life in the home or host country, for example, transport, agriculture, communications, or education. They research international developments in their chosen theme, as well as when and where developments took place and how such development has influenced or affected the home or host country.

In *Migration (Moving People)* Task 3, the children research a past civilisation that left written records, for example, the Egyptian, Greek or Roman civilisations. They use these records to build up a picture of how the society affected other countries, through the movement of people, goods and technologies, as well as the positive and negative effects of these changes. They also look at how aspects of the civilisation remain to influence present day society.

In *Historical Overview (The Big Picture)* Task 8, the children use historical timelines that they have created showing events in different parts of the world to draw comparisons between the histories of different countries. They children discuss how events are linked, if at all, and how the history of one country affects that of another.

TEACHERS' RUBRIC:

Beginning	Developing	Mastering
The child is able to describe historical events in more than one country, but is only able to link these events when prompted or helped, either by friends or by the teacher.	The child is able to make a connection between the history of one country and another. The child uses his/her own knowledge and is able to research appropriately for further information.	The child is able to make many connections between the history of one country and another. He/she offers many different ideas and is happy to explore and defend these possible links. The child draws upon his/her own knowledge and is able to add to this from further accurate research.

CHILDREN'S RUBRIC:

I'm getting used to it	I'm getting better	I'm really getting it
I can see that what happened in the past in one country can be connected to other countries, but it is still quite confusing for me at times unless I get some help from other children or from my teacher.	I can see some links between what happened in the past in one country and another. I can usually find out some more information, which will help me to make more links.	I am able to suggest many different ways how the history of one country is linked with another. I can suggest whether the link might be a good or a bad one. I can also describe different types of links.

LEARNING ADVICE:

How To Progress From Beginning To Developing

Suggest the following to the children

- Look at a map of the world and note your host and home countries. What are the links between these countries? Now think about the history of these two countries and the things you know happened. Are there any links between them?
- Ask your family and friends to talk to you about different links between your home and host countries and other areas of the world.
- Begin to make a list of the different types of links, for example, trade, migration, technology, communications, etc.

How To Progress From Developing To Mastering

Suggest the following to the children

- Look at a map of the world and select some of the countries that you have visited or lived in. What links can you identify between these countries? Now have a think about the history of these countries. What do you know already? Can you think of any links between any of these countries? Can you think of any links between more than two countries?
- Ask friends and family to talk to you about how countries are linked today and in the past. If possible, ask your grandparents about their ideas.

Be able to place the events, people and changes in the periods they have studied into a chronological framework

SCENARIOS – Examples of the skill in action:

In *Global Swap Shop (Trading)* Task 1, the children work in groups to conduct a case study of a particular society and its trading practices in the past. Each group prepares a poster detailing trading routes, etc and then places their poster on a class chronological timeline.

In *Rulers and Governments (Leading Their World)* Task 4, the children produce a timeline detailing a history of democracy, empires and revolutions. They include information on the home and host countries and other parts of the world.

In *Historical Overview (The Big Picture)* Task 1, the children record their own “history”. They record details of events in their lives, and events in the host and home countries and in the rest of the world at different times throughout their own lives. They go on to produce a timeline booklet, with the events recorded chronologically to build up an international picture of their lives so far.

TEACHERS' RUBRIC:

Beginning	Developing	Mastering
The child is able to order and sequence a limited number of events, people or changes in a timeframe. The child makes some mistakes with the ordering and is not yet able to work completely unaided.	The child is able to order and sequence many events, people and changes with very little help or prompting. Most of these are correct and accurately placed on a timeline. The child is not always able to give accurate reasons for certain placing on a timeline.	The child is able to use timelines and place required events, people and changes on this line with almost complete accuracy every time. The child is able to explain and give reasons for the placing.

CHILDREN'S RUBRIC:

I'm getting used to it	I'm getting better	I'm really getting it
I can put things about other people's history on a timeline if I am able to work in a group or if my teacher helps me.	I am able to put things about other people's history in order with very little help. Most of the time I get them in the right order. Sometimes I am not quite sure of my reasons for where I put things on my timeline.	I am able to place historical things about events, people and changes in the right order. I use things I already know about to make my decisions. I am usually right when I check my work. I don't really need any help from my teacher to do this.

LEARNING ADVICE:

How To Progress From Beginning To Developing

Suggest the following to the children

- Play some games with a group of friends. Collect together some pictures about things in the past but all within the same category, for example, clothing from different times in history, different sports, etc and try to put them in the right order. Make each other explain why you think something should go before or after something else. How can you check your answers? What clues were helpful to your decisions?
- Make a timeline of events in your own life. What will you choose to put in it? Use colour coding and symbols to represent certain aspects of your life.
- Try to invent some different types of timelines. Do they always have to be horizontal? How would you represent the different numbers of years? What could you use your timelines for?

How To Progress From Developing To Mastering

Suggest the following to the children

- Read newspapers and articles about how things have changed over time.
- Collect timelines from newspapers and magazines about developments. Sometimes, certain manufacturers put timelines in their advertising to show how a new product has developed, for example, cars. Collect these and see how they are sequenced.
- Ask your parents and grandparents to tell you about things that happened in the past. Write or draw them in chronological order after you have heard or read the information. Ask them to check your timeline for you to see how accurate you were.

History

By the time you come to the end of each milepost you will have watched the children doing history lots of times. You will have a record that hopefully shows them progressing from beginning, along the continuum towards mastering stage. This progression is unlikely to be smooth. Children will go the other way sometimes as we all do with skills practice, but there will probably be a general trend.

You will have played an important role in this progression as you will have been able to offer helpful advice to each child based on what you have seen. That's what we mean by *assessment for learning* and why the IPC Assessment for Learning Programme is so important.

In looking at this trend you will be able to make a judgment about whether each child is generally at beginning, developing or mastering stage in each of the important history skills and what overall stage of history skill development each child is at.

It is helpful at the end of each milepost to have one overall check on how well the children can work as historians. This overall check isn't a test. It's a way for you to check your own judgments by letting the children carry out some activities without your intervention. If, after watching the children's performance in this end-of-milepost assessment confirmation activity, you think that your overall judgment is inappropriate, you might want to let the children do another activity. However, two days of activity doesn't give you better evidence than two years of closely watching the children at work. In the end, you will have to make a judgment based on all the evidence you have, not just one small part of it.

Try to make the end-of-milepost assessment confirmation activity as much fun as possible. Have a history day. Let the children think up their own activities.

Try some of the following ideas.

- Make a big picture, mind-map or timeline joining together all the historical things you have learnt about in the units. Can you draw lines between some of the things showing the connections? Colour-code your lines.
- Annotate a world map showing all the historical links you can think of between your home and host countries. Compare your map with one produced by a friend from a different home country. Can you see any links between your map and theirs?
- Annotate a world map showing all the historical connections that you are aware of between different countries. Use colours and symbols to show the different links.

- Work with some friends and make up your own “historical world connections” game. Use a world map and devise your own rules – you might make some information cards and questions for participants to use but the game must be about making historical connections between different groups of countries.
- Produce your own Power Point presentations about the history of your host or home country. Show them to other children to help them learn about the history of other places. What could you include in the presentation? Mind-maps? Timelines? Diagrams showing links?

Each of these activities requires the use of most of the skills that have been focused on over the course of the milepost. Let the children carry out their activities. Observe them closely. Compare what you see to the judgments you have made from your evidence at the end of the milepost.

MILEPOST 3



ICT

ASSESSMENT FOR LEARNING
beginning... developing... mastering

programme

ipc International
Primary Curriculum
great learning, great teaching, great fun

Be able to interpret their findings

SCENARIOS – Examples of the skill in action:

In *The Big Geographical Picture (What Does Our World Look Like?)* Task 1, the children use sensors to record environmental changes in temperature and humidity. They record the data in an appropriate chart, line or bar graph and make copies for other children. They then look for patterns in the data and cross-reference for accuracy. They go on to write two facts about each graph or chart, for example, "Temperature is highest at noon", or "Temperatures are highest on south-facing walls". The children then talk about their findings as a class.

In *Development (What Price Progress?)* Task 2, the children create a record of how often they use any digital technology or any technology that uses microchips. They then show their parents or another adult their data and identify any areas of their lives that are influenced by ICT. Their parents/other adults talk about what they used in their childhoods that have been replaced by ICT today, for example, communication, toys, etc. The children present all of this information using an ICT package and individually compare the influence of ICT on their lifestyles with the lifestyles of their parents when they were children.

In *Drug Education (The Thinking About Drugs)* Task 1, the children work in groups to find out about one drug, using the Internet and other resources. They find out what the drug is, what it does, whether the drug has any benefits, what the short- and long-term effects of it are and how it is used. The children present their findings as a Power Point presentation and answer any questions the other children have.

TEACHERS' RUBRIC:

Beginning	Developing	Mastering
The child can gather information together but has difficulty in drawing conclusions from it. The child needs substantial help to interpret his/her findings.	The child can gather information together and draw some conclusions from it. His/her ideas are not always accurate and the child often misinterprets the results.	The child can gather information together and draw a number of conclusions from it. His/her interpretations are often accurate and the child needs little help from the teacher.

CHILDREN'S RUBRIC:

I'm getting used to it	I'm getting better	I'm really getting it
I can put all the things I have found out in one place. I don't really understand what it all means and have to ask my teacher to explain it to me.	I can put all the things I have found out in one place and look at my results. I can explain what I think it means, but sometimes I get it wrong.	I can put all the things I have found out in one place and look at my results. I can explain what I think it means and I usually get it right.

LEARNING ADVICE:

How To Progress From Beginning To Developing

Suggest the following to the children

- Look at all the information you have found out about one subject. Is any of the information repeated? Rewrite all the information for yourself, making sure you include everything you need, but that you don't repeat anything.
- Look again at the information that you found out about one subject. Is any of the information contradictory? Did one source you looked at say one thing, and another source say something very different? Ask your teacher how to find out what information is accurate.
- Always use different sources to collect as much information as you can, giving you more to interpret.

How To Progress From Developing To Mastering

Suggest the following to the children

- Talk about your ideas with a friend. Do you interpret the same piece of information in the same way? Ask a third child. Are your ideas similar or very different? Check with your teacher.
- Make sure that you record all of your information clearly and in a logical order so that it is easy to read and interpret. Use suitable headings and sub-headings and make sure that each piece of information is in the correct place.
- Talk to your teacher about suitable methods of recording different types of information. What types of information are suited to graphs and tables, or to text or annotated diagrams, etc?

Be able to identify whether their findings are valid

SCENARIOS – Examples of the skill in action:

In *The Big Geographical Picture (What Does Our World Look Like?)* Task 3, the children use a variety of CD-ROMs and interactive websites to explore models of the Earth in space, or a geographical or environmental process. They find two models of the same process or the Earth in space and compare the two, looking for similarities and differences between them. The children then write a brief review of each model and whether the information they provide is valid.

In *The Physical World (Energy, Force, Light And Sound)* Task 4, the children find out how to use light and sound sensors linked to ICT applications. They then use the sensors to detect and record levels of light or sound throughout the day or during a specific time period at different places around the school. When they have collected the data the children analyse it for validity, before recording the data as a graph.

In *Looking At The Evidence (The Investigators)* Task 1, the children use the Internet to explore controversial issues, for example, the environment. The children look at websites with opposing views, and note if the website is sponsored by any group, etc. Throughout the activity, the children are encouraged to view the Internet critically as a tool for gathering information, and that they need to check the validity of their findings.

TEACHERS' RUBRIC:

Beginning	Developing	Mastering
The child accepts results and information at face value and doesn't question validity. He/she fails to grasp the idea of inaccurate, or misleading information.	The child recognises that he/she must check the validity of results or information. The child is unsure how to do this and needs teacher guidance to identify whether his/her information is valid or not.	The child recognises that he/she must check the validity of results or information. The child has some practical ideas of how to do this and can explain whether he/she thinks the information is valid or not.

