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Art Learning Goals

MILEPOST 2

By the end of the school year in which they are 9, the vast majority of children will:

- 2.1 Know how a number of artists – including some from their home country and the host country – use forms, materials and processes to suit their purpose
- 2.2 Know about some of the work of artists in the host country
- 2.3 **Be able to use art as a means of self expression**
- 2.4 **Be able to choose materials and techniques which are appropriate for their task**
- 2.5 **Be able to explain their own work in terms of what they have done and why**
- 2.6 **Be able to talk about works of art, giving reasons for their opinions**

Geography Learning Goals

MILEPOST 2

By the end of the school year in which they are 9, the vast majority of children will:

- 2.1 Know how particular localities have been affected by human activities
- 2.2 Know how particular localities have been affected by natural features and processes
- 2.3 Know how the nature of particular localities affect the lives of people
- 2.4 Know about the weather and climatic conditions in the host country and how they affect the environment and the lives of people living there
- 2.5 **Be able to use geographical terms**
- 2.6 **Be able to describe the main geographical features of the area immediately surrounding the school**
- 2.7 **Be able to make simple maps and plans of familiar locations**
- 2.8 **Be able to use maps at a variety of scales to locate the position and geographical features of particular localities**
- 2.9 **Be able to use secondary sources to obtain geographical information**
- 2.10 **Be able to express views on the features of an environment and the way it is being harmed or improved**
- 2.11 **Be able to communicate their geographical knowledge and understanding to ask and answer questions about geographical and environmental features**
- 2.12 Understand how places fit into a wider geographical context
- 2.13 Understand that the quality of the environment can be sustained and improved

History Learning Goals

MILEPOST 2

By the end of the school year in which they are 9, the vast majority of children will:

- 2.1 Know about the main events, dates and characteristics of the past societies they have studied
- 2.2 Know about the lives of people in those periods
- 2.3 Know about the main similarities and differences between the past societies they have studied
- 2.4 **Be able to give some reasons for particular events and changes**
- 2.5 **Be able to gather information from simple sources**
- 2.6 Be able to use their knowledge and understanding to answer simple questions about the past and about changes
- 2.7 Understand that the past can be considered in terms of different time periods
- 2.8 Understand that the past has been recorded in a variety of different ways

Information and Communications Technology (ICT) Learning Goals

MILEPOST 2

By the end of the school year in which they are 9, the vast majority of children will:

- 2.1 Know about some applications of ICT in work situations
- 2.2 Know about some applications of ICT in daily life
- 2.3 Know about some of the ways in which the use of ICT in work situations affects people's lives
- 2.4 **Be able to find and use stored information from a variety of sources**
- 2.5 **Be able to use ICT to support and present their work in other subjects**
- 2.6 Be able to use sequences of instruction to control devices and achieve specific outcomes
- 2.7 **Be able to make choices to gather information and solve problems**
- 2.8 Understand that ICT can be used responsibly and creatively to people's benefit

International Learning Goals

MILEPOST 2

By the end of the school year in which they are 9, the vast majority of children will, through their study of The International Primary Curriculum:

- 2.1 Know about some of the similarities and differences between the different home countries and between them and the host country
- 2.2 Know about ways in which these similarities and differences affect the lives of people
- 2.3 **Be able to identify activities and cultures which are different from but equal to their own**

Music Learning Goals

MILEPOST 2

By the end of the school year in which they are 9, the vast majority of children will:

- 2.1 Know how a number of musicians – including some from their home country and the host country – organise sounds and use them expressively
- 2.2 Know how a number of musicians – including some from their home country and the host country – choose sounds and instruments which are appropriate for their task
- 2.3 **Be able to recognise and explore the ways that sounds can be organised and used expressively**
- 2.4 Be able to sing in tune and with expression
- 2.5 **Be able to perform simple pieces rhythmically using a limited range of notes**
- 2.6 Be able to improvise repeated patterns
- 2.7 Be able to compose simple pieces to create intended effects
- 2.8 **Be able to choose sounds and instruments which are appropriate for their task**
- 2.9 Be able to improve their own work, having regard to the intended effect
- 2.10 Be able to explain their own work in terms of what they have done and why
- 2.11 Be able to talk about pieces of music, giving reasons for their opinions
- 2.12 Be able to recognise and identify familiar pieces of music including some from the host country
- 2.13 Understand how musical elements are combined and varied to create different effects

Physical Education (PE) Learning Goals

MILEPOST 2

By the end of the school year in which they are 9, the vast majority of children will:

- 2.1 Know the principal rules of a number of established sporting and athletic activities
- 2.2 Know the principles of water safety
- 2.3 **Be able to choose appropriate skills and movements to suit a task**
- 2.4 **Be able to plan actions and movements**
- 2.5 **Be able to take part in a range of individual, pair, small group and team activities**
- 2.6 **Be able to perform a range of activities with control and coordination**
- 2.7 Be able to apply tactics in competitive situations
- 2.8 Be able to apply expressive movements in sequence
- 2.9 **Be able to improve performance through analysis, observation and repetition**
- 2.10 Be able to move easily through water
- 2.11 Understand the importance of warming up before an activity
- 2.12 Understand that physical activity is good for their health
- 2.13 Understand the importance of rules
- 2.14 Understand the importance of fair play

Science Learning Goals

MILEPOST 2

Enquiry

By the end of the school year in which they are 9, the vast majority of children will:

- 2.1 **Be able to carry out simple investigations**
 - **suggesting ways of collecting evidence**
 - **preparing a simple investigation which is fair with one changing factor**
 - **predicting the outcomes of investigations**
 - **using simple scientific equipment**
 - **testing ideas using evidence from observation and measurement**
 - **linking the evidence to broader scientific knowledge and understanding**
 - **using evidence to draw conclusions**
 - **recording and communicating their observations and findings in a variety of ways**
 - **explaining their observations and findings**
- 2.2 Be able to gather information from simple texts
- 2.3 Understand the importance of collecting scientific evidence
- 2.4 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 9, the vast majority of children will:

- 2.5 Know the differences between living and non-living things
- 2.6 Know about processes and conditions that have an effect on living things
- 2.7 Know about the principles of nutrition, growth, movement and reproduction
- 2.8 Know about the living things that are supported by different environments
- 2.9 Know about ways in which animals and plants are suited to different environments
- 2.10 Know about the frequently occurring animals and plants that are supported by the environment around the school
- 2.11 Know about food chains in the local environment
- 2.12 Understand the principles of protecting living things
- 2.13 Know about the function and care of teeth in humans and other animals
- 2.14 Know about the function and actions of the heart in humans and other animals
- 2.15 Know about the functions of skeletons and muscles in humans and some other animals
- 2.16 Know about the main stages of the human life cycle
- 2.17 Know about the effect of exercise on the human body
- 2.18 Know about the effects that tobacco and alcohol have on the human body
- 2.19 Know about the effect of diet on the human body
- 2.20 Be able to classify animals according to their features
- 2.21 Know about the effects that light, air, water and temperature have on plants
- 2.22 Know about the functions of leaves
- 2.23 Know about the life cycle of plants
- 2.24 Be able to classify plants according to their features

Materials

By the end of the school year in which they are 9, the vast majority of children will:

- 2.25 Know that some materials conduct electricity
- 2.26 Know that some materials conduct heat more effectively than others
- 2.27 Know that temperature is a measure of heat
- 2.28 Know that some changes in materials are reversible and others are irreversible
- 2.29 Know about the changes that occur when materials are mixed
- 2.30 Know that some substances dissolve in water and others do not
- 2.31 Be able to compare common materials and objects according to their properties
- 2.32 Be able to distinguish between solids, liquids and gases
- 2.33 Be able to separate insoluble solids from liquids by filtering
- 2.34 Understand that different materials are suited for different purposes

Physical processes

By the end of the school year in which they are 9, the vast majority of children will:

- 2.35 Know about the principles of magnets and magnetic and non-magnetic materials
- 2.36 Be able to construct electrical circuits to make devices work
- 2.37 Be able to change the type or number of components in a circuit to have a different

- effect
- 2.38 Know that forces can have direction
 - 2.39 Know that forces differ in size
 - 2.40 Know about the effects of friction
 - 2.41 Know that light travels from a source
 - 2.42 Know that objects form shadows when they block the passage of light from a source
 - 2.43 Know that sounds are made when objects vibrate
 - 2.44 Be able to create sounds with a variety of objects
 - 2.45 Be able to change sounds by altering variables
 - 2.46 Know that the sun, earth and moon are approximately spherical
 - 2.47 Know that the position of the sun appears to change during the course of a day and that shadows change as a result
 - 2.48 Know that the sun provides the light and heat necessary for the earth
 - 2.49 Know that the moon appears to change shape over the course of a month

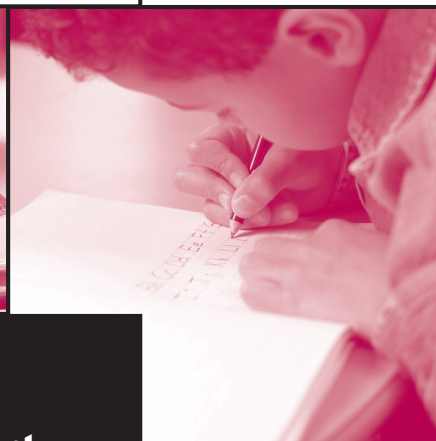
Technology Learning Goals

MILEPOST 2

By the end of the school year in which they are 9, the vast majority of children will:

- 2.1 Know that the way in which products in everyday use are designed and made affects their usefulness
- 2.2 **Be able to design and make products to meet specific needs**
- 2.3 **Be able to make usable plans**
- 2.4 Be able to make and use labelled sketches as designs
- 2.5 **Be able to use simple tools and equipment with some accuracy**
- 2.6 **Be able to identify and implement improvements to their designs and products**
- 2.7 **Be able to identify the ways in which products in everyday use meet specific needs**
- 2.8 **Be able to suggest improvements to products in everyday use**

MILEPOST 2



Art

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

programme



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

Be able to use art as a means of self expression

SCENARIOS – Examples of the skill in action:

In *Airports (Connections)* Task 1, the children design a logo and fleet colours for an imaginary airline owned by their school. The children look at logos and designs that are currently used and speak to other people about what they think the logo and fleet colours should be like. The children then work in pairs or small groups to produce their own logo and fleet design for the airline. The children express their own ideas as well as thinking about what they have found out from other sources.

In *Visual Representation (Paintings, Pictures and Photographs)* Extension Activity, the children produce a self-portrait. They include clues in this piece of art about their family, their interests, their travels, their friends, etc. The children choose their own means of including the clues, including magazine clippings, photos, images and symbols. In this activity, the children express how they view themselves and areas of their lives.

In *Inventions and Machines* Task 1, the children produce a piece of art to express what they think about inventions and machines. They decide whether they will show inventions and machines in a positive or a negative way, and choose their own medium and materials for the work.

TEACHERS' RUBRIC

Beginning	Developing	Mastering
The child needs substantial help in producing art. He/she has little understanding of how art can be used to express his/her own ideas, and often uses the same materials and processes, or copies what other children are doing.	The child can produce a directed piece of art, but has little awareness of self-expression. He/she often copies what other children are doing and needs help from the teacher to choose materials and processes.	The child can express his/her ideas using art, with little or no direction. He/she chooses his/her own materials and processes and can explain these choices and the ideas he/she is trying to express.

CHILDREN'S RUBRIC:

I'm getting used to it	I'm getting better	I'm really getting it
I like my teacher to tell me exactly what to do when I am doing art. I follow the teacher's instructions and my work usually looks quite similar to other children's.	I can make a piece of art when my teacher tells me what to do. Sometimes I choose my own materials and processes, but I like to check with my teacher. I get ideas from other children.	I can make lots of different types of art and know that sometimes one style is better than another. I have my own ideas and when I do art I think about why I am doing it and try to show this in my work.