CHILDREN'S RUBRIC:

I'm getting used to it	I'm getting better	I'm really getting it
When I look at information or results in class I don't check to see if it is correct. My teacher tells me that I should check what information other children have, or if I can find the same information in other places. I don't know why I have to do this.	I know that sometimes information or results are incorrect. I'm not sure how to check if the information or results I have are correct, so I have to ask my teacher for help.	I know that sometimes information or results are incorrect. I know some ways to check this and usually check the information and results that I have. Then I can tell my teacher if my information is okay or not.

LEARNING ADVICE:

How To Progress From Beginning To Developing

Suggest the following to the children

- When you find a piece of information, look for the same information using a different source. Is the information the same or different? Check a third source or ask a friend what they found out.
- Always remember to check your results in a different source, with a friend or with your teacher. Also remember to record your own information and results accurately.
- Ask your teacher to show you different newspaper clippings about the same topic/story or direct you to two or three different websites with coverage of the same topic. Compare the stories or information. Highlight any differences between them. How can you find out which source is the most accurate? Can you find out if any of the sources are entirely accurate?

How To Progress From Developing To Mastering

Suggest the following to the children

- Work with a small group of children. Choose a question that you would like to answer (or ask your teacher to set you a question). Each child should use a different source to answer the question. Now share your results. Are your answers the same? Compare the sources that you used.
- When using a source, remember to check when it was published, or when the material was produced. Is the information outdated? Have there been any developments that mean that there is new information about the topic?
- When researching using the Internet always visit a variety of websites to give you a broader perspective. A search engine doesn't put websites in the order of most accurate to least accurate!

Be able to manipulate and combine different forms of information from different sources

SCENARIOS – Examples of the skill in action:

In *Energy And Fuels (Making Things Go)* Task 1, the children find out about sustainable energy sources. They use library books, CD-ROMs, the Internet and other resources to find out as much as possible about their energy source. The children then manipulate and combine this information to give a class presentation of the energy source they have studied.

In *Weather and Climate* Task 3, the children find out about the impact of weather on health. The children look at different types of weather, including hot sun or snow, and think about sensible ways of keeping safe. The children then use a publishing package to design a weather advice poster incorporating all the information they have found out about one type of weather and how it affects health.

In *The Big Geographical Picture (What Does Our World Look Like?)* Task 2, the children research how scientists and geographers use ICT applications to gather information and how they use this information to create models or simulations. The children find out about this using the Internet and other resources, or by e-mailing organisations in the home or host country. The children then manipulate and combine the information to produce a class display about exploring the Earth using ICT.

TEACHERS' RUBRIC:

Beginning	Developing	Mastering
The child can gather information from a range of sources but has difficulty in combining it. He/she often repeats the same information in different places or fails to include some information.	The child can gather information from a range of sources and can combine it to create a new document. He/she sometimes needs help to manipulate the information to prevent repetition and to ensure he/she includes everything he/she needs.	The child can gather information from a range of sources and can manipulate and combine it well. He/she includes all relevant information and avoids repetition.

CHILDREN'S RUBRIC:

I'm getting used to it	I'm getting better	I'm really getting it
I can collect information from different sources but find it hard to put it all together in one place. I usually repeat things or forget to put some things in, but my teacher helps me with this.	I can collect information from different sources and can put it all together in one place. I think I do this well, but sometimes my teacher tells me I have forgotten to put something in, or that I have repeated something.	I can collect information from different sources and put it all together in one place. I make sure I don't repeat the same thing twice and I include everything I need to.

LEARNING ADVICE:

How To Progress From Beginning To Developing

Suggest the following to the children

- As you collect information make notes about what you have and how you intend to organise it.
- Make sure you stay organised! Keep track of all the information you have collected so that you don't forget anything when you come to collate it.
- Use headings and sub-headings in your work and make sure that any diagrams or tables, etc are clearly labelled. This will help you to avoid repetition and ensure that everything is in the correct place.
- Always read through your work thoroughly before showing it to your teacher to make sure that it makes sense and that you haven't repeated or missed anything out.

How To Progress From Developing To Mastering

Suggest the following to the children

- Make a plan for your work before you begin to collate the information you have gathered. What sections will you include? Will you include any graphics or other features? Where will they go? How will they be labelled? Check your plan against all of the resources you will use to make sure you haven't forgotten anything.
- Ask a friend to check your work before you show your teacher.
- Look at the information you have gathered and want to collate. What is the best way of combining all of this information? Have you collected a lot of facts and figures, for example, that could be recorded in a table or graph? Choose the best method of presenting your information.

Be able to use ICT to present information in a variety of forms

SCENARIOS – Examples of the skill in action:

In *The Big Geographical Picture (What Does Our World Look Like?)* Extension Activity, the children use ICT to present information they have found out about pollution. The children choose a suitable ICT package to design a poster, which they then display in their classroom.

In *The Physical World (Energy, Force, Light And Sound)* Task 1, the children use ICT to develop a glossary of terms they have used throughout the unit so far. They use a word processing package to do this, and choose the style, font and layout that they want to use. The children add to their glossaries as they progress through the unit.

In *Drug Education (The Thinking About Drugs)* Task 1, the children find out all they can about a drug. They work in groups to do this, with each group finding out about a different drug. The children then prepare a Power Point presentation of their findings to teach the other children about the drug they have studied.

TEACHERS' RUBRIC:

Beginning	Developing	Mastering
<p>The child needs help to use ICT programmes to present information in more than one way. He/she needs help to decide what type of ICT is appropriate, what information he/she should include and how to present the information, e.g. in a graph, a table, etc.</p>	<p>The child can use more than one ICT programme to present information in a variety of forms. He/she has ideas about how to present the information, e.g. a graph or a table, but needs help to use these functions and to decide what information to include.</p>	<p>The child can use a range of ICT programmes to present information in a variety of ways and usually chooses a suitable way to present it, e.g. a graph, a table, etc. He/she can use these functions with little help and decide what information to include.</p>

CHILDREN'S RUBRIC:

I'm getting used to it	I'm getting better	I'm really getting it
My teacher helps me to use ICT to present information. I'm not sure if I should use a table or a graph, etc, and I find it hard to remember how to make these. My teacher shows me what to do and also tells me what information to include.	I can use ICT to present information. Sometimes I have to ask my teacher to show me something as I don't know how to use all the different functions, like making tables or graphs. My teacher also helps me decide what information I should include.	I can use ICT to present information in lots of ways. My teacher tells me that I usually present my information in the best way. I like to decide what information to include and don't really need any help.

LEARNING ADVICE:

How To Progress From Beginning To Developing

Suggest the following to the children

- Look at how other people present information. How have they used ICT to show things? Look at tables, graphics, text-based documents and the Internet to get ideas that you can use in your work.
- Look at work you have used over the course of the milepost. Where have you used ICT in your work? Why did you choose to do this? Try presenting the same information using ICT in a different way, for example, if you presented information using a bar chart, try making a pie chart.
- Talk to your friends about how they use ICT to present information. Can they show you a feature or programme that you haven't used before?

How To Progress From Developing To Mastering

Suggest the following to the children

- Work with another child. Show each other one piece of work that you have each presented using ICT. Now take the other child's work and present it again using ICT in a different way, while they do the same with your piece of work. Compare what you have done. Do you think the work is better presented using one form of ICT than another?
- Talk through your ideas about how to present your work with your friends and your teacher before you begin. Explain why you want to present your work in a certain way.
- Each week, try to learn how to use a different function of a software programme, e.g. to make tables, to manipulate graphics, etc. Practise this skill until you can use it competently in your work.

END-OF-MILEPOST ASSESSMENT CONFIRMATION

Information and Communications Technology (ICT)

By the time you come to the end of each milepost you will have watched the children doing ICT lots of times. You will have a record that hopefully shows them progressing from beginning, along the continuum towards mastering stage. This progression is unlikely to be smooth. Children will go the other way sometimes as we all do with skills practice, but there will probably be a general trend.

You will have played an important role in this progression as you will have been able to offer helpful advice to each child based on what you have seen. That's what we mean by *assessment for learning* and why the IPC Assessment for Learning Programme is so important.

In looking at this trend you will be able to make a judgment about whether each child is generally at beginning, developing or mastering stage in each of the important ICT skills and what overall stage of ICT skill development each child is at.

It is helpful at the end of each milepost to have one overall check on how well the children can work in ICT. This overall check isn't a test. It's a way for you to check your own judgments by letting the children carry out some activities without your intervention. If, watching the children's performance in this end-of-milepost assessment confirmation activity, you think that your overall judgment is inappropriate, you might want to let the children do another activity. However, two days of activity won't give you better evidence than two years of closely watching the children at work. In the end, you will have to make a judgment based on all the evidence you have, not just one small part of it.

Try to make the end-of-milepost assessment confirmation activity as much fun as possible. Let the children think up their own activities.

Try some of the following ideas.

- Challenge the children to prepare a presentation on a famous person they like. This person could be from the past or the present. The children can research this person, download images, etc and make a display using ICT before talking about what they found out.
- The children can produce a guide to ICT at Milepost 3 to help children who will be studying the units in the coming year. They can include details of the software that is available, what they can use it for, how to create specific things like tables, etc and examples of their own work. They can add pictures and make it into a brochure to keep in the computer room at school.

Each of these activities requires the use of a number of the skills that have been focused on over the course of the milepost. Let the children carry out their activities. Observe them closely. Compare what you see to the judgments you have made from your evidence at the end of the milepost.

MILEPOST 3



International

ASSESSMENT FOR LEARNING
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Be able to explain how the lives of people in one country or group are affected by the activities of other countries or groups

SCENARIOS – Examples of the skill in action:

In *Current Affairs And The Media (Making the News)* Task 1, the children are asked to think about how they would feel if the news from their home country was misrepresented by another country and the reasons this might happen. They are asked to find examples of when this has been alleged to have happened. In doing this work, children are looking at some ideas about how one country can be affected by the activities of a different country.

In *Rulers and Governments (Leading Their World)* Task 2, the children work with a partner to find out about pacts, treaties and alliances between countries both in the past and in the present. The children think about the mutual benefits of these agreements and whether there are any disadvantages for the signing countries or for any other countries. In this activity, the children are looking for direct and indirect impact of how the lives of people in one country or group affect other countries or groups.

In *The Big Geographical Picture (What Does Our World Look Like?)* Task 1, the children find out about an environmental issue, such as acid rain, greenhouse gases, deforestation and soil erosion, the ozone hole, radioactive contamination, etc. The children find out about the source of the pollution, the countries and processes where the pollution is created, countries that are affected by the pollution, how the problem is carried from one place to another and local and global measures to control or reduce the problems. In this activity, the children explain how the lives of people in one country are affected by pollution created in another country and how global measures affect how people live and work.

TEACHERS' RUBRIC:

Beginning	Developing	Mastering
The child can talk about how his/her own life and the lives of his/her friends at school are affected by the actions of others. The child can also talk about times when what he/she and his/her friends have done has had either a positive or negative affect on others. The child is not yet able to talk similarly about the wider world.	Using examples, the child can explain how what he/she and his/her friends do affects others and how what others do affects him/her. The child is also able to explain how this interdependence works in his/her own community, but is not yet clear on how interdependent actions impact on a larger scale.	Using examples, the child can explain how the lives of different groups of people in school are affected for better or worse by the actions of others. The child can broaden this to the community in which he/she lives and is able to provide some examples of similar interdependence at work in groups and peoples within and between different countries.