LEARNING ADVICE:

How To Progress From Beginning To Developing

Suggest the following to the children

- When you are going to produce a piece of art, think about how you would like to do the art. What style will you use? What materials will you use? Think about colours and shapes, etc. Then go to talk to your teacher about your ideas.
- Whenever you do a piece of art, think about why you are doing it in a certain way. Why are you choosing a certain colour? Why are you producing a painting rather than a collage?
- Work alone. Try not to look at what other children are doing. Try to think of your own ideas about what you are going to do and how you are going to do it. Also think about why you are going to do it in a certain way.
- Think about how art makes you feel. Do any colours make you feel happy or sad? Do you prefer one art style to another? Why do you think this is? Next time you use a colour that makes you happy, think about whether you want your art to reflect happiness.
- Try to use as wide a range of different materials and processes as you can, rather than using the same small range you usually use. Think about when you would use each process or material and why.

How To Progress From Developing To Mastering

Suggest the following to the children

- How does art make you feel? Produce a piece of art that expresses how you feel about your progress throughout the milepost. Explain your choices to your teacher or classmates.
- Develop your art skills using as many materials and processes as you can. Try to learn how to use a new material or process each week. Ask other children to show you how to use them or ask your teacher.
- Look at different works of art. How do they make you feel? Look at art you have made. How did you feel when you made it? Do you feel the same when you look at it now?
- When making art, always think about why you are making choices. Why are you choosing materials/colours/a large size/a rectangular shape, etc? Talk to your teacher about your finished piece of art and explain your choices.

Be able to choose materials and techniques which are appropriate for their task

SCENARIOS – Examples of the skill in action:

In *Archaeology (Treasure)* Task 4, the children make a 3D representation of a sketch of a piece of pottery. They make decisions about what medium they will use, how they will decorate their work and how they will label and display it. The children choose materials and techniques which are appropriate for the task.

In *Food (Chocolate)* Task 1, the children work in small groups to look at the designs of chocolate wrappers. They think about which designs they like best and why, and what information is included on the wrapper. The children then work individually to design their own chocolate wrappers, choosing suitable materials and techniques and including all of the necessary information.

In *Explorers and Adventurers* Task 4, the children produce a piece of art in the style of artist Georgia O’Keefe. The children need to choose appropriate materials to make their art in an abstract style of a similar size to the work of the artist they are studying and choose appropriate colours. The children are encouraged to use all the available space on the paper.

TEACHERS' RUBRIC

Beginning	Developing	Mastering
The child can choose his/her own materials and techniques, though they are often inappropriate for the task. The child needs help from the teacher to choose correctly.	The child can choose at least one material and technique which is appropriate for the task. This choice, though appropriate, is often not the best choice for the task. The child needs help to think of alternative materials and techniques.	The child usually chooses the best material and technique for a task. The child uses a range of materials and techniques and rarely needs help.

CHILDREN'S RUBRIC:

I'm getting used to it	I'm getting better	I'm really getting it
When I choose what materials I want to use, my teacher often gives me a better idea of things to use. I often ask my teacher what type of art I should make, like a painting, or a drawing.	I like choosing how I will make my art, though I usually use the same materials and techniques. My teacher helps me with some different ideas.	I know that different materials and techniques are better for some things than for others and I can use lots of different things in my art. My teacher is usually happy with my choices.

LEARNING ADVICE:

How To Progress From Beginning To Developing

Suggest the following to the children

- When you are about to begin a piece of art, think of two or three different materials or techniques you could use. Which ones do you think will work best and why? Talk to your teacher about your ideas.
- Work with a partner and share your ideas about which materials and techniques you should use for a piece of art. Do you both agree? Check your ideas with other children.
- Think about a piece of art you have made that didn't turn out how you wanted it to. Could you have used a different material or technique to make it better?

How To Progress From Developing To Mastering

Suggest the following to the children

- Make a list of different art techniques, like clay modelling, painting on paper, painting on canvas, charcoal drawing, etc. Next to each technique, make a list of all the materials that are suitable for use with the technique, for example, the type of paper or paint you should use. Add instructions about how long you need to fire a clay sculpture/leave a painting to dry, etc. You can refer back to this guide when you are making art or use it to help other children with their work.
- Try out different materials and techniques. Ask another child to show you a technique that you can't use very well. Can they give you any tips to make it work better? Now help another child.
- Look at other people's pieces of art. What materials and techniques did they use? Were there any alternative materials or techniques they could have used? Why do you think they chose the materials and techniques that they did?

Be able to explain their own work in terms of what they have done and why

SCENARIOS – Examples of the skill in action:

In *People Of Different Ages (Young and Old)* Task 3, the children design anti-ageist posters depicting elderly people doing a range of active jobs and pursuits. The children also think up a slogan to include on their poster to encourage an active lifestyle in old age connected to a more active lifestyle. The posters are displayed around the classroom and the children discuss what they have done and why.

In *Airports (Connections)* Task 1, the children produce a logo and fleet design for an imaginary airline owned by the school. The children look at current logos and designs used in the airline business to get ideas for their own work. When the children have produced their designs, they display them in the school and explain what they did and why.

In *Earthquakes and Volcanoes (The Active Planet)* Task 1, the children create a piece of art to depict a volcanic eruption. They choose from a variety of materials and paints for this, including cotton wool, chiffon, paints, bark, etc. The children are encouraged to mix together paints to get the colours that they want to use. The artwork is then displayed and the children explain what they did and why.

TEACHERS' RUBRIC

Beginning	Developing	Mastering
The child is able to explain what he/she did to produce a piece of art. He/she cannot articulate why he/she made these choices and is often directed by the teacher or other children.	The child explains in detail what he/she did to produce a piece of art. The child needs some prompting to explain why he/she made these choices.	The child explains in detail what he/she did to produce a piece of art and offers suggestions of other things he/she could have done. The child demonstrates clear reasoning for these choices.

CHILDREN'S RUBRIC:

I'm getting used to it	I'm getting better	I'm really getting it
I can explain how I made something. My teacher or my friends usually tell me what to do to make a piece of art.	I can explain how I made something. When my teacher asks me why I did something I have to think hard about it. Sometimes I know why I did something, but sometimes I do what other people tell me.	I can explain how I made something and how I could have made it. I can explain why I did it this way: for example, mixing red and orange paint makes a more realistic fire colour than using red and yellow.

LEARNING ADVICE:

How To Progress From Beginning To Developing

Suggest the following to the children

- Talk to a partner about how you are going to make something. Tell them why you are going to make it this way. Can they give you any suggestions about other ways you could make it?
- Try out lots of different colours when painting. For example, if you want to paint a fire, try different combinations of red, orange, yellow, etc, rather than using the first colour you find.
- Try to think of your own ideas rather than asking other children. Once you have your own ideas you can share them with your friends to see if they can help you improve them.
- Show another child how to mix two colours together to create a realistic colour for something. Explain to them why it is better to mix two colours together rather than use one colour on its own.

How To Progress From Developing To Mastering

Suggest the following to the children

- When making something, think of all the different ways you could do it. Explain to a friend why you chose one option. How is it better than the other options you thought of?
- At every stage of your work, ask yourself why you are doing something. Why have you chosen that colour? Why didn't you choose the other colour? Why are you going to leave your sculpture overnight before you paint it? Explain to your teacher.

Be able to talk about works of art, giving reasons for their opinions

SCENARIOS – Examples of the skill in action:

In *Archaeology (Treasure)* Task 1, the children research and collect images of different pieces of treasured artwork from their home and host countries. The children are encouraged to find 2D and 3D art, as well as pieces from different times in history to provide as broad a range as possible. The children then talk about one piece of art that they particularly like, giving reasons for their opinions.

In *Food (Chocolate)* Task 1, the children look at different chocolate wrappers. They talk about the designs: which ones they like best, what they like about them, whether they are eye-catching, etc. The children are encouraged to give reasons for their opinions.

In *Clothes and Music (Fashion)* Task 4, the children look at the work of famous artists like Picasso, Matisse and Pollock. The children create a timeline of the artists and include their thoughts on the artists' work. The children can then talk about their thoughts, giving reasons for these opinions.

TEACHERS' RUBRIC

Beginning	Developing	Mastering
The child can express likes and dislikes but cannot justify his/her reasoning.	The child can express likes and dislikes and, with prompting by the teacher, can justify his/her reasoning with ideas about colour, design, shape, size, etc.	The child can express likes and dislikes and can explain why he/she thinks this. He/she comments on different aspects of the art, including colour, design and art medium.

CHILDREN'S RUBRIC:

I'm getting used to it	I'm getting better	I'm really getting it
When I look at art I know if I like it or dislike it, but I'm not sure why.	When I look at art I know if I like it or dislike it. My teacher helps me to explain this by giving me ideas about colour, design, shape and size and then I can explain why I like or dislike it.	When I look at art I know if I like it or dislike it. I can talk about the art in different ways, including the colour, the design and what type of art it is.

LEARNING ADVICE:

How To Progress From Beginning To Developing

Suggest the following to the children

- Talk to a friend about a piece of art they like. Ask them to explain to you why they like it. Do you agree with them? Why? Why not?
- Ask your teacher to help you write a list of things to think about when you look at art. Include ideas about colour, design, shape, size, process, medium, etc. Next time you look at art think about the list you made and think about as many things as you can about the art.
- Choose one piece of art that you like. Find out as much as you can about it. Where is it kept? Who was the artist? Does the piece of art have a name? Make a fact sheet about this piece of art to display in your classroom for the other children to look at.

How To Progress From Developing To Mastering

Suggest the following to the children

- Choose an art style, for example sculpture. Write down everything that you want to know about a piece of art in this style, for example, how it was made, who the artist was, where the statue is kept, why it was made, etc. Now find out all the information you wanted to know and talk to the rest of your class about it.
- When you give an opinion about something always explain why you think this. What is it about the art that makes you like it or dislike it?

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.

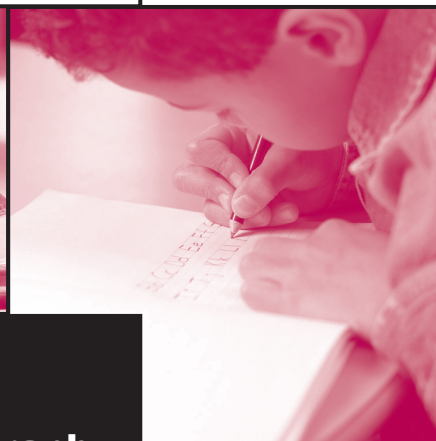
Try some of the following.

- 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 interpretations 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.

Each of these activities require 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 2



Geography

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

programme

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

Be able to use geographical terms

SCENARIOS – Examples of the skill in action:

In *Airports (Connections)* Task 3, the children use maps to identify the types of activity that take place in an airport. They look at the symbols the mapmaker has used to represent different activities and places. The children use geographical terms regarding map-reading and where places are situated, as well as more specific language related to what is taking place.

In *Earthquakes and Volcanoes* Task 2, the children work together to find out about a volcano of their choice. They find out about the state of the volcano (dormant, active), the location of the volcano, any areas that would be affected by an eruption and the history of the volcano. Throughout this activity the children use geographical terms and vocabulary.

In *Time Zones (Time and Place)* Task 1, the children find out more about a geographical zone. They collect information about annual rainfall, annual temperatures, average daily sunlight levels and typical weather patterns for the area. Throughout this activity the children use geographical terms and language.

TEACHERS' RUBRIC:

Beginning	Developing	Mastering
<p>The child describes a chosen place, country or geographical feature using some simple and relevant geographical terms.</p> <p>These may not always be used accurately.</p> <p>The child may require prompting.</p>	<p>The child independently uses geographical terms to describe a place, country or geographical feature.</p> <p>Although the terms are used appropriately they may concentrate on only one feature, such as climate, or they may describe a range of features but only in a simple way.</p>	<p>The child can use a wide range of geographical terms when describing different features of a country, place or geographical feature – e.g. land use, landforms, population and settlement, etc.</p> <p>The geographical terms are used accurately.</p>

CHILDREN'S RUBRIC:

I'm getting used to it	I'm getting better	I'm really getting it
<p>My teacher says I use some good words to describe a country, place or geographical feature, but I need to learn more words and find out what they mean before I use them.</p>	<p>I usually work on my own at the beginning.</p> <p>My teacher says that the words I use are good but that I should try to describe places, countries and geographical features in more detail.</p>	<p>I can work on my own.</p> <p>I can describe a place, country or geographical feature in two or three different ways.</p> <p>I can use a lot of geographical words and my teacher says I couldn't do any better.</p>

LEARNING ADVICE:

How To Progress From Beginning To Developing

Suggest the following to the children

- Discuss your ideas with a friend and work together to describe and write about the same country in more detail using geographical terms.
- Try to remember what the words mean and re-read the sentences to check they have been used properly.
- When you write down a word try to think of other words that are linked to the same idea. For example, hot — hottest months, dry, arid, little rainfall, etc. Then think about how these might affect crops, activities, landforms, etc.