CHILDREN'S RUBRIC:

I'm getting used to it	I'm getting better	I'm really getting it
<p>I can give some examples of how other children or grown-ups in school help to make my life better or worse. I can also give some examples of how my friends and I do the same to them. I find it hard to think of ways how where I live is made better or worse by others.</p>	<p>I can give examples of how my own life and the lives of others and where I live are made better or worse by what we all do. I'm just beginning to give examples of how the same thing happens between countries and groups of people who live a long way from each other.</p>	<p>I can explain how almost everything I do has an effect on my friends and family; sometimes good and sometimes not so good. I can also explain how what they do has an effect on me, too. I can explain how the local area where I live is affected by what others do and how what we all do affects other areas nearby. I can give examples of how this works between countries or between people who live a long way from each other.</p>

LEARNING ADVICE:

How To Progress From Beginning To Developing

Suggest the following to the children

- At the end of a week, review everything that has gone on in the classroom (and school, if appropriate) in the light of the effects of certain actions on others. Discuss both the beneficial and detrimental effects and gather suggestions for future behaviours.
- Don't always try to conclude by making everything "better" for everyone. Although this may be the overall goal, accept that there are reasonable actions that don't always result in immediate benefits to others.
- Carry out a more developed investigation in the school. Look at the impact of the actions of one person on another. Take one person, for example, the caretaker or janitor. How does what he/she does impact on us? How does what we do impact on him/her? Try to see that almost every action impacts somewhere, somehow, and that very little of what we do is "neutral".
- Devise an induction programme for new children into the school. Begin by thinking what new children might need and what we, therefore, have to do to enable that to happen.
- Begin to think about the idea of "impact" onto the community in which you live. What do people do (individually or collectively) that impacts the area where you live?
- Think about the kind of community you would like to live in. You might imagine that you are building a new town or are the first settlers in a new place. What behaviours and actions would enable this new community to achieve its goals?
- Begin to relate these ideas of impact to countries. Use current examples from the news or examples from the IPC units to stress the similarities between impact at a very personal level to impact on a national and international level.

How To Progress From Developing To Mastering

Suggest the following to the children

- Continue to reinforce the idea of “impact” as part of your class and school culture, in particular the need to take responsibility for each other.
- Develop a simple project that impacts on the whole school, the local community or someone in the community. Such a project might be to do with litter collection, noise reduction, help to a particular individual, and so on.
- Write personal diaries to reflect on the positive and sometimes negative impacts that something you have done has had on people close to you.
- Now develop instances that emerge from the news, local events or IPC Units of Work or activities taken from other curricula to record the impacts of one group on another on an increasingly broad scale. Make sure you try to look for positive, neutral and negative impacts in the same activity.

Be able to identify ways in which people work together for mutual benefit

SCENARIOS – Examples of the skill in action:

In *Global Swap Shop (Trading)* Task 3, the children choose a product which is manufactured in a country where the company headquarters are not based, and produce a list of reasons why they think this is so. The children then research to find out if their ideas are accurate and what reasons actually exist for manufacturing goods in certain areas of the world. The children consider whether these reasons are fair and whether this has a mutual benefit for the parties involved, including the consumer. The children think about things such as production costs, labour, other employment sectors in the manufacturing countries and the price of the finished product.

In *The Physical World (Energy, Force, Light and Sound)* Task 1, the children research a case study of an International Aid project that involves energy and the home or host country (either as donors or receivers). The children write up their case study and consider whether it is beneficial or detrimental overall. In this activity, the children think about how different people and countries work together on such projects for mutual benefit.

In *Host Country & Home Country (Here and Now, There and Then)* Task 1, the children look at two countries they have studied throughout the unit and find out as many ways as they can how these two countries have been involved with each other. They look at conflicts and disagreements, how these were resolved, examples of cooperation between the two countries, and how the countries have worked together for mutual benefit. The children report their findings and add their personal opinion about the two countries and other ways in which they might work together for mutual benefit.

TEACHERS' RUBRIC:

Beginning	Developing	Mastering
<p>The child is able to ask other children for help when they have knowledge, skills and understandings that the child doesn't have. He/she can explain how a group of people working together can help each other get better results than they would if they were working on their own.</p>	<p>The child is able to explain and provide examples of how when his/her friends and family work together they often achieve more for themselves and each other than one person working on his/her own. The child is beginning to relate this mutual cooperation to the wider world, but finds it difficult to illustrate this with examples.</p>	<p>The child is able to explain and provide examples of how working with other children and adults often enables more to be achieved for more people than individuals working on their own. He/she is able to link this to larger groups that work in the community, and then to groups that span countries and continents, such as charities and emergency relief groups.</p>

CHILDREN'S RUBRIC:

I'm getting used to it	I'm getting better	I'm really getting it
I like working on my own but I also like working with other people. When this happens we often do things better because we have different strengths.	I like working with friends because we often do things better working together. I can think of ways in which the same thing happens in the area where I live, too. I'm still not sure of examples of how this might work between countries or people who live a long way from each other.	I can give examples of how when people work together the result is often better for everyone than when people work on their own. I can think of when this happens in school, in the area in which I live, between people who live quite a long way from each other and between people who live in different countries.

LEARNING ADVICE:

How To Progress From Beginning To Developing

Suggest the following to the children

- Display and use a classroom motto or slogan to support the ideas in these learning goals. (Hilary Clinton wrote a book called *It takes a village...*. Another possibility is "One of us is never as good as all of us".)
- Make sure that when important decisions have to be made in the class you ask for ideas from everyone. Groups of people working together can be very powerful!
- Discuss how decisions are made in school. Following a staff meeting, for example, ask your teacher to talk about how collective decisions are made in your school.
- Reflect on which activities have been improved as a result of the involvement of other children.
- Try to identify aspects of the community where people working together have made things better. Find out about the number of voluntary groups that work together, for example.

How To Progress From Developing To Mastering

Suggest the following to the children

- Look at national and international news stories focused around responses to disasters. See how quickly people can come together and how, in some ways, the willingness to work collectively to help others is a natural response.
- Ask your teacher to tell you about his/her life and the lives of children and others that shows that working together for mutual benefit is much more common than people think. Challenge accepted ideas that the world is now "selfish".
- Discuss the ways in which your own family works with others at an international scale through charity giving, overseas work, and so on.
- Use the news and IPC Units of Work or activities taken from other curricula to raise the profile of some international organisations, such as the United Nations. It is possible to identify the benefits brought by the cooperation they encourage without suggesting that they are perfect.
- Encourage links with schools in other countries. These may be in areas much poorer than your own, though they don't have to be. See what mutual benefits can be gained from these links and develop one or two of them.

END-OF-MILEPOST ASSESSMENT CONFIRMATION

International

The development of international understanding is a both a part and a continuation of the development of the self. The IPC's work in this area of young children's development has been strongly influenced by a simple statement: *In working with an "other" we are challenging our sense of self.*

This is important because all the way through their time in primary and elementary school, the children are still in the process of constructing who they are at a very fundamental level. At Milepost 3 the children begin to be introduced formally for the first time to the idea of the impact that the actions of individuals, groups and countries have on others and to the idea of working together for mutual benefit. These ideas and the skills required to implement them both *transcend and include* those experienced in previous mileposts. The previous skills are not left behind, but form an important part of the new skills introduced at Milepost 3. As with the skills introduced in Milepost 2, these can be difficult, even for adults, and we should be careful not to expect the children to reach the developmental levels of 18 year-olds or, more dangerously, to learn to parrot the kinds of responses that seem to indicate a greater maturity than actually exists.

By the time you come to the end of this milepost you will, therefore, have watched the children beginning to establish the two key skills described above. You will have a record that hopefully shows them progressing from beginning along the continuum towards mastering stage. This progression won't be smooth. As we all do with skills development, children will revert sometimes, but there will probably be a general trend.

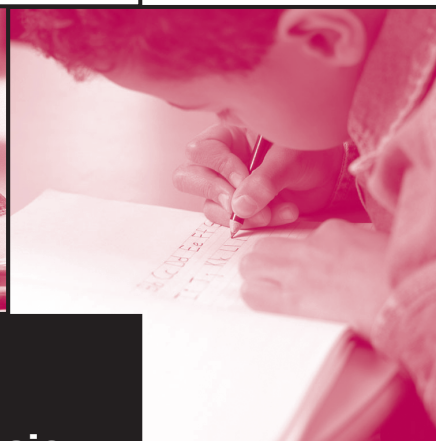
You will have played an important role in this progression as you will have been able to offer helpful advice to each child based on what you have seen. That's what we mean by *assessment for learning* and why the IPC Assessment for Learning Programme is so important.

In looking at this trend you will be able to make a judgment about whether each child is generally at beginning, developing or mastering stage in each of the important international skills and what overall stage of international skill development each child is at.

It is helpful at the end of each milepost to have one overall check on how well the children are able to demonstrate these skills in action. This overall check isn't a test. It's a way for you to check your own judgments by letting the children work individually and together without your intervention.

At the end of Milepost 3 you might want to use as many real-life examples as possible, although examples from fiction can also be useful. Use actual instances where the impact of one group on another has occurred, or where people or institutions have collaborated together, and engage the children in discussion about them. Equally, you might use the real-life examples to set up scenarios for discussion with the children, asking them both for their views and for possible solutions to the issue at hand.

MILEPOST 3



Music

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Be able to play tuned and untuned instruments with control and rhythmical accuracy

SCENARIOS – Examples of the skill in action:

In *Artists' Impressions Of The World (They See The World Like This)* Task 3, the children listen to music by an impressionist composer, like Debussy. They think about how impressionist composers use vague touches of sound to give an impression, rather than use intricate sounds and pieces. The children then choose a piece of impressionist art they created earlier in the unit and think about how they can compose a piece of impressionist music to accompany it. The children choose the instruments they would like to use and compose and perform their piece of music, playing with control and rhythmical accuracy.

TEACHERS' RUBRIC:

Beginning	Developing	Mastering
The child lacks control when playing tuned and untuned instruments and finds it hard to keep to a rhythm. The child is able to copy the teacher or another child, but is unable to work alone.	The child displays some control and rhythmical accuracy when playing tuned and untuned instruments. He/she performs better as part of an ensemble, but is beginning to work alone.	The child plays tuned and untuned instruments with control and rhythmical accuracy. The child works well as part of an ensemble and alone.

CHILDREN'S RUBRIC:

I'm getting used to it	I'm getting better	I'm really getting it
I can copy a piece of music if my teacher or another child plays it first. I don't really know what I'm doing and my teacher has to help me quite a lot to make my music sound the same as everyone else's. I don't like working by myself.	I can play different instruments and follow a rhythm, but sometimes my teacher has to help me to make my music sound right. I prefer playing as part of a group, but sometimes work alone.	I can play different instruments well and my music usually sounds the way I want it to. I like playing with instruments and music by myself or in a group. My teacher says that my work is good.

LEARNING ADVICE:

How To Progress From Beginning To Developing

Suggest the following to the children

- Work in a small group of 3 or 4 children. Sit in a circle with one the same instrument each. Take it in turns to play a short rhythmic piece (5 or 6 notes). The other children can repeat the piece using their instruments, first as a group and then individually. Every child should take a turn to play a piece of music and repeat it.
- Try this again. This time, try adding an extra note or two to the piece. Can all the children repeat it correctly?
- Choose one of the pieces that you have been playing. Try playing it as a small group 5 times in a row without stopping in between. Do you need to practise more before you can do this?
- Try playing the same piece of music using different instruments. Try a xylophone, drum, recorder, etc. Can you keep to the rhythm even though the instruments sound different?

How To Progress From Developing To Mastering

Suggest the following to the children

- Help other children by keeping the rhythm for them, perhaps using a drum.
- Experiment using a wider range of notes. Don't just stick to the notes that you always use – use notes further up or down the scale. Can you still keep the rhythm?
- When you play a short piece of music, try playing it 2 or 3 times without stopping between.
- Ask a friend to listen to you play. Are you keeping the rhythm or are you speeding up or playing too slowly?
- When you have been playing as a group, try playing the same piece of music by yourself. Do you need some help to remember how the music goes?