How To Progress From Developing To Mastering

Suggest the following to the children

- Try to think of more than one way in which you might use geographical terms to describe a country, place or geographical feature.
- Try to think of ways in which the country, place or geographical feature you are describing is similar or different to the host country. Think about the weather, landforms, people, etc. Make lists of words linked to these differences.
- Work with a friend to develop your initial ideas together: then write about your ideas independently.
- Use a thesaurus to find out new words — try them out with a partner.

Be able to describe the main geographical features of the area immediately surrounding the school

SCENARIOS – Examples of the skill in action:

In *Community (Living Together)* Task 5, the children describe how and why land is used in the school community. They record all the different ways the land in and around the school is used. The children describe in detail the main geographical features of the area immediately surrounding the school and how this affects how the land is used.

In *Food and Farming (Survival)* Task 1, the children make a map of the local area illustrating the farms and other food producing places — factories, markets, shops and stalls. They then compare the uses of these places and the origins of the food the children eat.

TEACHERS' RUBRIC:

Beginning	Developing	Mastering
The child prepares, with some help, a simple description about one geographical feature which is observable in the immediate vicinity of the school.	The child independently describes more than one feature of the immediate geographical environment, but does not show how the features interact to create a sense of "the locality".	<p>The child independently describes three or four main geographical features of the immediate locality using an appropriate range of vocabulary.</p> <p>The child can make links between inter-related factors, e.g. climate and agriculture.</p>

CHILDREN'S RUBRIC:

I'm getting used to it	I'm getting better	I'm really getting it
I find it difficult to think about what to do until my teacher gives me some ideas. Then I can think of one idea for myself.	<p>I work on my own most of the time.</p> <p>I can describe some different features in the area around my school and my teacher shows me how these all fit together.</p>	<p>I can work on my own.</p> <p>I can describe our local area in a lot of detail.</p> <p>I can show how some things affect how other things are in our locality.</p>

LEARNING ADVICE:

How To Progress From Beginning To Developing

Suggest the following to the children

- Think about different ways you could describe your local area, in terms of land use and jobs, weather or landforms, etc.
- Work with a friend and ask each other questions about what you like to do and what places you like in the local area — this will help you to get ideas about the local area.
- Imagine you are talking to a friend or relative in a different place. How would you describe the place where you live?

How To Progress From Developing To Mastering

Suggest the following to the children

- Keep reminding yourself of what you are trying to find out and record.
- List all of the things you could write about but that don't really matter at this time. Then identify those ideas that are geographically based.
- When you describe one geographical feature try to think about how this might affect or link to other features or human activities.

Be able to make simple maps and plans of familiar locations

SCENARIOS – Examples of the skill in action:

In *Airports (Connections)* Task 4, the children plan a new airport. They decide on all the different areas they are going to include, how big they will be and where they will be situated. After deciding on a key and symbols to represent each area, the children produce a map or plan of their new airport.

In *Archaeology (Treasure)* Task 4, the children make a map to show their “treasure island”. They work as a group to do this. They include a title, a key, a scale and compass points. They then write directions to the treasure island using all of the features they have included in their map.

In *Community (Living Together)* Task 6, the children produce a map or plan of the school site and the different ways that the land is used and who uses it. They include a colour code, key, title, symbols and words in their maps.

TEACHERS' RUBRIC:

Beginning	Developing	Mastering
<p>The child can make a simple map or plan with some identifiable features in pictorial form.</p> <p>The features are not in their correct relative positions.</p>	<p>The child independently produces a map with three or more identifiable features in correct relative positions.</p> <p>Features may be shown as pictures or symbols.</p>	<p>The child independently produces a map with most features in the correct position relative to one another.</p> <p>They use symbols rather than pictures to identify features and may include a simple key.</p>

CHILDREN'S RUBRIC:

I'm getting used to it	I'm getting better	I'm really getting it
<p>I can make a map using pictures to show different places and objects.</p> <p>I need some help from my teacher to put them in the right places on the map.</p>	<p>I can work on my own to draw a map.</p> <p>I use pictures and some symbols to show the different places and features.</p> <p>I know that I usually draw some of them in the correct place.</p>	<p>I can make a map by myself.</p> <p>I use symbols to show where different places are and a key to show what the symbols mean.</p> <p>I usually draw most of them in the correct place.</p>

LEARNING ADVICE:

How To Progress From Beginning To Developing

Suggest the following to the children

- Look at objects on a table. Try to draw where they are in relation to one another.
- The next time you draw a map only draw objects on your map that don't move — don't include cars or animals, etc.
- Instead of drawing a picture of a place in detail, try to draw one object to represent a place. For example, a book could represent a library or a swing might show where the park is.
- Close your eyes and imagine you are standing at a place in the middle of your map. What can you remember about the area in front, to the sides and behind you? Draw these places on your map.

How To Progress From Developing To Mastering

Suggest the following to the children

- Take an imaginary walk around your map. Close your eyes and imagine you are walking from one place to the next. Have you included all the features? Repeat with a new starting place.
- Use signs and symbols to represent all the places you have shown. Make a list of the different signs and explain what they represent. This is called a key.
- Make maps of the school or local area from memory. Then use the map to check you have features in the correct place. Did you miss anything out? Draw a new map from memory of the same place.
- Compare your map with that of a friend — discuss the features shown on each of your maps and change or correct your information.

Be able to use maps at a variety of scales to locate the position and geographical features of particular locations

SCENARIOS – Examples of the skill in action:

In *Earthquakes and Volcanoes* Task 3, the children use atlases, reference books and maps at different scales to find out where the earth's plates meet. They then compare this to information they found out using maps showing where volcanoes are located.

In *Food (Chocolate)* Task 1, the children use a variety of maps to find out where in the world the cacao tree grows. They then go on to research the climate of these countries, how growing cacao trees affects the environment (perhaps by clearing other trees to make room for planting) and agricultural methods in the areas. The children can use maps at a variety of scales to find out this information.

In *Rainforests (Saving The World)* Task 1, the children use world maps to decide where they think tropical rainforests can be found. They then use a variety of atlases and other maps to find out exactly where the world's rainforests are and how much of the Earth's surface is covered by rainforests.

TEACHERS' RUBRIC:

Beginning	Developing	Mastering
<p>The child can locate places on given maps and a globe with help.</p> <p>The child needs support to interpret maps and the features they show.</p>	<p>The child can use given maps of different scales to locate places with a little support.</p> <p>The child may need some initial help locating the same place on maps of different scales.</p>	<p>The child can confidently locate places on maps of different scales.</p> <p>The child understands that maps of different scales are used for different purposes.</p>

CHILDREN'S RUBRIC:

I'm getting used to it	I'm getting better	I'm really getting it
<p>I can find some places on a world map or a globe after someone helps me.</p> <p>My teacher helps me to use different maps to find the same place.</p>	<p>I need some help to find places on maps at the start.</p> <p>I find some maps easier to use than others when I work by myself.</p>	<p>I can choose different maps to show different features.</p> <p>I am happy to work by myself and know how to use different types of maps.</p>

LEARNING ADVICE:

How To Progress From Beginning To Developing

Suggest the following to the children

- Use a world map to locate a country. The country may seem very small — this is a small-scale map. Produce a larger scale map of the country by using the photocopier to enlarge the base map. Repeat this. You can see that more details, such as rivers and mountains, can be added as the area is enlarged — this is a large-scale map.
- Use magnifiers to give close up views of objects — you should be able to see more details. Large scale maps give close up views of places.
- Find a country on the globe. Spin the globe and try to find it again without help.
- Look at the shapes of land and sea on the globe. Try to find the same shapes on maps of the world. Learn the names of the different land masses and oceans.
- Look at the shape of a country and where it is on the continent. Try to find it on a different map.

How To Progress From Developing To Mastering

Suggest the following to the children

- Collect maps of different scales that show the same place. Discuss how they are the same and how they are different.
- Work with a friend — ask each other questions using a globe. For example, find lines of longitude and latitude, find named countries, etc.
- Use maps of local places. Use them to predict what you will see or find. Check out your predictions on the ground.
- Make up maps of imaginary places at a variety of scales. Start with a large scale map of a castle, then show where the castle is in a town, then place the town in an imaginary country with other geographical features. You could write a story about the world you have made.

Be able to use secondary sources to obtain geographical information

SCENARIOS – Examples of the skill in action:

In *Time Zones (Time and Place)* Task 4, the children use atlases, globes and other resources to find out about time differences around the world, as well as how this affects air travel. They also use lines of latitude and longitude to find out how time is different around the world.

In *Food (Chocolate)* Task 2, the children use a variety of secondary sources to research cash crops. They use books, encyclopaedias, the Internet and trips to their local shops to find out what cash crops are sold there.

In *Money and Trade* Task 1, the children use maps and the Internet to find out about different currencies around the world, where they are used, and about any countries that use the same currency. They also work out what each currency is worth in the currency of the host country using secondary sources.

TEACHERS' RUBRIC:

Beginning	Developing	Mastering
<p>The child can interpret sources of information when directed by the teacher.</p> <p>He/she can make a simple, accurate statement from at least one source.</p>	<p>The child can extract information from more than one source. The child sometimes needs guidance to use a variety of different sources of information.</p> <p>The child can relate the information to the appropriate source.</p>	<p>The child can independently interpret a variety of sources of geographical information accurately.</p> <p>He/she uses different sources of information to verify his/her statements and usually chooses the most appropriate source for the task.</p>

CHILDREN'S RUBRIC:

I'm getting used to it	I'm getting better	I'm really getting it
<p>I can find out some geographical information but I need some help from my teacher or a friend to work out how to do this.</p>	<p>I can find different information from at least two different places.</p> <p>I can say where I found the information so other people will know where to look. My teacher helps me to look at sources I wouldn't normally use.</p>	<p>I can find out information by myself and I can use at least three different sources.</p> <p>I look carefully at all the sources to check that the information I find in one source is also shown in another source.</p>

LEARNING ADVICE:

How To Progress From Beginning To Developing

Suggest the following to the children

- Work with a friend or with your teacher. Look at different sources of information. Write down one fact from each source.
- After finding out information about one country with help from your teacher, try to use the same methods to find out information about another place by yourself.
- Make sure that the information you find can be found easily by someone else. Say or write things like: "The photo shows a house on stilts", or: "On the graph I can see that it doesn't usually rain in July and August".

How To Progress From Developing To Mastering

Suggest the following to the children

- Try to think what the information you find out might mean — for example why might a house be on stilts? Does this mean the ground is sometimes very wet? You could check this by looking at a climate graph — you are beginning to relate one source of information to another.
- Look carefully at details of photographs and graphs. Try to write a number of facts from each source. Try to find more information to support these facts from other sources.
- Ask yourself what you want to find out. Think where this information might be found and what form it might take. Try to find sources of information for yourself.

Be able to express views on the features of an environment and the way it is being harmed or improved

SCENARIOS – Examples of the skill in action:

In *Rainforests (Saving The World)* Task 4, the children look at maps and photographs that show how the rainforests are being destroyed in different parts of the world. The children think about how the rainforest people feel about this destruction. The children are then reminded of how they reacted when their class rainforest was destroyed/harmed at the beginning of the unit and talk about why this destruction is taking place. The children then produce posters to highlight their views on how rainforests are being harmed.

In *Archaeology (Treasure)* Extension Activity, the children find out about the extraction of precious stones and metals in the home and host countries. They find out about how this affects the environment and give their views on this.

TEACHERS' RUBRIC:

Beginning	Developing	Mastering
<p>The child suggests a view about the environment, which may relate to likes and dislikes.</p> <p>He/she may not be able to explain how an environment is being harmed or improved.</p>	<p>The child is able to express views about one or more features of the environment and state how it is either being harmed or improved in each situation.</p>	<p>The child expresses views on different features of the environment.</p> <p>These views include positive and harmful effects of different interrelated factors.</p>

CHILDREN'S RUBRIC:

I'm getting used to it	I'm getting better	I'm really getting it
<p>I can suggest what I like or dislike about a place or what is good or bad about certain features of the environment.</p> <p>My teacher helps me when I have to think about why I feel like this.</p>	<p>I can talk about what I feel about one part of the environment and how it is being harmed or improved.</p> <p>I work by myself most of the time.</p>	<p>I can talk about two or three different aspects about the environment and why I think it is being harmed or improved in each case.</p> <p>I like to work by myself.</p>

LEARNING ADVICE:

How To Progress From Beginning To Developing

Suggest the following to the children

- Work in a group to brainstorm ways in which the environment is being harmed or improved by an activity — this will give you lots of ideas to share.
- List all the non-living things in the environment; water, rivers and rocks, as well as living things and people. Find out which are being harmed and which are being improved by an activity.

How To Progress From Developing To Mastering

Suggest the following to the children

- Think about how improvements in one feature may have been harmful to other features — for example, building a hotel may create jobs for people, but it might have been built on a woodland area which used to be home to many creatures.
- Give reasons why you think an environment is being harmed or improved.
- Try to find more than one way in which an environment may be being harmed. For example, while a quarry damages the landscape and natural environment as rocks are taken away, the heavy lorries are also noisy and drive even more wildlife away.

Be able to communicate their geographical knowledge and understanding to ask and answer questions about geographical and environmental features

SCENARIOS – Examples of the skill in action:

In *Earthquakes and Volcanoes* Extension Task, the children use their knowledge of how earthquakes release waves of energy to find out about houses built in earthquake-prone zones. Then, working in groups, the children are given scenarios involving the building of earthquake-proof houses. The children work individually on their given scenario, using their knowledge of earthquakes, and then as a class, to come up with the best scenario for everyone involved.

In *Archaeology (Treasure)* Task 3, the children are researching the idea of “treasure islands” to explain what an imaginary island would look like. While the treasure island doesn’t really exist, the children describe real geographical features they would be likely to find on such an island in the geographical area they have chosen, including vegetation, population, climate, activities, landscape, buildings and other important features. This is based on their geographical knowledge and understanding and they use this to produce an accurate map of the island.

In *Food (Chocolate)* Extension Activity, the children create a mind map about rainforests. They record what they know about the subject in a series of true / false statements which the rest of the class have to consider and make a judgement about. Then, once everybody has had a chance to ask and answer questions and decide which statements are true and false, the information is put onto a poster.

TEACHERS' RUBRIC:

Beginning	Developing	Mastering
With some help, the child can answer given questions but finds it difficult to define their own questions.	The child can answer geographical questions and can communicate geographical knowledge in more than one way.	The child is independently able to ask geographical questions and communicate responses in a variety of ways.
The child can communicate geographical information in at least one way.	Some help is needed to develop appropriate enquiries.	

CHILDREN'S RUBRIC:

I'm getting used to it	I'm getting better	I'm really getting it
I can answer the questions my teacher gives me if I have some help.	I can find answers to questions given by my teacher, but I need some help if I have to think of the questions myself.	I can find answers to questions and I can present the information in at least three different ways.
I find it difficult to think of questions of my own.		I have started to ask and answer my own questions.
My teacher tells me that I can give information in at least one way.	My teacher tells me I am able to give information in more than one way.	

LEARNING ADVICE:

How To Progress From Beginning To Developing

Suggest the following to the children

- Write down simple statements about a place. Think of these as answers to questions. Now write down the questions.
- When you have designed a question, ask it about another place.
- Work with a partner and ask each other questions about places shown in photographs, or statistics shown in graphs.
- Find different ways to show your ideas — draw pictures, write, speak about your ideas, or draw a map.

How To Progress From Developing To Mastering

Suggest the following to the children

- Practise speaking about your information sources in front of friends.
- As a group, make up a news report about a place. Imagine you are an interviewer asking questions and other people in the group are answering. Design your questions together.
- Make sure that what you say is accurate and that you make reference to sources of information.
- Produce a group presentation with each person giving answers to questions in different ways, using maps, photographs, charts and graphs.

END-OF-MILEPOST ASSESSMENT CONFIRMATION

MP2

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.

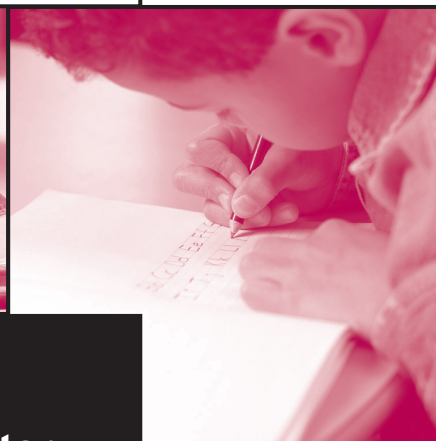
- Choose (or give them) two countries. The children should find five ways in which they are geographically similar and five ways in which they are different. The children should present information about the countries in as many different ways as they can (graphs, pictures, maps, photos, text).
- The children could identify ways in which they are linked to places around the world (clothing, food, music, languages, places you have family). They can then find these places on different maps and globes.
- The children could choose a photograph, (from a range presented by the teacher). They should describe the photograph using

geographical terms and ask other people to find the photograph from their description.

- The children could ask geographical questions about the features of a photograph chosen by someone else in order to identify it.
- The children could draw a map of an imaginary place and identify geographical features on the map and describe ways in which the environment shown is being harmed or improved.
- The children could design and make an orienteering course or a treasure trail with clues using geographical terms. Let the other groups try out each child's course.

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 2



History

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

programme

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

Be able to give some reasons for particular events and changes

SCENARIOS – Examples of the skill in action:

In *Before People (Dinosaurs)* Extension Activity, the children work together to identify the possibilities and theories for the extinction of dinosaurs. They make a large label or symbolic drawing for each of their ideas and display these as a wall display. Each child then decides on his or her own preferred explanation and writes about the reasons why they think this is the most likely cause of the extinction of the dinosaurs.

In *Development (Different Places Different Lives)* Task 3, the children investigate the major historical changes that have taken place in the host country in the last 100 years. The children then create a timeline of the events and changes that took place, including any wars, natural or man-made disasters, changes in the law or governance of a country, etc. This leads on to a discussion about the changes these events influenced and how the host country would be different today if these events had not taken place.

In *Habitats (Do You Live Around Here?)* Task 1, the children investigate what the home or host country was like in the past. They find out how the area has changed over the years and how different it is now. The children identify reasons for the changes that have taken place and create a report for other children to look at.

TEACHERS' RUBRIC:

Beginning	Developing	Mastering
The child identifies one reason why they think something might have happened. The child needs substantial prompting and discussion before the idea is given.	<p>The child identifies more than one reason why something might have happened or changed.</p> <p>Many of his/her ideas are relevant and with further help he/she can present clear reasoning.</p>	The child identifies a range of ideas as to why something happened or changed. All of the ideas are possible and relevant. The child is happy to work independently with his/her ideas.

CHILDREN'S RUBRIC:

I'm getting used to it	I'm getting better	I'm really getting it
I can come up with an idea about why something happened or changed. My ideas are much better when the teacher gives me help or when I can talk to my friends.	<p>I can come up with lots of different ideas about why something happened or changed.</p> <p>Not all of my ideas are good ones, but lots of them are possible reasons.</p>	I can come up with lots of ideas about why something happened or changed. I am happy doing this without help from my teacher or other children. My answers are usually good ones and my teacher and friends can't think of any other better examples.

LEARNING ADVICE:

How To Progress From Beginning To Developing

Suggest the following to the children

- Think about why you have done something in the past – list your reasons and talk about them with a friend.
- Ask other people, for example friends and family, why they decide to do a particular thing. Keep a note of other people's reasons. Try to remember some of these ideas next time you are talking about reasons in school.

How To Progress From Developing To Mastering

Suggest the following to the children

- Have a go at creating a "cause and consequence" game or flow chart.
- Think of lots of things that have happened in the last week and try to list the reasons why they happened.
- Work with a friend. Choose a thing that you have both done recently, for example, been late for school, visited a place outside your locality, moved house, etc. Compare the reasons these events occurred. Are your reasons similar?
- When you hear examples of why something happened – such as on the TV world news – try to remember some of the reasons next time you are talking about similar things in school.

Be able to gather information from simple sources

SCENARIOS – Examples of the skill in action:

In *Inventions and Machines* Task 2, the children find out about inventions by using the Internet, E-mail, library books, CD-ROMs and encyclopaedias. They also discuss how useful each resource is. The teacher then directs the children to find out when each item was invented, who it was invented by, who the invention was intended for, who uses the invention now and how the invention has changed since then.

In *Archaeology (Treasure)* Task 1, the children use a variety of resources to find out about the work of archaeologists. They think about what they would like to find out before looking at different sources of information. As well as using school-based resources, such as the Internet, reference books and encyclopaedias, CD-ROMs, etc, the children also try to contact a real archaeologist by E-mail to find out about their work.

In *Significant People (They Made A Difference)* Task 3, the children have to find the following items to find out about two significant people; one from the host country and one from their home country: a portrait or photograph; a description of them written by someone alive at the same time; a description of them written by someone who lived after them. The children use a variety of simple sources to find this information.

TEACHERS' RUBRIC:

Beginning	Developing	Mastering
The child uses one or more simple sources to answer predetermined questions. The child needs assistance in choosing the relevant source and to locate the answers from it.	The child uses a few sources with some degree of confidence and ease to locate the answers to research questions. The child may have devised some of these questions him/herself.	The child uses a range of sources to answer many questions set by the teacher and him/herself. The child has a good idea as to the usefulness of each source and uses them appropriately.

CHILDREN'S RUBRIC:

I'm getting used to it	I'm getting better	I'm really getting it
I can use one source to find out something if my teacher helps me with the questions. I also need some help to find the answers from the source.	I can use a few different sources to find the answers to my questions. Sometimes my teacher tells me what to find out and where to find it, but often I think of these things myself.	I can use many sources to answer lots of questions that my teacher has set. But I can also write and answer my own questions. I am beginning to discover which source is the most useful for each piece of research.

LEARNING ADVICE:

How To Progress From Beginning To Developing

Suggest the following to the children

- Have a look back at other work you have already done in this unit and in other units before beginning your research. This might help you to remember something useful.
- Think of some simple ways that you might be able to record and remember useful things about different bits of history.
- Keep a record of how useful different resources are when finding out about the past.
- Talk to your friends and your teacher about how useful different sources are.

How To Progress From Developing To Mastering

Suggest the following to the children

- Try some different sources to research. Have a look at them and see if they are any better than the ones you usually choose. For instance, is a computer-based source more useful to you than a paper one? Is a picture source more to your liking? Explore and enjoy them all.
- Talk to other people about how they find out about the past. What do they recommend?
- What do you do when you want to find something out? List some good questions that have worked in the past. Always think about whether this source is helpful or not. Should you check the information in another source to see if it is accurate? Which resources do you think are the most reliable and accurate?

END-OF-MILEPOST ASSESSMENT CONFIRMATION

MP2

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, 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 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.

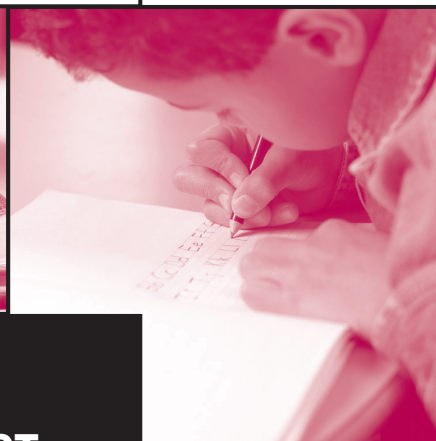
Try some of the following ideas.

- Draw a mind-map that shows all the historical things you have learnt about so far. Think about different ways that you might group things on your mind-map – people, things, events, etc.
- Collect together a range of different simple sources – books, artefacts, pictures, etc. The children can create a guide to help other children, explaining how each resource can be used for research, and the advantages and disadvantages of each one. You could display this near your school's resources, e.g. in the library or the computer room. Are some resources better for answering some questions than others? Rank the sources, with the most useful at the top.