Be able to perform as part of an ensemble

SCENARIOS – Examples of the skill in action:

In *Feelings* Task 1, the children listen to a range of music from the home and host countries. The children think about how the composers of the music use music and words to create a mood or to describe feelings. Using a range of instruments, the children work together to make sounds that represent different feelings. The children put a range of sounds together in their group and perform them for the rest of the class.

In *Artists' Impressions Of The World (They See The World Like This)* Task 4, the children compose an ensemble piece of music in an impressionist style to reflect a piece of impressionist art one of the children has created. The children share their ideas and choose suitable instruments, etc for their composition. Each group records their ensemble composition and displays it with the artwork it is inspired by.

TEACHERS' RUBRIC:

Beginning	Developing	Mastering
The child has difficulty playing as part of an ensemble and often forgets what he/she is supposed to do. The child is unwilling to participate and prefers to work alone.	<p>The child can perform as part of an ensemble, but often plays at the wrong time or plays the wrong notes.</p> <p>The child works hard to play correctly but still needs some guidance.</p>	The child performs well as part of an ensemble and demonstrates an awareness of everyone's part in the process.

CHILDREN'S RUBRIC:

I'm getting used to it	I'm getting better	I'm really getting it
I don't like playing as part of a group. I always forget what to play and when to play it and my teacher gives me a lot of help.	I like playing as part of a group, but sometimes forget what to play and when to play. I practise hard to get better and my teacher gives me some help.	<p>I like playing as part of a group and usually play my part well.</p> <p>I know when other people are supposed to play too, and can follow the music quite easily.</p>

LEARNING ADVICE:

How To Progress From Beginning To Developing

Suggest the following to the children

- Begin by playing a piece of music with a friend. Play the same music together at the same time using the same instruments. Keep practising until you can perform it well.
- Ask another child to join your pair. Try performing the same piece of music again, perhaps adding a different instrument. Is it more difficult to perform well?
- Record your music. Play it back and think about how it sounds. Are you playing correctly, at the right speed, keeping to the rhythm, etc? Now try playing the music and recording it again. Have you improved?

How To Progress From Developing To Mastering

Suggest the following to the children

- Choose an instrument that you like and can play well when working as part of an ensemble. This will allow you to concentrate on the music, rather than how the instrument works, etc.
- Ask your teacher to give you feedback on how you play. Can they help you to remember the notes or give you ideas about when you are supposed to play?
- Try playing pieces of music that you know well. Is it easier to remember what and when to play?

Be able to compose musical pieces combining musical elements within a structure

SCENARIOS – Examples of the skill in action:

In *Artists' Impressions Of The World (They See The World Like This)* Extension Activity, the children work in pairs and select a person, place or experience as a theme or inspiration for a composition. The children then brainstorm ideas and improvise sounds that represent the theme. The children use a variety of instruments to record their composition on a multi-track recorder. The children then make a second track for their theme and record it with the first track. The children play back the recording and listen to the combined layers of sound. They make any adjustments and add further tracks to build up a multi-layered composition for their theme.

In *Development (What Price Progress?)* Task 1, the children work in a group to create a musical composition of a natural scene or mood, to reflect how they feel in a local calm or rural area. The children ensure their compositions have a beginning, a middle and an end and they select instruments and sounds that reflect the theme. The children practise their compositions before performing them for the rest of the class.

In *Feelings* Task 2, the children work in small groups to compose a musical piece that tells a story. The children decide what story they want to tell and what structure their music will have to show this. They decide what instruments and style would best suit their theme and practise their compositions before performing them for the rest of the class.

TEACHERS' RUBRIC:

Beginning	Developing	Mastering
The child lacks imagination in musical composition work and only performs when explicitly directed in his/her work.	The child shows imagination in his/her work but finds it difficult to combine musical elements without teacher guidance.	The child shows imagination in his/her work and is able to compose pieces that combine musical elements within a structure with success.
The child is unable to combine musical elements and composes very simple pieces with help from the teacher.	The child experiments with different instruments and sounds in his/her compositions with some success.	The child uses a range of instruments and sounds in his/her work.

CHILDREN'S RUBRIC:

I'm getting used to it	I'm getting better	I'm really getting it
I like it when my teacher tells me exactly what to do.	I like making up music, but sometimes my teacher helps me to change my ideas a bit when I use more than one instrument or sound.	I like making up music and using different instruments at the same time in the same piece of music.
I don't like making up music by myself and I can never think of what to do.	I like trying out different instruments and sounds and sometimes it works well.	My teacher tells me that my work is very good.

LEARNING ADVICE:

How To Progress From Beginning To Developing

Suggest the following to the children

- Choose an instrument that you haven't used before. Ask another child who has used it before to show you how to play it and the different sounds you can make with it. Can you teach them how to use an instrument they haven't tried before?
- When you are choosing instruments work with a friend. Do you both have the same ideas about what instruments and sounds to use? Check with your teacher.
- Ask your teacher to talk to you about the type of music you are going to produce. What kinds of sounds will you need to make? What instruments can you choose from? Now use your teacher's advice to choose and experiment.

How To Progress From Developing To Mastering

Suggest the following to the children

- When you choose an instrument for a task, think back to the last time you used this instrument. Was it recently? If it was, choose a different instrument instead.
- When you are composing a piece of music, try out lots of different instruments. Which do you think best suits your task? Don't just choose an instrument because it is there, or because you know how to use it. Experiment with different instruments and sounds to choose the best one for the task.
- Work with other children. Share your ideas. Remember to explain why you think a particular instrument or sound would be best. Do the other children agree with you? Can you come to a group decision about what to use and how to use it?
- Try adding different instruments and sounds to a piece of music that you can play well. Play it for another child or group of children. What do they think of your composition?

END-OF-MILEPOST ASSESSMENT CONFIRMATION

Music

By the time you come to the end of each milepost you will have watched the children doing music lots of times. You will have a record that hopefully shows them progressing from beginning, along the continuum towards mastering stage. This progression is unlikely to be smooth. Children will go the other way sometimes as we all do with skills practice, but there will probably be a general trend.

You will have played an important role in this progression as you will have been able to offer helpful advice to each child based on what you have seen. That's what we mean by *assessment for learning* and why the IPC Assessment for Learning Programme is so important.

In looking at this trend you will be able to make a judgment about whether each child is generally at beginning, developing or mastering stage in each of the important music skills and what overall stage of music skill development each child is at.

It is helpful at the end of each milepost to have one overall check on how well the children can work in music. This overall check isn't a test. It's a way for you to check your own judgments by letting the children carry out some activities without your intervention. If, watching the children's performance in this end-of-milepost assessment confirmation activity, you think that your overall judgment is inappropriate, you might want to let the children do another activity. However, two days of activity won't give you better evidence than two years of closely watching the children at work. In the end, you will have to make a judgment based on all the evidence you have, not just one small part of it.

Try to make the end-of-milepost assessment confirmation activity as much fun as possible. Let the children think up their own activities.

Try some of the following ideas.

- Have a music afternoon. The children could spend the morning practising short compositions they have created throughout the milepost or creating new short compositions. In the afternoon you could have a "concert" for parents, other classes and teachers. The children could prepare a concert programme including the names of their compositions and the scores (in symbol form).
- The children could prepare an "Instrument Guide" for children who will be following Milepost 3 in the coming year. The children could put together a short brochure detailing the instruments that are available in your school, along with copies of their compositions and details of what sound effects, etc can be produced by each instrument. The children could record some of their own compositions using the instruments as inspiration for other children.

- The children could choose a favourite class story or film extract and compose a class piece of music to accompany it. You could record the composition and play it for another class to give their feedback about whether they think the music is suitable, etc.

Each of these activities requires the use of a number of the skills that have been focused on over the course of the milepost. Let the children carry out their activities. Observe them closely. Compare what you see to the judgments you have made from your evidence at the end of the milepost.

MILEPOST 3



PE

ASSESSMENT FOR LEARNING
beginning... developing... mastering

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Be able to plan their own performance

SCENARIOS – Examples of the skill in action:

In *Mission to Mars and Beyond (Living Things And Space Environments)* Task 1, the children plan a series of exercises that they could do in cramped conditions in a space shuttle. The children look at what astronauts currently do for exercise and the conditions they do this in, for example, in zero gravity to create more usable space. The children develop an exercise routine and then demonstrate it to the rest of the class.

In *Artists' Impressions Of The World (They See The World Like This)* Task 2, the children plan a performance of a dance from the home or host country. They choose suitable music and practise the movements as individuals and as part of a group, before performing for the other children.

TEACHERS' RUBRIC:

Beginning	Developing	Mastering
With support from the teacher the child can plan a performance that links smoothly together. The child can show that he/she has planned the work by showing a starting position, a middle and an end. He/she may be able to adapt the plans to meet the needs of a partner or other children.	The child can independently plan a performance that links smoothly together. The performance has a clear beginning, middle and end and the child can adapt his/her work to fit the needs of a partner or other children.	The child is able to independently plan a well-balanced performance. The child is able to work collaboratively with a partner or small group to create performances. The performance shows attention to detail.

CHILDREN'S RUBRIC:

I'm getting used to it	I'm getting better	I'm really getting it
I am able to plan a short performance, but I often ask my teacher to help me. I like planning performances and they flow well. I make sure my performance has a beginning, a middle and an end.	I like planning performances and can do this by myself. I make sure the performance has a beginning, a middle and an end and my teacher tells me that my performance flows well. I can change my performance if I work with a partner or other children.	I can plan a performance with lots of different moves, by myself or with other children. My teacher tells me I couldn't do any better.

LEARNING ADVICE:

How To Progress From Beginning To Developing

Suggest the following to the children

- Practise linking together three different actions. What movements are you going to do? Why have you chosen these movements? Try to add a fourth movement to your sequence. Now try a fifth. Again, think about why you are choosing certain movements. What are you trying to show with your actions?
- Practise a sequence that has different speeds and levels. Work with a partner and show each other short sequences of different speeds. Can you copy each other and explain how to do the movements and why you are doing them?
- Practise working with a partner or a small group to plan a performance with at least three different actions and balances.
- Show the teacher how you can use the apparatus to improve your performance. Can you use apparatus as part of a performance?

How To Progress From Developing To Mastering

Suggest the following to the children

- Practise linking together three different actions. What movements are you going to do? Why have you chosen these movements? Try to add a fourth movement to your sequence. Now try a fifth. Again, think about why you are choosing certain movements. What are you trying to show with your actions?
- Practise a sequence that has different speeds and levels. Work with a partner and show each other short sequences of different speeds. Can you copy each other and explain how to do the movements and why you are doing them?
- Practise working with a partner or a small group to plan a performance with at least three different actions and balances.
- Show the teacher how you can use the apparatus to improve your performance. Can you use apparatus as part of a performance?

Be able to participate in small-side team games

SCENARIOS – Examples of the skill in action:

In *Mission to Mars and Beyond (Living Things And Space Environments)* Task 2, the children invent small-side physical team games that could be played within the cramped conditions of a space shuttle, with limited equipment, space, and considering other factors, like gravity. The children make up the rules and conventions of their game, before teaching it to other members of the class. In this activity, the children have the opportunity to teach each other and participate in a number of small-side team games.