- Make a historical quiz game with pairs of cards that have the question on one card and the answer on another. The children can play in small groups and see how many cards they can match up. They can think up their own rules for the game.
- The children could dress up as a historical person. They could find out as much as they can about them and then “hot seat” in the role of this person. Let the other children ask questions of the “historical person”.

Each of these activities requires the use of a number of 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 2



ICT

ASSESSMENT FOR LEARNING
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Be able to find and use stored information from a variety of sources

SCENARIOS – Examples of the skill in action:

In *Airports (Connections)* Extension Activity, the children use ICT to find out about some major airlines. They visit the websites of airlines and find out what type of information they offer online, such as timetables, fares, etc.

In *Time Zones (Time and Place)* Task 2, the children make a collection of timetables for different types of transport, e.g. bus, rail, ferry, air, etc. They use ICT to find as wide a selection as possible and look at how the information is presented. The children then download some airline schedules and use world maps to plot the routes.

In *Food (Chocolate)* Task 1, the children use the Internet to find information about ways of growing crops that cause little environmental damage. They find out why people buy organic products, how organic foods are grown, and about organic chocolate. They use this information throughout the unit.

TEACHERS' RUBRIC:

Beginning	Developing	Mastering
The child can find and use information from at least one source. He/she needs help to identify other possible sources and how to use them.	The child can find and use information from at least one source. He/she has ideas about other sources he/she could use, but these ideas are not always appropriate or practical.	The child can find and use information from a number of different sources. His/her choice of source is usually appropriate and the child finds relevant information that he/she can use.

CHILDREN'S RUBRIC:

I'm getting used to it	I'm getting better	I'm really getting it
I know how to use ICT to find information. I usually use the same source every time, but my teacher tells me about other places I could look.	I know how to use ICT to find information. I talk to my teacher about other places I could look to find information and sometimes he/she tells me my ideas are good. Other times my teacher tells me that I can't find the information where I want to look.	I know how to use ICT to find information in lots of different places. I usually find what I am looking for and can use what I find out in class.

LEARNING ADVICE:

How To Progress From Beginning To Developing

Suggest the following to the children

- Work with another child and write down all the different Internet search engines you use to find information. How many can you think of? Now work with another pair and compare your lists. Did they think of any different search engines?
- Use your list of search engines and try them out. Are some easier to use than others? Do they all take you to the same kind of sites? Which ones do you think work best and why? Make a list of search engines that you can use in future.
- Make a list of CD-ROMs and CD-ROM encyclopaedias that you have at school. What information can you find from them? Does the cover of the CD-ROM give enough information about what is on the disk? If not, make a new CD-ROM cover to show everything you can find out on it.
- When you find information using ICT that you want to use, "cut" and "paste" it into a new document. This way, you will have all the information you need in the same place.

How To Progress From Developing To Mastering

Suggest the following to the children

- When using ICT to find out information, write down everything that you want to find out. Can you identify any "key words" that you can use in your search? Highlight the key words in your list and try them out. Can you find the information that you want?
- When you use the Internet to find out information, how many different websites do you look at? Talk to a friend about how many websites they look at. Do you think you are looking at too many / too few?
- The next time you visit a website that you think is useful, write down the web address. Ask your teacher to make a class list of website addresses that you can add this information to, to help all children find out information.
- When you find information using ICT that you want to use, "cut" and "paste" it into a new document. This way, you will have all the information you need in the same place. You can then edit the information and print it off to use in your work.

Be able to use ICT to support and present their work in other subjects

SCENARIOS – Examples of the skill in action:

In *Clothing and Music (Fashion)* Art Task 3, the children use ICT to support and present their work. They reproduce a freehand piece of art they have created to show their use of complementary colours using a computer and a paint or draw programme.

In *Community (Living Together)* Geography Task 4, the children use ICT to present research into their community. They create a table with two columns: "The community I belong to" and; "The things we share". The children list what they have found out in their investigations to create a "community table".

In *Explorers and Adventurers* History Tasks 2 and 3, the children use ICT to both support and present their work. They begin by using a variety of resources, including the Internet, to find out about one explorer and one adventurer from the past. The children then use ICT to create a clear record of what they have found out. It is suggested that they create a table and word process the information, though they can choose whichever method they feel best suits the task.

TEACHERS' RUBRIC:

Beginning	Developing	Mastering
The child needs encouragement to use ICT to support his/her work in other subjects. He/she rarely uses ICT without being directed by the teacher and needs guidance to decide how to use the ICT.	The child can use ICT to support his/her work in other subjects when directed by the teacher. The child sometimes has his/her own ideas about how to use ICT to present his/her work.	The child shows initiative when using ICT to present and support his/her work and rarely needs guidance from the teacher. The child usually chooses an appropriate way of incorporating ICT into his/her work.

CHILDREN'S RUBRIC:

I'm getting used to it	I'm getting better	I'm really getting it
I don't use ICT in other subjects unless my teacher tells me to. I'm not sure what to do and ask my teacher to show me and give me ideas.	I use ICT in other subjects when my teacher tells me to. I have some ideas about how I can use ICT to present what I have done, but usually do what my teacher tells me to.	I like using ICT in other subjects and have lots of ideas about what I can do. I don't usually ask my teacher what to do.

LEARNING ADVICE:

How To Progress From Beginning To Developing

Suggest the following to the children

- When working in other subjects always stop and think when you are about to do something by hand that you could do using ICT. Are you going to draw a table, for example? Or maybe a graph? Think about how you could use ICT instead to present your information.
- When you work as a group to present information, consider word processing your work and ideas. This is neater than anybody's handwriting and you can make the work much clearer and easier to read.
- Make a list of things you like to do using ICT – do you like working with images, do you like word processing or creating tables? The next time you do one of these things in another subject, ask your teacher if you can use ICT in your work.

How To Progress From Developing To Mastering

Suggest the following to the children

- Compare your work using ICT and work done by hand. Do you prefer how your tables look when you draw them by hand or when you use ICT? What does your teacher think? Next time you draw a table, you could use ICT instead.
- Make a list of the advantages and disadvantages of using ICT in your work. For example, if you make a mistake when using ICT it is easy to change it, but if you make a mistake when writing in pen, it is more difficult to change. Think about this when working in other subjects and try to use more ICT in your work.

Be able to make choices to gather information and solve problems

SCENARIOS – Examples of the skill in action:

In *Airports (Connections)* Task 1, the children make their own airline ticket. First, they gather information about airline tickets and airlines. They decide which airlines they will look at, where they will find this information, and what details they will need to include. They also think about including a photo of the passenger on the ticket and how to make the ticket attractive. The children make choices about how to make their ticket using ICT and how they will gather the information they need.

In *Food (Chocolate)* Extension Activity, the children design their own website to promote a chocolate product. They find out how to do this, what this will involve and what they need to do, as well as the content they wish to include. They make decisions about the practicality of their ideas and the equipment and time they have available. They conduct their own research based on the choices they make.

TEACHERS' RUBRIC:

Beginning	Developing	Mastering
The child is able to gather information and solve some problems. He/she works best when told exactly what to do and is uncomfortable making his/her own decisions with regards to his/her work, whether working individually or in a group.	The child makes some decisions to gather information and solve problems and checks his/her choices regularly with the teacher. The child is most comfortable working in a group and is a little reluctant to make choices individually.	The child confidently makes decisions to gather information and solve problems. The child is happy to work individually and often takes a leadership role when working in a group.

CHILDREN'S RUBRIC:

I'm getting used to it	I'm getting better	I'm really getting it
I work best when my teacher tells me exactly what I have to do. I don't like to decide things by myself or with other children.	I like to make choices in my work but I always check with my teacher. I prefer working with other children in a group and am not sure if I am doing the right thing when I work by myself.	I like making decisions about my work by myself. If I work with other children I have lots of ideas that I like to share about what we should do. I think my ideas are good.

LEARNING ADVICE:

How To Progress From Beginning To Developing

Suggest the following to the children

- Share your ideas with other children before talking to your teacher. Can you work together to come up with some ideas together? Do you have the same kinds of ideas or do you think very differently?
- When you are going to find out about something write down everything you can think of about what you might find out. Include what you want to find out, as well as what other information you think there might be. Now look at your list. What things are you going to look for first? Are there any things on your list that you think are more important than others? Order your list into things you are going to find out first. Explain your reasons to a friend.
- Look again at your list. Think about how you are going to find out the information. What sources are you going to use? Will you work alone or with a friend? Write down where you will find each piece of information and who is going to find it.

How To Progress From Developing To Mastering

Suggest the following to the children

- Begin by thinking about your own ideas before asking your teacher or a friend.
- Before you begin your research write down what you are trying to find out as a question.
- Before beginning your research consider all your options. What exactly are you trying to find out? What different options do you have to find the information out? How many resources do you have available at school? What about the amount of time you have? Formulate a plan to make your research as effective as possible.

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.

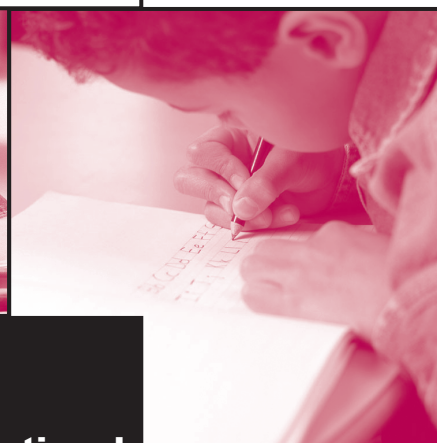
Try to make the end-of-milepost assessment confirmation activity as much fun as possible. Let the children think up their own activities.

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 2 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 2



International

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Be able to identify activities and cultures which are different from but equal to their own

SCENARIOS – Examples of the skill in action:

In *Community (Living Together)* Task 1, the children begin by considering the different cultures, beliefs and interests that make up different communities around the world. The children then form a pair with a child who has a different culture, beliefs or interests from them and talk to each other to find out about these differences. When the children have finished, they form a new pair to find out about the differences between them and another child. The children then form a large circle and talk about the differences they have found out. The children create a wall display of their “class community” and write about the differences they like and the differences they dislike but understand they have to tolerate. In this activity the children look at a range of cultural differences and differences in beliefs and interests, whilst understanding that “different is equal”.

In *Development (Different Places Different Lives)* Task 3, the children consider whether most people would prefer to live in a developing or in a developed country and why. The children discuss their ideas in a pair before participating in a class discussion on this topic. In this activity, the children think about the different activities that take place in different parts of the world, including education, work, food, clothing, entertainment, etc. By justifying their reasoning, the children identify the major differences but understand that “different is equal” and it is a variety of factors that influence a person’s preference for one place over another.

In *Health and Fitness* Task 1, the children work in groups to find out about attitudes towards health in different areas around the world and whether being healthy is really a western phenomenon. The children research different parts of the world and identify different activities people do and how these are influenced by different cultures, before presenting their findings using world maps. In this activity, the children look at a range of different cultures and activities and compare the differences between them and the host country and other places the children know.

TEACHERS' RUBRIC:

Beginning	Developing	Mastering
<p>The child can talk about and take part in activities related to things he/she normally does or uses, such as foods, festivals, fashion, etc. The child is critical of anything different from those things.</p> <p>The child can also talk about the way he/she and his/her family and friends live. The child is beginning to be aware that a number of things he/she does are connected to the kind of person he/she is and his/her background. The child doesn't yet appreciate the way that other people live and doesn't link his/her lifestyle with the kind of person he/she is and his/her background.</p>	<p>The child can talk about, enjoy and is beginning to take pride in activities related to his/her own foods, festivals, fashions, etc. The child accepts small differences and variations from his/her own ideas in other children, but is critical of those whose activities are considerably different.</p> <p>The child can also talk about the way he/she, his/her friends and his/her family live and is able to link this to his/her own background. The child is able to discuss how the way other people live is also linked to their backgrounds, but is often critical of these ways because they are different from his/her own.</p>	<p>The child can talk about, enjoy and take pride in activities related to things he/she normally does or uses, such as his/her own food, fashions and festivals. The child can accept at an equal level (and without unjustified criticism) the often considerably different activities of children related to the same themes.</p> <p>The child can also talk about and get enjoyment from the "everyday" way he/she and his/her family and friends live and the way this is part of the background he/she comes from. The child can talk constructively about the different ways other people might live and link this to their backgrounds.</p>

CHILDREN'S RUBRIC:

I'm getting used to it	I'm getting better	I'm really getting it
I know what I prefer to eat, how I like to dress and how to organise my birthday and other similar celebrations. I don't like to do any of these things any other way.	I really like that I have favourite foods and clothes. Some of my friends like things a little different to me and that's alright – but not when they are too different.	I have favourite foods, clothes and games that I play and I really like them. But it's also great when I see people doing things quite differently to me. I think they like what they do just as much as I like what I do.
I also like the way we do things at home. People who do things differently to us are wrong.	I know that the way I do things (and my friends, family and other people, too) is because of our backgrounds. But I don't like doing things differently and wish everyone would do things similarly to us.	I also know that the way I do lots of things (and the way my friends and family do lots of things) is because of our backgrounds. I can also explain how people who do things differently to me and my friends and family have had what they do handed down to them.

LEARNING ADVICE:

How To Progress From Beginning To Developing

Suggest the following to the children

- Think about, list or draw the different preferences members of your family have in a number of different areas. Ask your parents and siblings how these preferences were formed. Talk to other children about the different preferences members of their families have. Talk about the “normality” of these differences.
- Now think about the different preferences between you and close friends. You can begin to see that differences are not destructive.
- Talk to your teacher about the differences in preference in their family or amongst their colleagues.
- Accept other children’s own preferences without criticism, unless they are obviously harmful to other living things. Offer your own alternative preferences without criticising other children’s choices.
- Talk with your parents about the things they still do that their own parents did. Talk to grandparents about this too. Discuss these links with other children and make a simple class display.
- Talk with the children about the things that they do that are similar to the things their own parents do, or that are done because their parents do them.
- Compare the things you do and their links with your family with those of your friends.
- Discuss your favourite book or film characters and begin to make the links between your behaviour and the behaviour of your family.

How To Progress From Developing To Mastering

Suggest the following to the children

- Talk to other children about foods, music or books that you like, that are considerably different from each other. If you can, play them some of the different kinds of music and explain why you like each even though they may be different.
- Think about the range of differences within the things you like. Use a Circle Time session to explore these with other children. Create a simple classroom display of some of the choices that represent the biggest differences.
- Talk with other children about places you have visited that are quite different from where you live. Talk about what you like about these places as well as what you dislike.
- Explore the times that you have become used to different environments or activities. Perhaps you took a while to settle into a new house or to accept the arrival of a new brother or sister. Explore how activities and situations become normal if we give them time.
- Talk with other children about things you would never have done unless someone had persuaded you or shown you. Explore with them your own initial resistance and talk with them about their own similar feelings.
- Try to separate what is “good” from what you “like”. Try to see what is good about things and activities that you wouldn’t normally use or do.
- Talk to your teacher about the links between their behaviour and the behaviour of their family and friends. Ask them about their friends from childhood and what different things they liked about their friends and things they and their families did.
- Begin to identify what you like about others’ behaviours and begin to think why those behaviours differ from your own.
- Where possible, begin to link these discussions (albeit in an initially temporary way) to differences between the behaviours of people from different cultures and countries.

END-OF-MILEPOST ASSESSMENT CONFIRMATION

International

The development of international understanding is 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, children are still in the process of constructing who they are at a very fundamental level. At Milepost 2 the children begin to be introduced formally for the first time to the idea of activities that are "different but equal" to their own and to the idea of "culture". These are difficult ideas, even for adults, and we should be careful not to expect 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 key skill included in the Assessment for Learning Programme. 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.

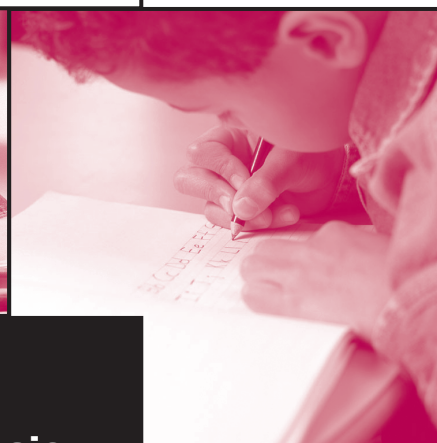
In looking at this trend you will be able to make a judgment about whether each child is generally at beginning, developing or mastering stage in this important international skill and what overall stage of international skill development each child is at.

It is helpful at the end of each milepost to have one overall check on how well the children are able to demonstrate this skill 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.

Because of the way in which children work in the IPC and, in particular, the importance of small and larger group work, most of the end-of-milepost assessment confirmation activities in other subject areas provide opportunities for you to add further observations that will help you to confirm or challenge the judgments you have made during the course of the milepost as a whole. This is particularly true of skill 2.3: *Children will be able to identify activities and cultures which are different from but equal to their own.*

For this skill, you might also want to engage the children in a number of activities to see how they respond to other cultures in terms of "different but equal" and how they can distinguish between their ability to appreciate difference and their own personal likes and dislikes. So you might, for example, want to play different kinds of music suggested by the children in the class, or play music from different cultures and see how the children respond in discussion of these.

MILEPOST 2



Music

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Be able to recognise and explore the ways that sounds can be organised and used expressively

SCENARIOS – Examples of the skill in action:

In *Rainforests* Task 1, the children explore the ways that sounds can be used expressively to represent a journey down a rainforest river. The children talk about the types of people and animals they might find along the river and what they might be doing. The children work with pitched and unpitched instruments to make sounds for the different activities along the river. The children then link their compositions together to create a musical journey.

In *Explorers and Adventurers* Task 2, the children improvise musical sounds to represent the moods and actions of space travel. They begin by working individually and then combine their work with a friend's. The children are encouraged to use electronically produced sounds and their voices in their compositions.

In *Clothing and Music (Fashion)* Task 2, the children choose a painting they have studied that they think tells a story or portrays a mood. The children then brainstorm descriptive words to go with the painting and find percussion instruments that “match” the words. The children then work in groups to bring the painting to life with music. They explore how sounds can be used to express their ideas, and think about what instruments they will use, how many instruments they will play at one time, who will play them, the volume of the sounds, the tempo, the rhythm, and so on. The children perform their compositions for the rest of the class.

TEACHERS' RUBRIC:

Beginning	Developing	Mastering
The child needs help to organise sounds to use them expressively. The child is unable to choose suitable sounds and instruments by him/herself and finds it difficult to explain why he/she is using an instrument or making a particular sound.	The child recognises that sounds can be organised and used expressively, but needs help to choose suitable instruments and sounds. The child has difficulty in explaining his/her choices, but his/her work is often successful in creating a desired effect.	The child recognises that sounds can be organised and used expressively and usually chooses suitable instruments and sounds to do this. His/her work is good and produces the desired effect. The child can explain why he/she chose particular instruments and sounds to express something.

CHILDREN'S RUBRIC:

I'm getting used to it	I'm getting better	I'm really getting it
My teacher helps me choose instruments and tells me how I can use them to make sounds.	I know what sounds I want to make but don't know how to do this by myself.	I know what sounds I want to make and like to choose instruments by myself.
I always do what my teacher tells me or I copy other children.	My teacher or friends help me to choose instruments and show me how to use them to make the sound that I want.	I can make the sounds I want using the instruments I choose.
I don't like choosing instruments by myself or working alone.	I don't like working alone at the beginning but can work alone later.	I can explain to my teacher and friends why I chose each instrument and why I chose the sounds that I did.

LEARNING ADVICE:

How To Progress From Beginning To Developing

Suggest the following to the children

- Choose an instrument you have available in your school that you haven't used before. Spend some time trying it out. What different sounds does it make? What different sounds and effects can you create playing it? Try to make as many different sounds as you can.
- Work with another child. Choose one instrument that you will both use. Play the instrument for the other child in the way that you usually use it. Now let the other child take their turn. How do they play the instrument? Can you teach each other a new way to play the instrument or a new sound that you can produce with it?
- Listen to different pieces of music, or to other children in your class in your music lesson. Think about the instruments they use, how they play them and the sounds that they make. Can you use any of these ideas in your work?

How To Progress From Developing To Mastering

Suggest the following to the children

- Listen to different pieces of music. Listen carefully to the different sounds of the instruments used in the music. Concentrate on one instrument that is being played. What sounds are made? What do you think these sounds represent? Why do you think the composer chose particular instruments and sounds?
- Think back to a piece of music that you composed during this milepost. Can you play it again? Now think about the instrument you chose and the sounds that you made. Why did you choose these? Did you choose them to tell a story? Would you change the instrument or the sounds to make your composition better?
- Try out lots of different instruments, making as many different sounds as you can. You could work with another child to give you more ideas. Make a note of what each instrument and sound could be used to represent in your music. Remember to think about this whenever you want to use music to express something.

Be able to perform simple pieces rhythmically using a limited range of notes

SCENARIOS – Examples of the skill in action:

In *Rainforests* Extension Activity, the children listen to examples of environmental awareness songs, or songs with an environmental theme. The children use these to help them compose and perform a simple piece of music about rainforest awareness. The children can choose the range of notes they will use, as well as suitable instruments.

In *Significant People* Task 5, the children choose a musician from the host or home country and work in groups to make music in a similar style. They compose a simple piece of music, concentrating on the style. The children then perform their pieces of music for the rest of the class.

TEACHERS' RUBRIC:

Beginning	Developing	Mastering
<p>The child is able to perform a simple piece of music rhythmically when shown by the teacher. He/she finds it difficult to keep to the rhythm and performs better as part of an ensemble.</p> <p>The child is unable to compose his/her own rhythmic pieces and can only use a limited range of notes.</p>	<p>The child can perform a simple piece of music rhythmically when shown by the teacher. He/she can create his/her own rhythms to play but sometimes needs help.</p> <p>The child usually remembers the rhythm and can perform alone.</p> <p>The child is beginning to experiment with a wider range of notes.</p>	<p>The child can perform a simple piece of music rhythmically with little or no teacher help. He/she often creates his/her own rhythmic pieces to play and enjoys experimenting with a range of notes.</p> <p>The child is happy to work alone or as part of an ensemble.</p>

CHILDREN'S RUBRIC:

I'm getting used to it	I'm getting better	I'm really getting it
<p>I can play a piece of music and keep to the rhythm when my teacher shows me. I don't like to play alone and usually forget how to play.</p> <p>I like to play as part of a group.</p> <p>I also like to stick to the notes that I know so I don't get confused.</p>	<p>I can play a piece of music and keep to the rhythm when my teacher plays it for me first. I like to make up my own music, but sometimes my teacher tells me how to change it to make it better.</p> <p>I like trying out new notes and don't mind working by myself.</p>	<p>I like playing music and can keep to the rhythm without any help.</p> <p>I like making up my own music and trying out new notes.</p> <p>My teacher tells me that the music I play is good.</p>

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 instrument (you should all use the same instrument). Take it in turns to play a short rhythmic piece. The other children can repeat the piece using the instrument. 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 of you 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?
- Practise keeping a rhythm by singing songs like "Row, row, row your boat", where groups of children begin the song at different intervals and have to keep to the rhythm.

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?

Be able to choose sounds and instruments which are appropriate for their task

SCENARIOS – Examples of the skill in action:

In *Rainforests* Task 1, the children compose a piece of music to represent a journey down a rainforest river. Each child works in a group and thinks about the types of animals and people they would find at certain points along the river and what they might be doing. The children then choose suitable sounds and instruments to represent these people and animals and compose music for their part of the river. The children then put all the compositions together to create their musical journey.

In *Earthquakes and Volcanoes* Task 2, the children choose instruments to create sounds that represent the sounds of a volcano. The children choose from instruments provided by the teacher, as well as their voices and other objects that produce noise. The children perform their volcano sounds and the other children comment on how well they chose sounds and instruments.

In *Significant People* Task 5, the children choose a musician from the host or home country and work in groups to make music in a similar style. They decide how to make it sound similar, what instrument to use and the speed of the music. They also consider whether there is anything else they could use to make sounds, like parts of the body or voice. The children then perform their pieces of music.