TEACHERS' RUBRIC:

Beginning	Developing	Mastering
<p>The child can perform basic skills in a practice situation. In a game skills are performed with less control and often the child makes the wrong choice of what to do next. The child finds the strategic aspects of the game difficult to perform and is rarely in the right place in the game.</p>	<p>The child can usually perform basic skills with control in a practice and a game situation. Increasingly, the child will be able to make the right choice about their next move and are aware that their performance affects the whole team. When directed by the teacher or another team member the child will be able to make specific moves.</p>	<p>The child can perform basic skills with control in a practice and a game situation. In the game the child will usually make the right choice about their next move. The child will demonstrate an ability to work with others in a team. The child will be able to make suggestions about how to improve the team performance. The child is usually in the right place at the right time, showing a good understanding of what is likely to happen next.</p>

CHILDREN'S RUBRIC:

I'm getting used to it	I'm getting better	I'm really getting it
I am getting better at playing team games. I find it easier when we are practising because there is no pressure. In a game I sometimes make a mistake, but my teacher and team-mates help me.	I can play team games quite well. In a game I usually know what I should do and quite often I do it successfully. My teacher or team-mates sometimes help me. I know that every member of the team can help us win or lose.	I'm good at team games. I've really improved my skills and when we play games I do well. I like to plan what our next move is going to be. Sometimes I help other members of my team, and tell them where they should be and what they should do next.

LEARNING ADVICE:

How To Progress From Beginning To Developing

Suggest the following to the children

- Play a “friendly” game, rather than a competitive one. Does this help take the pressure off?
- Try a different position on your team. Which positions do you play better in?
- Make sure you understand the rules of the game properly. Ask your teacher or team-mates if you are unsure.
- Ask another child to help you in your team. Ask them what your next move should be or if you are in the right place.
- Practise your skills as often as you can. As you become more confident in your abilities, you shouldn’t feel so pressured in a game situation.

How To Progress From Developing To Mastering

Suggest the following to the children

- Before beginning the team game, work with the other children to think about some moves or manoeuvres you can do to play better. For example, you could work out some pass sequences for games that use a ball. Think about how your part in this affects the success of the team.
- Don’t only think about your position or role in the team. Make sure you know what everybody else’s job is (defending, attacking, etc) so that you understand how the team functions as a whole.
- Think about how well you are doing your job in the team. Are you only doing what you are supposed to or are you doing more/not enough? Try to concentrate on what your job is and ask other children if you are not sure.
- Look at the rest of your team. Is everybody in the right place and doing the right thing for their position? Ask your teacher to make time for “Time Outs” in the game so that you can talk with the rest of your team about what you are all doing.

Be able to refine and improve their performance based on their understanding of what is needed

SCENARIOS – Examples of the skill in action:

In *Artists' Impressions Of The World (They See The World Like This)* Task 2, the children work with a traditional dance from the home or host country. The children look at the types of movements that are involved, facial expressions and clothing, etc. The children practise similar movements and perform a dance in a similar style. The children reflect on their performance and think about how they could improve it to make it more similar to the traditional dance that inspired them. The other children also give feedback to help the children refine and improve their performances. In this activity, the children have the opportunity to look at videos and other media of traditional dances to help them understand what they need to do and the movements they need to make to produce their own dances.

TEACHERS' RUBRIC:

Beginning	Developing	Mastering
The child is able to use criteria given by the teacher to make comment about their own technique. He/she can identify which movements are most appropriate for different situations. The child can suggest criteria for improving and refining movements, but has difficulty implementing them.	The child recognises what he/she does well and what he/she needs to improve and can identify some ways to improve or refine movements. The child needs some teacher help with ideas, and this often leads to an improvement in his/her work.	The child recognises how to refine and improve his/her performance. The child understands what movements or actions are required for a particular activity and needs little or no help to improve or refine his/her work.

CHILDREN'S RUBRIC:

I'm getting used to it	I'm getting better	I'm really getting it
My teacher helps me think about what I could change to make my movements better. I know what movements I should be doing but find it quite difficult to do them well.	I know what movements I can do well and what movements I need to practise more. I have some ideas about how to improve and my teacher usually gives me more ideas. When I use these ideas to change my movements my work is better.	I know what movements I can do well. When I think I am not doing a movement well I think of different ways to do it to make it better. I don't usually ask for help and my teacher tells me my work is very good.

LEARNING ADVICE:

How To Progress From Beginning To Developing

Suggest the following to the children

- Watch another group practising – can you identify one really good movement they are doing? Look closely at how the movement is made. Think about body position, speed, balance, equipment, etc. Ask a child who can do the movement well to show you how they do it – slowly. Repeat it, building up your speed until you can do it better. Ask another child to watch you – do they think you are doing it well, or can they suggest anything to help you improve?
- Watch another group practising – can you identify one movement that you think could have been more effective using another method? Speak to the group about how you think they could move better. Explain why your ideas would be more effective. Demonstrate the way you would do the movement and teach the other children. Which way do you all think is more effective?
- Work in a small group. Each child should choose one movement that they think they do well, and one that they find very difficult to do. Show each other the movements you do well. Teach each other how to do them better – are there different ways of doing the movement that are equally successful? Now do the movements that you find difficult. Can any children in your group help you to improve?
- Always think about why you are doing a particular movement in a particular way. What is the purpose of the movement? Develop an understanding of why a movement or action is needed before thinking about how well you are doing it.

How To Progress From Developing To Mastering

Suggest the following to the children

- Work with the same partner for a couple of PE sessions. Watch each other work and make notes on things you each do well and things you each need to improve. After you have observed each other in the sessions, go through your lists. Can you help each other with ideas about how to improve? Can one of you do some movements better than the other? Can you show each other or give each other advice about how to improve, or do you have to ask another pair?
- When you have finished a PE activity, think about your performance. Think about the things you think you need to improve. Practise these specific things before your next PE session. After your next performance, reassess your performance and the movements you made. Did you improve after practising? Are there any other things you could try to refine your movements? Talk to the other children about your ideas.
- Make sure you know what your role is in the activity you are going to do and what this will involve you doing. Think about why you will need to do each of the movements and what their purpose is. Why is it important that you do them well or in a certain way? What will happen if you don't do them so well?

END-OF-MILEPOST ASSESSMENT CONFIRMATION

Physical Education (PE)

By the time you come to the end of each milepost you will have watched the children doing PE lots of times. You will have a record that hopefully shows them progressing from beginning, along the continuum towards mastering stage. This progression is unlikely to be smooth. Children will go the other way sometimes as we all do with skills practice, but there will probably be a general trend.

You will have played an important role in this progression as you will have been able to offer helpful advice to each child based on what you have seen. That's what we mean by *assessment for learning* and why the IPC Assessment for Learning Programme is so important.

In looking at this trend you will be able to make a judgment about whether each child is generally at beginning, developing or mastering stage in each of the important PE skills and what overall stage of PE skill development each child is at.

It is helpful at the end of each milepost to have one overall check on how well the children can work in physical education. This overall check isn't a test. It's a way for you to check your own judgments by letting the children carry out some activities without your intervention. If, watching the children's performance in this end-of-milepost assessment confirmation activity, you think that your overall judgment is inappropriate, you might want to let the children do another activity. However, two days of activity won't give you better evidence than two years of closely watching the children at work. In the end, you will have to make a judgment based on all the evidence you have, not just one small part of it.

Try to make the end-of-milepost assessment confirmation activity as much fun as possible. Have a PE day. Let the children think up their own activities.

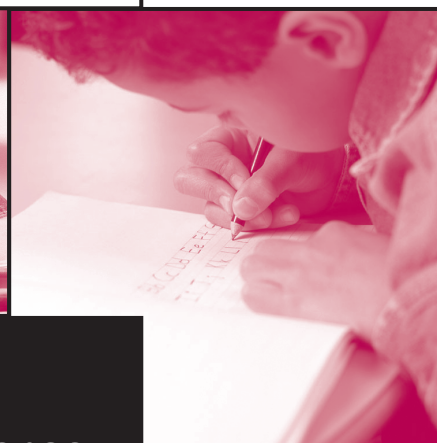
Try some of the following ideas.

- Have a school sports day. The children can take part in skill-based activities, like throwing competitions, running, team sports, etc. You could involve the whole school and children of all mileposts in this.
- Hold a mini-Olympics. Divide the children into teams representing different parts of the world (maybe based on home countries). Spend a couple of days finding out about the different types of sport and activities that are part of the Olympics and choose which ones you are going to include. The children could wear team colours similar to the ones of the countries they "represent" and you could have a running points system to display in the school. The mini-Olympics could take place over anything from an afternoon to a week and you can involve the whole school and children of all mileposts.

- Spend an afternoon concentrating on dance. The children could learn a dance from an area of the world and perform it for other children.

Each of these activities requires the use of a number of the skills that have been focused on over the course of the milepost. Let the children carry out their activities. Observe them closely. Compare what you see to the judgments you have made from your evidence at the end of the milepost.

MILEPOST 3



Science

ASSESSMENT FOR LEARNING
beginning... developing... mastering

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In the following Science Classroom resources for Milepost 3 (10 – 12 year olds) the skill numbering system has been adapted.

The important skills that have been identified and included in the Assessment for Learning Programme are collectively numbered 3.2 in the IPC Units of Work and all resources that detail the Learning Goals.

This skill has been separated to reflect the importance of the different aspects of this skill.

You should use the numbering system included in these Science Classroom Resources to record your judgments of the children using the Recording Software.

Be able to conduct scientific investigations posing scientific questions

SCENARIOS – Examples of the skill in action:

In *The Big Geographical Picture (What Does Our World Look Like?)* Task 2, the children conduct scientific investigations regarding materials used to keep warm, dry, cool, etc. The children work in small groups to pose scientific questions that they will investigate, including whether the colour of materials affects the temperature of the wearer, whether some materials act as better insulators than others, which materials make the best sunshade, etc. The children decide on a question to investigate and plan and carry out their investigations.

In *Looking At The Evidence (The Investigators)* Task 8, the children pose scientific questions about whether the temperature of water affects how fast sugar or salt dissolves. The children consider how to make the test fair, what container and other equipment they are going to use, etc before conducting their investigations.

TEACHERS' RUBRIC:

Beginning	Developing	Mastering
The child knows that scientific investigations arise from questions that require answering and is able to investigate questions posed by others. Occasionally, the child asks investigable questions of his/her own.	The child knows that investigations arise from questions that require answering. The child is able to think of questions of his/her own that prompt investigations, even though aspects of the investigation might not be possible.	The child is independently able to think of questions that can be explored through his/her own later investigation. These questions are based upon his/her knowledge and past experience of the subject matter.

CHILDREN'S RUBRIC:

I'm getting used to it	I'm getting better	I'm really getting it
I know that when we investigate in science we start by asking some questions which we then see if we can answer. I am beginning to be able to think of questions on my own which we can then investigate, but most of the time my teacher or other people help me.	I know that when we investigate in science we start by asking questions which we then see if we can answer. I can now think of a number of questions to ask and, most of the time, everyone thinks they are good. Sometimes though, even though the questions are good we can't really carry out the investigations in our class.	I know that an investigation in science has to begin with some good questions. I am able to think of lots of questions to ask. When I think of them I use what I have already learned about the issue we are investigating. I also make sure that I ask the kind of questions we can actually investigate.

LEARNING ADVICE:

How To Progress From Beginning To Developing

Suggest the following to the children

- Before beginning an activity ask your teacher to arrange a "Question Mart" session at which a number of possible questions can be both raised and discussed first.
- During investigations, make sure that you know that a question is being answered and what it is.
- Work with another child so that you can prepare joint questions initially.
- Think of one question that you would like to know about. Discuss with a friend whether you can actually carry out the investigation and how you can do this.
- When you display science work in your room, make the questions a significant part of the display.
- Discuss what makes a good question with the whole class. What makes some questions "better" than others? Are simple questions better than more complex ones? Does it matter if you can answer the question?

How To Progress From Developing To Mastering

Suggest the following to the children

- Explain to another child or your teacher the reasons behind your choice of question.
- Discuss with other children their past experience of carrying out science investigations and what they have learned through this. Talk together about what is investigable and what is not.
- Plan your investigation before you begin and reflect on your planning. Then reflect on the investigation itself. Write and talk about these reflections so that you can see that the skills of science are at least as important as the factual content.

Be able to choose an appropriate way to investigate a scientific issue

SCENARIOS – Examples of the skill in action:

In *Looking At The Evidence (The Investigators)* Task 10, the children are challenged to find out who has the slipperiest shoes in the class. The children are provided with some basic equipment, including a plank, weights, a scale, a metre rule, etc and choose an appropriate way to investigate the issue. The teacher can provide some guidance if the children have difficulty in their investigations by asking questions like: *How can you make sure all the shoes weigh the same? What should you record?* Etc.

In *Investigating Rivers (Go With The Flow)* Task 3, the children choose an appropriate way to investigate permeable and impermeable rocks. The children are provided with a variety of rocks and water and decide themselves how they will investigate each of the rocks to create a record of all the rocks they test, ranked in order from most permeable to totally impermeable.

TEACHERS' RUBRIC:

Beginning	Developing	Mastering
<p>The child is able to suggest ways in which an investigation might take place. His/her suggestions are linked to the question posed and resources and equipment available, but he/she needs help most of the time to design an investigation that can be carried out. The child knows about "fairness" in investigations but doesn't always include it in his/her thinking.</p>	<p>Whilst needing occasional help to clarify points, the child can design an investigation that is clearly linked to the question posed and that takes into account resources and equipment. The child is able to identify elements of "fairness" on his/her own. The child is able to see that his/her methods have "plusses" and "minuses" either on his/her own or when discussed with them.</p>	<p>The child is able to design a do-able investigation in a way that takes into account the range of equipment and resources available and the nature of the question posed. The child is able to ensure "fairness" in respect of at least one variable. The child is also able to talk about the "plusses" and "minuses" of his/her chosen methods.</p>

CHILDREN'S RUBRIC:

I'm getting used to it	I'm getting better	I'm really getting it
I know that it is important to think about the way we do our investigations. I usually get some help from my teacher or someone else. They help me make sure that my ideas can actually be carried out.	When I'm working out what to do I try to make sure that it is always linked to the question and that we can actually do it with the equipment we have. I sometimes need help with both of these though, especially when thinking about how to improve my ideas.	I know that our investigations need to be linked to the questions we are trying to answer. I also know that we need to make sure that we can actually carry out our investigations in our school with the equipment we have. When I think about what we might do I can usually say what is good and not-so-good about my ideas on my own and often make improvements.

LEARNING ADVICE:

How To Progress From Beginning To Developing

Suggest the following to the children

- Try to be as clear as possible about the question you want to answer and the kind of investigation it requires to answer it. For example: Does it need measurement? What kind of measurement? What level of accuracy does the measurement need to be at?
- Think about this in a variety of ways. For example, children with mathematical-logical intelligence might want to create a simple chart or matrix and so on.
- Discuss examples of fairness based on your life with other children. For example: Two children, equally good at netball, had a netball shooting competition. They both stood the same distance from the net and had the same number of throws. What could make it easier for one child over another? (Such as the use of a smaller ball, etc.)
- Work with another child and critique each others' ideas. For example: *This is what I would do. What's good and not-so-good about my suggestion?*
- Imagine carrying out the investigation. Does it go smoothly or can you see any difficulties? Can you eliminate some of these difficulties before you begin the investigation by rethinking what you will do?

How To Progress From Developing To Mastering

Suggest the following to the children

- Work with a partner and think of a way to investigate a question. Then critique each others' ideas against the criteria contained in the children's assessment rubric.
- Justify your suggestions before you begin your investigations. You can do this formally or informally but you should structure your justification: *This is what I am going to do. This is the equipment I am going to use. This is how I am going to use it. This is why I think the investigation is as fair as possible. This is why I think it will answer the question for me. These are the problems we might encounter.* After conducting the investigation, you should review your justification.
- Discuss media reports of science investigations with the rest of your class. Think about how scientists might carry out their investigations.

Be able to make systematic and accurate measurements from their observations

SCENARIOS – Examples of the skill in action:

In *The Physical World (Energy, Force, Light And Sound)* Task 6, the children investigate and record the mass and force of gravity on classroom objects and materials. The children make accurate measurements in Newtons and use a force metre to measure the amount of force needed to move something. The children go on to accurately measure the effect of water on the force of gravity on each object and record their findings.

In *Energy And Fuels (Making Things Go)* Task 1, the children investigate solar heating by filling a hosepipe with water and taking its temperature. The children then put the hosepipe in the sun and take the temperature after an hour, and so on. The children make systematic and accurate measurements of temperature changes in the water throughout the investigation.

TEACHERS' RUBRIC:

Beginning	Developing	Mastering
The child knows that measurement is important in investigations. The child carries out these measurements without always being accurate and without checking them through replication, unless reminded by someone else.	The child is aware of the importance of measurement in investigations. He/she usually tries to be accurate, but not always with success. The child only occasionally replicates these measurements on his/her own volition. With occasional help, the child can begin to see the patterns that emerge from different observations.	The child makes accurate observations and measurements using a variety of recording equipment. He/she knows that it is necessary to replicate measurements and do this without prompting. The child is able to see where patterns exist in the different observations he/she has made.

CHILDREN'S RUBRIC:

I'm getting used to it	I'm getting better	I'm really getting it
I never guess when taking measurements during our investigations. But I do need help to make sure that my measurements are accurate. I need to be reminded to check my measurements by doing them a second time.	I try my best to measure as accurately as I can, but I still need some help. Sometimes I remember to check my measurements, but not always. When I look at the measurements I have made I am beginning to see how they link with each other.	I know that accurate measurement is very important in investigations. I take great care over this and whenever anyone checks what I have done they usually find that I have been very accurate. When I look at all the measurements I have made and think about what I am investigating, I can begin to see the similarities and differences in my measurements.

LEARNING ADVICE:

How To Progress From Beginning To Developing

Suggest the following to the children

- Once you have identified the measurements you need to take – distance, time, taste, etc – work with another child to identify the different levels of detail or difficulty. For example, distance can be measured in metres, centimetres or millimetres. “Taste” can be defined as sweet, sour, etc but may need an invented classroom scale of sweetness, etc.
- Practise measuring accurately before you begin your investigation.
- Relate the idea of “checking” to real life examples. For example, if you want to buy something with your pocket money it is a good idea to double check that you have enough before you leave home. Try to think of your own examples of checking.
- Discuss with other children the results of their checking. Are you finding different results? What does this mean you have to do?
- Begin looking for patterns in your results. For example: *My pulse rate is always fastest just after an activity. My pulse rate always slows down as I begin to get my breath back.*

How To Progress From Developing To Mastering

Suggest the following to the children

- Practise a range of different measurements with increasing levels of accuracy.
- Work in pairs to check each other’s accuracy and provide feedback.
- Talk to other children about how to build the best scale you can where conventional measurements are inappropriate. Discuss with other children the difference between objective measurement and subjective measurement using a scale.
- Remind yourself of the need to check measurements each time they are made. Make a poster with a slogan to remind yourself and other children and put it on the wall.

Be able to explain and justify their predictions, investigations, findings and conclusions

SCENARIOS – Examples of the skill in action:

In *The Physical World (Energy, Force, Light And Sound)* Task 2, the children work in small groups to investigate what happens when they drop a marble into a curved tube. The children begin by explaining their predictions of what will happen, including the forces that are involved in the movement of the marble. The children then carry out their investigations, and record and explain their observations in their own words. The children conclude by discussing how what they found out about how a marble moves inside a curved tube is linked to the movement of larger objects, like the swing boat at a fairground, etc.

In *Investigating Rivers (Go With The Flow)* Task 1, the children discuss where rainwater comes from, why it rains and what happens to the water when the rain stops. The children make predictions about each of these points before conducting an experiment to confirm or disprove their theories. The children then make a water cycle to see what happens when it “rains” and explain and justify their investigation, findings and conclusions.

TEACHERS' RUBRIC:

Beginning	Developing	Mastering
<p>The child follows the sequence of “predictions, investigations, findings and conclusions”, but requires some help from others to do so. Is not always clear how the different stages are linked and so he/she finds it difficult to explain why some parts of the sequence happened, or how the conclusions are linked to the original prediction or question.</p>	<p>The child follows the sequence of “predictions, investigations, findings and conclusion”, usually without help. The child can say why each took place as it did, but doesn’t always see how one affects another. He/she is not yet able to reflect on the whole investigation, but only on parts of it.</p>	<p>The child can reflect critically on the investigations he/she has carried out. The child is able to show how his/her predictions, investigations, findings and conclusions are linked so that the conclusion offers a commentary on the original question. The child can say why he/she did things in a certain way.</p>

CHILDREN'S RUBRIC:

I'm getting used to it	I'm getting better	I'm really getting it
When I am doing an investigation I can make predictions, carry out an investigation, record my findings and say what I think we have found out. I can't always explain what I mean when someone asks me about this.	When I am doing an investigation I can make predictions, carry out an investigation, record my findings and say what I think we have found out. When someone asks me questions about each of these I can usually explain what I mean. I sometimes get a little confused trying to explain how everything fits together.	I am able to talk about the good and not-so-good parts of the predictions I made, my investigation, my findings and my conclusion. I can say clearly how everything I have done is linked to the original question and how all the parts of my investigation are linked together.

LEARNING ADVICE:

How To Progress From Beginning To Developing

Suggest the following to the children

- Think through what you are doing, one investigative stage at a time. For example, you might focus on explaining or justifying your predictions in one investigation and your methodology in another. Always try to explain “why” you are saying something.
- Work with another child to develop an appropriate vocabulary and structure to use when explaining or justifying what you have done.
- Try to respond to explanations with questions. So: *Now I’ve done my best to explain it, do any of you have any questions to clear up misunderstandings?*

How To Progress From Developing To Mastering

Suggest the following to the children

- Try to review your explanations and/or justifications for each stage of the investigation and anticipate possible questions from others before saying anything. If you can think of a question that might be asked, can you alter your explanation/justification beforehand so that the question is answered in your initial explanation?
- Draw mind maps that show how each part of the investigation is justifiably linked to the original question.

Be able to record and communicate their findings accurately using the most appropriate medium and the appropriate scientific vocabulary and conventions

SCENARIOS – Examples of the skill in action:

In *Investigating Rivers (Go With The Flow)* Task 2, the children find out about stalactites and stalagmites using the Internet. They record their findings and create a spreadsheet detailing the characteristics of each with the appropriate scientific vocabulary and conventions.

In *The Big Geographical Picture (What Does Our World Look Like?)* Task 3, the children use ICT-based models and simulations and atlases to record and communicate their findings about the movement of air and water on the Earth. The children produce short written reports and diagrams about: what causes the movement of water and air; how currents affect the distribution of warm and cold water; how warm and cold water affects plant and animal life; and how warm and cold currents affect human activity. The children use appropriate scientific vocabulary and conventions throughout their presentations.

In *A Mission To Mars and Beyond (Living Things And Space Environments)* Task 3, the children choose the most appropriate medium and conventions for recording the development of seeds and plants that they have grown. The children use appropriate scientific vocabulary to describe the process of growing the plants and using the seeds in their investigation, as well as the process the seeds and plants go through when growing under different conditions.

TEACHERS' RUBRIC:

Beginning	Developing	Mastering
The child knows that recording his/her work is important, but does so in a way that doesn't make clear to him/herself or others what he/she has done. Appropriate scientific vocabulary is rarely used.	The child knows that there are different ways in which he/she can record each stage of what he/she has done and usually chooses appropriately. Even so, the presentation does not always make clear what the child has done. The child shows an increasing use of scientific vocabulary.	The child records his/her work in ways that enable each part of the process to be clear, including, where necessary, detailed plans. The child chooses from a range of graphs, tables and charts in his/her work. These are supported by illustrations of key aspects of the work. The language that is used in any supportive writing uses scientific vocabulary where appropriate.