TEACHERS' RUBRIC:

Beginning	Developing	Mastering
The child needs substantial guidance to choose suitable instruments and sounds in his/her work. The child chooses randomly and his/her choice is often unsuitable for the task.	The child attempts to choose instruments and sounds but sometimes needs guidance to ensure such choices are appropriate for the task. The child understands that his/her choice of instrument and sound should be suitable for the task but needs some guidance with this. The child often chooses the same instrument and sounds each time.	<p>The child is happy to choose instruments and sounds and his/her choices are usually suitable for the task.</p> <p>The child experiments with different instruments and is confident in his/her choices.</p>

CHILDREN'S RUBRIC:

I'm getting used to it	I'm getting better	I'm really getting it
<p>My teacher always tells me what instrument to play and how to play it. I don't like to choose by myself and when I try I don't know what to do.</p> <p>My teacher often tells me to try a different instrument or sound.</p>	<p>I like choosing instruments and sounds, but my teacher sometimes changes my ideas to make them better. I know that I should use different instruments and sounds for different things, but I like to use the instruments that I know how to play and have used a lot before.</p>	<p>I like choosing instruments and sounds and my teacher usually tells me that my choices are good.</p> <p>I like trying different instruments and I think that my ideas are good ones.</p>

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?

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 in Milepost 2 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 2



PE

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

programme

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great learning, great teaching, great fun

Be able to choose appropriate skills and movements to suit a task

SCENARIOS – Examples of the skill in action:

In *Health and Fitness* Task 1, the children learn about and develop skills and movements for different types of exercise, including aerobic exercise, flexibility training (yoga), strength training, coordination and stamina development. The classes also focus on different muscle groups and different disciplines. Once the children have built up their knowledge of which physical skills and movements are appropriate for each activity, they plan sequences to teach each other, for example, a yoga session, a sequence to work the leg muscles, a session to increase cardiovascular fitness, etc.

In *Earthquakes and Volcanoes* Task 1, the children choose appropriate skills and movements to represent the eruption of a volcano. The children work by themselves and then in pairs to develop a range of suitable movements, before creating a sequence to perform to other children.

In *Rainforests (Saving The World)* Task 1, the children work together to create a rainforest dance. They divide the dance into a number of segments, and decide what aspect of the rainforest each segment will represent. The children then practise appropriate skills and movements for their part of the dance, put it to music and then perform for the other children.

TEACHERS' RUBRIC:

Beginning	Developing	Mastering
The child is aware that different skills and movements are suited to different tasks. However, he/she needs guidance to choose the most suitable option and often chooses the same skill or movement again and again. The child is more comfortable choosing a skill or movement that he/she can do well rather than the one that is best suited to the task.	<p>The child has a range of skills and movements to choose from when doing a task. He/she often chooses the best option, but sometimes needs help from the teacher or other children.</p> <p>The child is willing to learn new skills and movements that best suit a task, but needs to practise them before he/she is comfortable choosing to do them.</p>	The child has a wide range of skills and movements and independently chooses the best one for a task. The child is happy to learn new skills and movements so he/she can choose the best one for each task.

CHILDREN'S RUBRIC:

I'm getting used to it	I'm getting better	I'm really getting it
I know that some movements and skills are better for some games and activities than others. My teacher has to help me choose the right one. I don't really like learning new movements and prefer to use the ones that I already know.	I can do lots of different movements and skills and usually choose the best one by myself when we play a game or do some exercise. I like learning new movements, but have to practise them before using them by myself. Sometimes I need help from my teacher.	I know lots of different skills and movements and know that some are better for some tasks than others. I can choose the best movements by myself. I don't need any help.

LEARNING ADVICE:

How To Progress From Beginning To Developing

Suggest the following to the children

- Work with a partner. Teach your partner new movements and skills that you can do, but that they can't. Build up your knowledge and range of movements and skills.
- Watch other children. What movements and skills do they use? Do you use the same ones? Can you learn anything new from the other children, or can you teach them something new?
- Practise new movements very slowly to begin with. Do them as slowly as possible until you have mastered the move, before gradually building up to the right speed. Ask a friend to watch you perform the movement to help you with your technique.
- Think about a game or activity you do often. Next time you do this, try to use a new movement or skill. Try this for a week before deciding which way is best suited to the game or activity.

How To Progress From Developing To Mastering

Suggest the following to the children

- When you are given a task to do, stop and think about all the different ways you can do it. Talk with a friend. Do you both agree on the best movement or skill? If not, try out each other's ideas before coming to a decision about the best movement or skill for the task.
- Make a list of as many different PE games and activities as you can. Concentrate on one activity at a time, and think about what movements and skills you need for each one. Make an informative poster to display in the gym to help other children understand which movements and skills they need to develop to play a particular game, or do a particular activity well, e.g. a pre-exercise stretching and warm-up session. Include details of how to do the movement correctly without injuring yourself – in the form of a diagram with explanatory text.
- Next time you play a team sport, change position. For example, if you play football, you could try playing in goal, or try bowling in cricket if you normally field. This way, you can increase your skills and movements.

Be able to plan actions and movements

SCENARIOS – Examples of the skill in action:

In *Earthquakes and Volcanoes* Task 2, the children work in small groups to plan actions and movements that tell the story of an erupting volcano. They choose movements to represent different aspects of an eruption, for example, the ground shaking, the initial eruption, molten lava flowing down the sides of the volcano, etc, before putting the actions together to show other children.

In *Health and Fitness* Task 3, the children work in pairs to develop a fitness plan for each other. They find out what activity and exercise their partner does at the moment and identify any ways in which to improve their fitness levels, for example, does their partner do a lot of aerobic activity (running, swimming, etc), but little flexibility work (stretching, yoga, etc)? The child plans a fitness programme based on their findings, and plans the actions and movements the child should do to improve their fitness levels.

TEACHERS' RUBRIC:

Beginning	Developing	Mastering
The child needs help to plan actions and movements and often needs to copy the teacher. The child often forgets which action or movement to do and has trouble understanding why he/she is doing it.	The child plans actions and movements well, but is sometimes unsure why he/she should choose a particular movement. The child uses a range of actions and movements in his/her work.	The child works independently to plan actions and movements for a task. He/she uses a wide range of actions and movements and usually chooses the most appropriate actions and movements for the task.

CHILDREN'S RUBRIC:

I'm getting used to it	I'm getting better	I'm really getting it
My teacher helps me to plan actions and movements. I often forget which movement comes next and I am not sure why I am doing some moves.	I can use a lot of different movements and actions in class. Sometimes, I have to ask why I should use a particular move or action.	I know lots of different movements and actions and can choose the ones to use by myself. I don't need any help.

LEARNING ADVICE:

How To Progress From Beginning To Developing

Suggest the following to the children

- Work with a partner to practise actions and movements.
- Always think about why you are doing a particular action or movement. What are you doing it for? Should you be doing a different movement? Are you doing it correctly?
- Begin with a small plan of actions and movements, maybe three. When you remember what to do and can perform each action or movement well, try to add another action or movement at the end. You could try adding another action or movement at the beginning or the middle too as you get better.

How To Progress From Developing To Mastering

Suggest the following to the children

- Work in a small group. Each child should suggest an action or movement and explain why they are going to use it. For example, when telling the story of an erupting volcano, one child could suggest sliding on the floor on their belly to represent molten lava. The other children should add their own ideas, for example, suggesting that the child travels a meandering path, rather than in a straight line as this represents molten lava better. By working together, you will develop each other's ideas and come up with the best plan of actions and movements.
- Ask another child to show you a new action or movement. How many new actions or movements can you learn in a week? Can you do them all well? Build up your range of actions and movements in this way.
- Always think about why you are doing a particular action or movement. What are you doing it for? Should you be doing a different movement? Are you doing it correctly?

Be able to take part in a range of individual, pair, small group and team activities

SCENARIOS – Examples of the skill in action:

In *Health and Fitness* Task 2, the children work in small groups to invent a new physical activity game. They give the game a name, make up rules and decide what type of exercise it will involve. They decide whether the game will be played individually, in a pair, in a small group, or in a team.

In *Rainforests (Saving The World)* Task 1, the children work in groups to plan a rainforest dance. The children share their ideas in the group before developing and practising a dance to perform to the other groups.

TEACHERS' RUBRIC:

Beginning	Developing	Mastering
The child needs to be directed to work individually, as a pair, in a group or in a team. He/she doesn't participate well and seems unsure what his/her role is in each situation.	The child participates well in all types of activity, whether individual, as a pair, in a small group or in a team. The child does need some direction to adapt to each situation, particularly his/her role in a team or group. The child also needs some direction when working individually.	The child is happy to participate in activities individually, as a pair, in a group or in a team and adapts well to each situation. The child is confident in his/her role and is happy to participate both as a team member and to take the role as leader or team captain. The child can work individually without direction.

CHILDREN'S RUBRIC:

I'm getting used to it	I'm getting better	I'm really getting it
My teacher helps me to work in PE. I'm not sure what to do when we play team games and when we do individual activities I have trouble thinking of ideas. I ask my teacher for a lot of help.	I like playing individually, with a friend, in a team or in a group. When I work by myself, I sometimes have trouble thinking of ideas. I like working in a team but don't like it when nobody listens to me or does what I say.	I like playing individually, with a friend, in a team or in a group. I know that if I am team captain I have to be fair and do what's best for the team. I have lots of ideas when I work individually.

LEARNING ADVICE:

How To Progress From Beginning To Developing

Suggest the following to the children

- Try working with different partners instead of always working in the same pair.
- Before working individually, talk to another child to share your ideas and help you develop your range of skills.
- When working in a team tell the other children something that you do well. Ask them to share things that they do well. Can you work together to make the best team?
- Think about all the different “jobs” in a team. For example, when playing a sport like football there are defenders, attackers and a goalkeeper. Why is it important that everyone knows their job and sticks to it?
- Think about activities you do individually, in a pair, in a group or as a team. How do you prefer to play and why?
- Observe another team and tell your teacher something that they do well.
- Observe another team and tell your teacher something that they could improve.

How To Progress From Developing To Mastering

Suggest the following to the children

- Next time your class does a team activity, let everyone take a turn at being team captain. What can you learn from the different ways children lead the team? What works best?
- When working individually, observe other children before you begin, to help you with ideas of what to do.
- Make sure you understand the task or game well before you begin. Take a few minutes to think about your strategy and what you are going to do. If there is something you are not sure about, ask your teacher or other children.
- Observe another pair – what are they doing well? What can they improve? Swap pairs, so that you are now working with one of the children you observed. Give each other your feedback and try out your ideas. Do you work better now?

Be able to perform a range of activities with control and coordination

SCENARIOS – Examples of the skill in action:

In *Health and Fitness* Task 3, the children prepare a fitness plan for a partner to increase their fitness levels. When they have decided on a range of activities and exercises to do, they demonstrate their plan to their partner and demonstrate any physical moves, etc that they are recommending. They also have to ensure that their partner can perform the activities properly with control and coordination.

In *Rainforests (Saving The World)* Task 1, the children prepare and perform a rainforest dance in small groups. The children practise the moves they have decided on to make sure they can perform them with control and that the whole performance is well-coordinated.

TEACHERS' RUBRIC:

Beginning	Developing	Mastering
The child is able to perform simple activities using different parts of the body with some control. The child is experimenting with new movements but finds them difficult to master. He/she has some trouble with coordination, particularly when working in a group.	The child is able to perform simple activities competently and confidently in a number of ways using different parts of the body. The child is increasing his/her range of movements but needs some practice to master new movements and improve coordination.	The child is able to perform a variety of simple activities competently and confidently in many different ways using different parts of the body. He/she can demonstrate movements to other children with control and coordination.

CHILDREN'S RUBRIC:

I'm getting used to it	I'm getting better	I'm really getting it
I can do different movements using different parts of my body. I sometimes lose my balance and have to practise new movements a lot before I can do them well.	I can do lots of different movements with different parts of my body. I don't usually lose my balance. I like learning new movements, but have to practise them before I can do them well.	I can move well in lots of different ways and can show other children new ways to move around. I can do this without any help.