CHILDREN'S RUBRIC:

I'm getting used to it	I'm getting better	I'm really getting it
I know that I can't remember everything I do and that I need to make a record of it. I also know that this will help others see what I have done. But when I look at what I have written or drawn I can't always make sense of it. My teacher and my friends find it hard to make sense of it, too.	I know that I can't remember everything I do and that I need to make a record of it. I also know that this will help others see what I have done. My teacher sometimes helps me to make my work easier to understand and gives me more scientific vocabulary that I can use.	In order to help me remember and others to see what I have done I know that my recording and writing is very important. My words, pictures, diagrams, graphs and charts are all very clear and help other people to easily see what I have done.

LEARNING ADVICE:

How To Progress From Beginning To Developing

Suggest the following to the children

- Collect a range of different examples of record keeping from magazines, newspapers, etc. Display them in the classroom. Discuss the appropriateness of the range of recording methods with other children. Use the display as a reference set when it is time to make your own recordings.
- Look at samples from Leonardo De Vinci's notebooks (you can find these on the Internet). Look at the relationship between his drawings and his notes.
- Make a link with the *rough drafts* you might begin with in your writing. Discuss the difference between notes used to brainstorm ideas, recordings that are only for personal use and recordings for other people.
- Think about developing a structure through which you can think about how to record. So: *What is it most important to record for me? What is it most important for other people to know? What is the best medium to record this? How can I make the information clear to people?*
- Try to make sure that the recordings you make are actually used. You could work as a class to produce an occasional photo-copiable science magazine or create a wall display about recordings to help other children.
- Work with a partner or in a small group and discuss each other's recordings. You can then offer constructive advice to each other on how – if at all – they might be improved. You can then reflect on your own recordings to see if the same advice applies to your work.
- Produce a display (or a mind map with two or three children) of the key scientific words related to the investigation you are working on and the work you have done. Use these in your notes and in your writing.
- Ask your teacher to provide a format for all the children to use that will give you a start. This may be an appropriate chart format, for example.

How To Progress From Developing To Mastering

Suggest the following to the children

- Once you are used to using a range of different record keeping and annotations, begin to justify your choices before you begin the recording process. This will help you realise that recording is an important part of the process.
- Try to reflect about recording by writing a "How to Record" booklet for younger children and then apply the advice to your own work.
- Discuss newspaper headlines with other children and, in particular, the extent to which they convey the meaning of the main story. (Any newspaper story will do for this.) Then think about how you can convey the key information of your investigation clearly and concisely.
- Discuss the recordings you have done against the criteria contained in the children's rubric.

END-OF-MILEPOST ASSESSMENT CONFIRMATION

Science

By the time you come to the end of each milepost you will have watched the children doing science lots of times. You will have a record that hopefully shows them progressing from beginning along the continuum towards mastering stage. This progression won't be smooth. Children will go the other way sometimes as we all do with skills practice but there will probably be a general trend.

You will have played an important role in this progression as you will have been able to offer helpful advice to each child based on what you have seen. That's what we mean by *assessment for learning* and why the IPC Assessment for Learning Programme is so important.

In looking at this trend you will be able to make a judgement about whether each child is generally at beginning, developing or mastering stage in each of the important science skills and what overall stage of science skill development each child is at.

It is helpful at the end of each milepost to have one overall check on how well the children can work as scientists. This overall check isn't a test. It's a way for you to check your own judgments by letting the children carry out some investigations without your intervention. If, watching the children's performance in this end-of-milepost assessment confirmation activity, you think that your overall judgment is inappropriate, you might want to let the children do another investigation. However, two days of investigating doesn't give you better evidence than two years of closely watching the children at work. In the end, as with all scientists, you will have to make a judgment based on all of the evidence you have, not just one small part of it.

Try to make the end-of-milepost assessment confirmation activity as much fun as possible. Have a science day. Let the children think up their own investigation. If they can't, write different investigations on cards and let them draw one out of a hat.

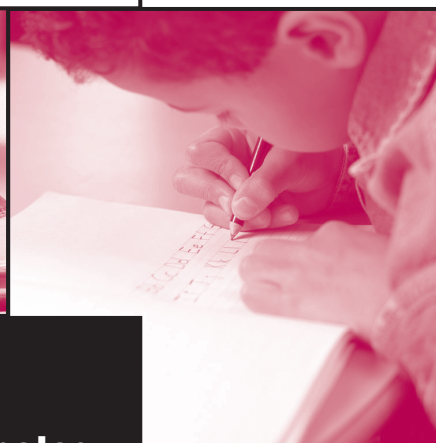
Try some of the following ideas.

- Do apples bounce higher than oranges?
- Does the material affect the amount of smelliness in socks?
- Can tall people always run faster than shorter people?
- Do all computers take the same time to boot up?
- Do people with the loudest voices have the biggest mouths?
- Does yawning always make other people yawn?
- Do insects only visit brightly coloured plants?

And so on... Just use your own imagination – and that of the children.

Each of these questions requires the use of most of the skills that have been focused on over the course of the milepost. Let the children carry out their investigation(s). Observe them closely. Compare what you see to the judgments you have made from your evidence at the end of the milepost.

MILEPOST 3



Technology

ASSESSMENT FOR LEARNING
beginning... developing... mastering

programme

ipc International
Primary Curriculum
great learning, great teaching, great fun

Be able to respond to identified needs, wants and opportunities with informed designs and products

SCENARIOS – Examples of the skill in action:

In *Development (What Price Progress?)* Task 4, the children design and make a product to improve the quality of life at home or in the classroom. Once the children have decided what type of product they wish to make, they gather together some products that are currently available and used for a similar purpose. The children identify the “wants” and “needs” of the proposed consumer and design their product. The class evaluates all of the finished products to see how well they meet the demands of the user.

In *Mission to Mars and Beyond (Living Things And Space Environments)* Task 1, the children build a model of a space station to show a realistic representation of their proposed living and working areas. The children choose suitable materials and follow a logical process to show how they could live on Mars. They build all of the internal features and equipment they will include and put it all together to show the completed space station.

In *The Physical World (Energy, Force, Light And Sound)* Task 1, the children are challenged to build a design for a model powered by a sustainable energy source (wind, water, sun, etc) that will move a weight up and down or across a distance. The children work in pairs to research how energy can be transferred using gears and pulleys, before designing and making their model. The children try out each other’s models and use each other’s plans to recreate some of the models.

TEACHERS' RUBRIC:

Beginning	Developing	Mastering
The child can respond to an identified need, want or opportunity with at least one design or idea for a product. The child needs help to ensure his/her idea is suitable to meet the need, want or opportunity. It may not be possible to make the product.	The child can respond to an identified need, want or opportunity with at least one design or idea for a product. His/her idea is suitable to meet the need, want or opportunity and can usually be made.	The child can respond to an identified need, want or opportunity with two or more designs or ideas for products. His/her ideas are suitable to meet the need, want or opportunity and can usually be made.

CHILDREN'S RUBRIC:

I'm getting used to it	I'm getting better	I'm really getting it
When my teacher asks me to solve a problem by making something I have at least one idea. Sometimes my teacher tells me to change my idea a bit to make it solve the problem better. I can't always make my product.	When my teacher asks me to solve a problem by making something I have at least one idea. My teacher tells me that my idea is good and would solve the problem. I can usually make my product.	When my teacher asks me to solve a problem by making something I have different ideas. My teacher tells me that my ideas are good and would solve the problem. I can usually make my products.

LEARNING ADVICE:

How To Progress From Beginning To Developing

Suggest the following to the children

- Work with another child and discuss what you are going to make. Think about why you are going to make something. What is the purpose of the product? What needs or wants will it satisfy?
- Look at a variety of products that you use regularly. What do they do? What wants or needs do they satisfy?
- Conduct a survey with other children, parents and other adults. What things could make one aspect of each person's life easier? Are there any similarities between the ideas of people of different age ranges? Can you design a product to respond to one of these "wants"?

How To Progress From Developing To Mastering

Suggest the following to the children

- When designing a product, always consider the materials, equipment and technology you will need. Is it possible to make your product? If not, can you change or modify it in some way to make it possible to build?
- Use the Internet and other resources to look at designs and plans for products that are currently available. Use these ideas in your own work.
- When designing a new product, always keep yourself informed of similar products that are available. Is your product really needed, or does a product that satisfies a "need", "want" or opportunity already exist. Could you make a more user-friendly product?

Be able to gather and use information to suggest solutions to problems

SCENARIOS – Examples of the skill in action:

In *The Physical World (Energy, Force, Light And Sound)* Task 1, the children find out how energy can be transferred using gears and pulleys. They research using the Internet, reference books, CD-ROMs and other sources and also use basic construction equipment to find out how these things work. They find out how to change the direction of movement, how to speed up movement, how to slow down movement and how to move objects both horizontally and vertically. The children use this research to help in their design for a model to move an object that is powered by a sustainable energy source.

In *Weather and Climate* Task 1, the children make a hat suitable to wear during one type of weather, for example a rain hat, a sunhat, etc. The children gather information about different types of hat that are available and the materials and colours they are made of and the textures and styles they have. The children design a hat that they think is suitable for the weather they have chosen and base their designs on the information they have gathered. The children try out their hats in the chosen weather to see how well they work.

In *Control Technology (Making Things Happen)* Task 1, the children gather information about simple mechanical feedback loops and more complex electronic feedback loops. The children find out how they work, why they are used and what types of appliance or equipment they are used for. The children are then challenged to think of a control mechanism that would help with a local or home country need. The children think of the problem they would like to solve and base their ideas on what they have found out.

TEACHERS' RUBRIC:

Beginning	Developing	Mastering
The child needs to be directed to appropriate sources to find information. The child is unsure how to use this information in his/her work.	The child can find information by him/herself. The child needs help to use this information to suggest solutions to problems.	The child can find information by him/herself and uses this information to suggest at least one solution to a problem.

CHILDREN'S RUBRIC:

I'm getting used to it	I'm getting better	I'm really getting it
My teacher tells me where to look for information. My teacher then shows me how to use this information to get ideas to solve problems.	I know where to find information about different things and can do this by myself. My teacher helps me to use this information to get ideas to solve problems.	I know where to find information about different things and can do this by myself. I can use this information to give me ideas to solve problems.

LEARNING ADVICE:

How To Progress From Beginning To Developing

Suggest the following to the children

- Make sure you know what resources you have available in your school. Ask your teacher or another child to help you make a list of all these resources. Include reference books, the Internet (specific websites for different topics), CD-ROMs, the knowledge of other children, etc.
- Think about why you are using a particular resource to gather information. Is it the best resource for the topic? How many different resources are you using? Is the information accurate? Can you find out everything you need to know?
- Work with another child. When gathering information, choose 2 or 3 different resources each that you will use. Collate all your information and work together to suggest solutions to problems.

How To Progress From Developing To Mastering

Suggest the following to the children

- Before you begin your research, write down the problem that you are trying to solve. Have this clear in your head before you begin and refer to it whilst you are gathering information to ensure that what you find out is useful.
- When you have gathered all of the information you need, collate it all together in a simple document. Now explain to another child why you have gathered this information and how it will help you to solve a problem.
- Always explain the reasoning behind your ideas. Why do you think your idea will solve a problem? What are your ideas based on? Have other children ask you questions to make sure you are clear about the suggestions you are making.

Be able to devise and use step-by-step plans

SCENARIOS – Examples of the skill in action:

In *Development (What Price Progress?)* Task 4, the children design and make a useful product to improve quality of life in the classroom or at home. The children decide what they are going to make and record step-by-step plans of the development process, including the materials, tools and equipment they are going to use. The children use their plans to make their products.

In *Investigating Rivers (Go With The Flow)* Task 1, the children work in pairs to build a small-scale model of a bridge. The children create a working portfolio to show how to make the bridge, including: an artist's impression of the bridge; a plan of the bridge with measurements (height, width, distance from each bank, number of supports, etc); a list of materials to be used for each part of the bridge; the equipment required for each part of the bridge; a list of activities in order to show how they will construct the bridge. The children use these plans to build their bridges.

In *The Physical World (Energy, Force, Light And Sound)* Task 1, the children work in pairs to develop a design for a model that uses a sustainable energy source, like wind or water. The children create a workable plan that uses cogs and pulleys to transfer energy, make a list of the materials and tools needed and devise step-by-step plans detailing the different design stages. The children use these plans to make their model.

TEACHERS' RUBRIC:

Beginning	Developing	Mastering
The child can make basic step-by-step plans for a product, though he/she often fails to include key stages, or to list all of the equipment needed. The child needs substantial teacher help to ensure the plans are usable in the classroom.	The child can make detailed step-by-step plans for a product and includes a list of all the equipment needed. The plans are often usable but sometimes need to be changed by the teacher to ensure the process is in the correct order.	The child can make detailed step-by-step plans for a product and includes a list of all the equipment needed. The child details exactly how he/she is going to make the product and the plan can be used in the classroom with success.

CHILDREN'S RUBRIC:

I'm getting used to it	I'm getting better	I'm really getting it
I can make a step-by-step plan to use in class to make a product. My teacher helps me, as sometimes I forget to write down everything I will use and sometimes put things in the wrong order.	I can make a step-by-step plan to use in the classroom to make a product. I write down everything I will use and the order I will do things in. Sometimes I put things in the wrong order and my teacher helps me to change it.	I can make a step-by-step plan to use in the classroom to make a product. I always write down everything I will use and how I am going to do things. I write these things in the order that I am going to do them. I use my plan to make something and my teacher says my work is good.

LEARNING ADVICE:

How To Progress From Beginning To Developing

Suggest the following to the children

- Work with another child to make a list of all the things you need to include every time to make a plan to make something, for example, equipment and other resources, the different “making” stages, etc. Check this with your teacher. Make sure you refer to this list every time you create a plan.
- Look at the work and plans of other children. Ask the other child if they could follow their plan successfully to make something or if they needed to change anything. Use their ideas in your own work.
- Work in a small group of about 4 children. Decide on one product that you will make as a group and talk about what you will need and how you will make the product. Then work separately to produce what you think is a usable, step-by-step plan. When you have all created your plans, come back together as a group and compare your plans. Are they similar? Which is the most practical? Did you forget any of the stages or equipment in your own plan? Now work as a group with your ideas to create one plan that incorporates the best ideas and use it to make your product.

How To Progress From Developing To Mastering

Suggest the following to the children

- Write down everything you will need to do to make a product in the correct order. Now draw pictures to illustrate each stage of the making process. Make these pictures as detailed as possible, showing how parts fit together, how you will attach things, etc. Is it easier to see if your plan is usable using pictures, or words, or both?
- Show your plan to your teacher or to other children before you begin to build or make something to get their feedback.
- When you are designing a usable, step-by-step plan, try making a prototype of your product to help you decide exactly how you will do things and what you need. When you have identified any changes you need to make, make them to your plan and then build or make your product.

Be able to work with a variety of tools and materials with some accuracy

SCENARIOS – Examples of the skill in action:

In *The Physical World (Energy, Force, Light And Sound)* Task 3, the children work together to make a powered toy boat. They use electric cells, magnets, wind-up propellers, sails or solar panels to power their boat. The children use suitable tools and techniques to attach the power source to the boat and to make it work as effectively as possible. The children also use tools and materials to waterproof the power source if required, for example in the case of a magnet.

In *Investigating Rivers (Go With The Flow)* Task 1, the children use a variety of tools and materials to make a bridge. They choose the best materials for the bridge and its supports and construct it accordingly. The children then test each other's bridges with an agreed weight (perhaps a toy car) to see how successful they are. In this work the children use tools to fix parts of the bridge together, to shape the bridge and to fasten it on either side of the river bank.

In *Mission to Mars and Beyond (Living Things And Space Environments)* Task 1, the children build a model space station. They use plans that they have created and choose suitable materials for each of the areas of their station. The children build the internal equipment and features of the station and then the outer casing, making sure that their work fits together and the areas (living, working, etc) are easily-identifiable.

TEACHERS' RUBRIC:

Beginning	Developing	Mastering
The child can use a range of tools and materials under supervision. He/she has difficulty using the tools and materials with accuracy and often has to redo the work.	The child can use a range of tools and materials to make products. The child works with some accuracy but needs some supervision to ensure he/she is using tools correctly. The child sometimes need teacher help to redo or modify the work.	The child can use a wide range of tools and materials to make products. The child's work is accurate and he/she rarely has to redo or modify it. The child needs little or no help from the teacher.

CHILDREN'S RUBRIC:

I'm getting used to it	I'm getting better	I'm really getting it
My teacher shows me how to use different tools and watches me work. I sometimes make mistakes and have to start again.	I can use different materials and tools to make things. I sometimes make mistakes and have to change my work a bit and my teacher helps me do this.	I can use different materials and tools to make things. My work usually looks how I want it to and I don't need any help from my teacher.

LEARNING ADVICE:

How To Progress From Beginning To Developing

Suggest the following to the children

- Ask your teacher or a friend to show you how to use a piece of equipment. Practise using this every day for a week. Can you use it better by the end of the week?
- Think about a piece of equipment that you find it difficult to use. For example, when you use a cutting machine, do you often make mistakes? Ask a child who is good at using this equipment to show you how they do it (under supervision). Can they give you any ideas about how to do it better, for example, clearly marking where you want to cut, etc?
- Ask your teacher to demonstrate how to do something and then ask him or her to watch you work. Do you find it easier when you have somebody to copy?

How To Progress From Developing To Mastering

Suggest the following to the children

- Try laying out your work before you begin. Where will each thing go? How will you attach things together or make them the right size? What will you do first? Now begin your work.
- When cutting things out, draw a line to follow on the material rather than cutting it freehand.
- Choose one material. Spend an afternoon using this material in as many ways as possible. You could try sticking it, gluing it, cutting it up, folding it, etc. Are some ways of using the material easier than others? Can your teacher or a friend give you help to make using the material easier?

Be able to test and evaluate their own work and improve on it

SCENARIOS – Examples of the skill in action:

In *Weather and Climate* Task 1, the children design and make hats to suit a particular type of weather. After researching different types of hats and materials and drawing up step-by-step plans, the children prepare a paper or textile pattern of their proposed hats to test how they fit together and how it will be joined. They make any necessary changes to the design before going on to make their hats. Once all the hats are made, the children test them out, preferably in the type of weather they were designed for. They make any last minute changes now, and then write an evaluation of their work, including suggestions on how they could improve it further.

In *The Physical World (Energy, Force, Light And Sound)* Task 2, the children design and make simple games that use an electronic or magnetic component, for example, pin the tail on the donkey, magnetic battleships, steady hand, etc. When all the games are complete, the children hold a testing and evaluating session, when they try out each other's games. The children suggest improvements to their own and other children's work.

TEACHERS' RUBRIC:

Beginning	Developing	Mastering
The child can evaluate his/her work and decide whether the finished product is good or needs improvement. The child has to be shown how to make improvements to the product.	The child can evaluate his/her work and decide whether the finished product is good or needs improvement. The child can suggest at least one way to make the work better. His/her ideas are not always practical or, when implemented, don't lead to an improvement in the product or plan.	The child can evaluate his/her work and decide whether the finished product is good or needs improvement. The child can suggest at least one possible way to make the work better. His/her ideas are practical and, when implemented, lead to an improvement in the product.

CHILDREN'S RUBRIC:

I'm getting used to it	I'm getting better	I'm really getting it
<p>I can test my work to see if it is good or if I need to change it to make it better.</p> <p>My teacher shows me how to make changes to my work to make it better.</p>	<p>I can test my work to see if it is good or if I need to change it to make it better. I have some ideas about how to make it better, but my teacher sometimes tells me that my ideas aren't possible.</p> <p>Sometimes when I make changes, I think my work was better before.</p>	<p>I can test my work to see if it is good or if I need to change it to make it better. I have ideas about how to improve my work and when I try them out they do make my work better.</p>

LEARNING ADVICE:

How To Progress From Beginning To Developing

Suggest the following to the children

- When you have finished making something compare it to your original plan. Is the finished result as you planned? Why did you change it? Why did it turn out differently?
- Give your product to a friend and ask them to try it out. Can they give you any ideas about how you could make it better? Try out one of their products. Can you help them with ideas to make it better too?
- Look at products that are similar to something you have made. How are they different to your product? Which are better? Are there any things you could incorporate into your design?

How To Progress From Developing To Mastering

Suggest the following to the children

- Try your product out. Does it work as it was intended? What is it that is stopping it from working as well as it could? For example, if you made a toy car, did you make sure all the wheels were the same size, or that they move smoothly?
- Now think about what it is that is stopping your product from working as well as it could. How could you change this to make the product better? For example, could you change the size of the wheels, could you make them smoother, etc?
- Ask your teacher to arrange a class "trial" session. As a class you can try out each other's products and suggest ways that they could be improved. Try incorporating the other children's ideas about your product into your plan and make your product again. Is it better?

END-OF-MILEPOST ASSESSMENT CONFIRMATION

Technology

By the time you come to the end of each milepost you will have watched the children doing technology lots of times. You will have a record that hopefully shows them progressing from beginning, along the continuum towards mastering stage. This progression is unlikely to be smooth. Children will go the other way sometimes as we all do with skills practice, but there will probably be a general trend.

You will have played an important role in this progression as you will have been able to offer helpful advice to each child based on what you have seen. That's what we mean by *assessment for learning* and why the IPC Assessment for Learning Programme is so important.

In looking at this trend you will be able to make a judgment about whether each child is generally at beginning, developing or mastering stage in each of the important technology skills and what overall stage of technology skill development each child is at.

It is helpful at the end of each milepost to have one overall check on how well the children can work in technology. This overall check isn't a test. It's a way for you to check your own judgments by letting the children carry out some activities without your intervention. If, watching children's performance in this end-of-milepost assessment confirmation activity, you think that your overall judgment is inappropriate you might want to let the children do another activity. However, two days of activity won't give you better evidence than two years of closely watching the children at work. In the end, you will have to make a judgment based on all the evidence you have, not just one small part of it.

Try to make the end-of-milepost assessment confirmation activity as much fun as possible. Have a technology day. Let the children think up their own activities.

Try some of the following ideas.

- Challenge the children to make a toy for a younger child (Early Years or Milepost 1 or 2 age-range). You could look at the type of toys that they have, what type of toy they would like to make and the children could talk to their "target consumer" (the younger children) about things they would like. The children could make plans of their toys using pictures and words to show the teacher, before making their toys. Once they have made their toys, they can try them out and make any changes or improvements they think necessary, before giving them to younger children to test out.
- The children could make something to decorate the school. When thinking of what they could make, think about what time of year it is. Is it Christmas or Easter soon? Are there any other holidays soon to take place where you are? Is it summer or winter? What else is going on at school? Are there any sports days, parents' evenings, new students due to arrive, etc? Brainstorm with the children different things they could make for the school. The children can then draw up their plans and make something under supervision.

Each of these activities use a number of the skills that have been focused on over the course of the milepost. Let the children carry out their activities. Observe them closely. Compare what you see to the judgments you have made from your evidence at the end of the milepost.

RECORD SHEET FOR CLASSROOM USE

Subject:

Milepost:

Skill:

Teacher:

Date:

Pupils	Beginning	Developing	Mastering