LEARNING ADVICE:

How To Progress From Beginning To Developing

Suggest the following to the children

- Try throwing a bean bag into a hoop on the ground. How many times can you get the bean bag in the hoop without missing? Begin with the hoop close to you and, as you get better, you can move the hoop further away.
- Concentrate on one body part at a time. For example, you could practise movements that involve your hands, like throwing and catching. Try a few different movements using this body part and practise until you can do them well. You could then demonstrate your movements to another child who has practised movements using their feet, etc.
- Choose a movement or activity that you find difficult to do. Work with a partner who can do the movement well and ask them to demonstrate it to you. Try it yourself, moving as slowly as possible. Ask the other child to help you – supporting you or describing how you should move. As you improve you can carefully speed up your movement until you can do it at a “normal” speed. Now show your partner a movement you can do well but they find difficult.

How To Progress From Developing To Mastering

Suggest the following to the children

- Choose a part of the body and think of all the different ways you can use it, for example, feet: run, jump, skip, kick, hop, etc. Begin by slowly practising each movement separately until you can do each movement well. Then add the movements together until you have a sequence that you can show to the other children.
- Practise balancing. Begin by standing upright and taking one foot slightly off the ground. How long can you balance for? Now try lifting your foot higher off the ground. Is it much more difficult to balance? Can you think of anything to help you keep your balance, for example, looking at a point on the floor?
- Work with another child and perform and teach each other new movements. Practise until you can do them well.

Be able to improve performance through analysis, observation and repetition

SCENARIOS – Examples of the skill in action:

In *Rainforests (Saving The World)* Task 1, the children perform a rainforest dance for the rest of the class. The other children evaluate each performance, commenting upon what worked well and offering suggestions for improvement. The teacher could also film the dances so that each group can watch, evaluate and improve their own work.

TEACHERS' RUBRIC:

Beginning	Developing	Mastering
The child is able to say what is effective about the technique of others with guidance from the teacher. He/she finds it difficult to suggest criteria to improve performance. The child is unable to comment on his/her own performance. The child is making slow progress in developing his/her own level of skill.	The child is able to observe other children doing a variety of activities and say what is effective about their technique. He/she can use criteria given by the teacher to make comment about his/her own technique. The child needs guidance to use this information to improve his/her performance.	The child is able to explain the skills that he/she can perform well in practice and in a game or activity. The child recognises what he/she can do well and what he/she needs to improve and can identify this in others.

CHILDREN'S RUBRIC:

I'm getting used to it	I'm getting better	I'm really getting it
My teacher gives me ideas how to improve my performance. I don't really know how other children in my class could be better, but I know some are better than others. I know that I improve if I practise something a lot.	My teacher helps me with ideas how to improve my performance. I can see what other children do well and am getting better at choosing the best moves or actions in a game.	I know that I do some things better than others, and that to improve I need to practise. I sometimes help my friends with ideas about how they can get better too.

LEARNING ADVICE:

How To Progress From Beginning To Developing

Suggest the following to the children

- Work in a pair. Watch each other perform a simple move, for example, a simple dance move. Help each other with ideas how to improve and be the best possible. Try out your ideas, and then try the move again. Are you doing it better this time?
- Think of something you find difficult to do. Practise this thing once a day for five or ten minutes. Have you improved by the end of the week?
- Try practising a move in front of a mirror. Can you see what you are doing well or incorrectly? Can you change your position or posture to help you do the move better?
- Ask another child about a sport or activity they do well. Why do they think they do it so well? How often do they play or do it? How long have they been playing or doing it? Do they have any special skills that help (running fast, etc)? Do they have any advice to help you improve?

How To Progress From Developing To Mastering

Suggest the following to the children

- Watch another group practising a ball sport – can you identify one really good pass?
- Watch another group practising a ball sport – can you identify one pass that you think could have been more effective using another method?
- If your school has a video camera, ask your teacher to film your next PE class. Watch the video after the class and think about how you could improve and how other children can improve. Also think about things the children did well. Do they have any advice for other children who find the activity more difficult?

END-OF-MILEPOST ASSESSMENT CONFIRMATION

Physical Education

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 sessions 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 require 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 2



Science

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

programme

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Primary Curriculum
great learning, great teaching, great fun

In the following Science Classroom resources for Milepost 2 (8 – 9 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 2.1 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 suggest ways of collecting evidence

SCENARIOS – Examples of the skill in action:

In *Habitats (Do You Live Around Here?)* Task 8, the children generate a question to investigate, for example: *How can we find out what snails prefer to eat?* The children discuss the question as a class and suggest different ways they could collect evidence to answer the question.

In *Visual Representation (Paintings, Pictures and Photographs)* Extension Activity, the children suggest ways of collecting evidence to distinguish between materials that are transparent, opaque and translucent. The children go on to use their ideas to collect the evidence they need in their investigations.

In *People Of Different Ages (Young and Old)* Task 6, the children work to create a new toddler breakfast food. They begin by suggesting ways to collect evidence about the types of food toddlers like and what foods are good for small children.

TEACHERS' RUBRIC:

Beginning	Developing	Mastering
The child identifies, with some help, at least one way of collecting evidence. The method chosen relates in some way to the subject of the investigation but may not be able to be carried out.	The child independently identifies one or more ways of collecting evidence. The method chosen is related to the subject of the investigation. The suggestion may need some adjustment for the evidence to be collected.	The child independently identifies a number of ways of collecting evidence. The method chosen is related to the subject of the investigation. The evidence can be collected using the method.

CHILDREN'S RUBRIC:

I'm getting used to it	I'm getting better	I'm really getting it
My teacher gives me some ideas at the beginning. I can think of one way to collect evidence, but this is a bit difficult to do.	I can work on my own at the beginning. My teacher says that my ideas for collecting evidence are pretty good. He/she gives me a little help at the end to make my ideas work properly.	I can work on my own and think of two or three ways to collect evidence. When I talk about my ideas with my teacher he/she says that I couldn't do any better.

LEARNING ADVICE:

How To Progress From Beginning To Developing

Suggest the following to the children

- Try to think of ways to collect evidence with a friend.
- Before you show your teacher your ideas, have an imaginary talk with them. What might he/she say? Will he/she tell you to change your ideas or think about something different? Have you thought of everything possible? Are your ideas new ideas or based on something you have done in class before to collect evidence?
- Get someone else's opinion before you show your teacher what you have decided.
- Have a go on your own first. Use your ideas to see if you can collect the evidence you need. Do they work?
- Think carefully whether you can actually carry out the evidence collection and why it might not work.
- Look at what you are trying to find out. Get that clear in your head first. Then make sure that your ways of collecting evidence are connected to what you are trying to find out.

How To Progress From Developing To Mastering

Suggest the following to the children

- Try to think of more ways in which you might collect evidence. Try them out to see whether they work.
- Explain why you have chosen these particular ways of collecting evidence.
- See if you can think of any problems in collecting this evidence.
- Think of what you have done in the past. How does this help you make your mind up about what to do?

Be able to prepare a simple investigation which is fair, with one changing factor

SCENARIOS – Examples of the skill in action:

In *Food and Farming (Survival)* Task 7, the children prepare a simple investigation to see how cress grows under different conditions. The children ensure the investigation is fair by using the same amount of water in each tray of cress. The children then change one factor in each tray, for example, turning one tray every day, putting kitchen foil behind a tray to reflect sunlight, keeping a tray in a box, etc. The children then observe how the plants grow.

In *Habitats (Do You Live Around Here?)* Task 2, the children prepare simple investigations to see how plants grow in different habitats. The children are reminded to ensure the test is fair, with one changing factor. For example, the children can grow their seeds in pots of sand: one pot of sand kept damp, a second pot of sand kept damp with a fertiliser granule added, and a third pot of sand kept damp with liquid fertiliser added. The children carry out their investigations and record their results.

In *Time Zones (Time and Place)* Task 2 Part 1, the children prepare a simple investigation to test how transparent materials are. The children are reminded to ensure the test is fair and that they use the same light source at the same strength under the same conditions to provide accurate results.

TEACHERS' RUBRIC:

Beginning	Developing	Mastering
The child is able to prepare, with some help, a simple experiment with one changing factor. The investigation relates in some way to the subject matter but may not result in a fair test.	The child is able to independently prepare an experiment with one changing factor. The investigation relates to the subject matter, but may not result in a fair test.	The child is able to independently prepare an investigation with one changing factor. The investigation is appropriate for the subject matter and will result in a fair test.

CHILDREN'S RUBRIC:

I'm getting used to it	I'm getting better	I'm really getting it
My teacher helps me from the start, but I can come up with some ideas on how to find out what we want. My teacher gives me one or two suggestions to make the test fairer.	I work on my own most of the time. I can come up with a way to find out what we want. My teacher gives me some help at the end to make sure the test is fair.	I work on my own to find a way to find out what we want. When I talk about this with friends and my teacher no-one can think of a way in which the test isn't fair.

LEARNING ADVICE:

How To Progress From Beginning To Developing

Suggest the following to the children

- Write down or tell someone exactly what you are trying to find out in your investigation. Keep reminding yourself of this throughout both the planning and the investigative stages of your experiment.
- Make a statement, for example: *Jacques is tall because he eats a lot.* Now try and think of lots of other reasons why Jacques might be tall. Play this game as much as you can.
- Before you begin to prepare an investigation, talk through your ideas with someone to make sure you are checking the right things.

How To Progress From Developing To Mastering

Suggest the following to the children

- Keep reminding yourself of what you are trying to find out in your investigation. Make a list before you begin of all the things you want to find out and check it regularly whilst you work.
- List all of the things you could find out in your investigation, but that don't really matter this time. Then focus on what does matter.
- Try your ideas out on a friend – but make sure you have thought of them first!
- When you have worked out your experiment, think very carefully of what could get in the way of you getting good information.

Be able to predict the outcome of investigations

SCENARIOS – Examples of the skill in action:

In *Time Zones (Time and Place)* Task 2 Part 1, the children collect a light source and a variety of different materials to see how transparent each material is. Before they begin their investigation, the children look at all the materials they are going to investigate and predict which ones they think will prove to be the most/least transparent.

In *Rainforests (Saving The World)* Task 6, the children investigate the best conditions for growing plants. After they decide how they are going to investigate this and what plants and materials they are going to use, the children make predictions about which plants will grow best in each condition. The children then carry out their investigations to see if their predictions were correct.

In *Visual Representations (Paintings, Pictures and Photographs)* Task 1, the children make predictions about which materials will allow them to create the best shadows when they shine a light source onto them. The children talk about their ideas, before carrying out the investigation to see if their predictions were correct.

TEACHERS' RUBRIC:

Beginning	Developing	Mastering
The child is able to predict the outcomes of an investigation with some help. The prediction has some feasibility.	The child is able to independently predict the outcome of an investigation. The prediction has some feasibility.	The child is able to independently and consistently predict the outcome of investigations. The predictions are feasible.

CHILDREN'S RUBRIC:

I'm getting used to it	I'm getting better	I'm really getting it
I have to think about what might happen when we carry out an investigation. I do this with my teacher. I have one or two ideas. I change them a little after talking to friends and to my teacher. My new ideas are a little better.	I work on my own to think about what might happen in an investigation. My teacher and friends think that most of my ideas might happen, although they aren't too sure about some of them.	I work on my own to think about two or three things that might happen in an investigation. I try my ideas out on my friends and teacher and we all think they are good.

LEARNING ADVICE:

How To Progress From Beginning To Developing

Suggest the following to the children

- Imagine you are writing a story. Think about what might happen next. In a story, what happens next often depends on what has already happened. Now think about what might happen in your investigation. Look closely at everything you have and think about what you are going to do.
- Before you begin your investigation, check your ideas out with someone. See if they think your prediction could happen. If they think it is impossible to happen ask them why and then see if you want to change your mind.
- Play “silly” and “sensible” predictions with other children. Make some silly predictions, such as: *I predict I’m going to grow one metre tonight*, or *I predict a train will come through our classroom in ten minutes*. Ask why these “predictions” are silly. Then make sensible predictions such as: *I predict I’ll go to sleep before tomorrow*. Ask the other children to explain why they think these predictions are sensible.
- Use the idea of “silly” and “sensible” predictions before you carry out an investigation. List some silly predictions and some sensible ones. Discuss why you have chosen each. Then choose from the sensible list.

How To Progress From Developing To Mastering

Suggest the following to the children

- Try to work on your own or with just one friend rather than in a group. Think of your own ideas first and then check with your friend.
- Imagine that you have carried out an investigation. Can you think of three different things you might have found out? Give reasons for each of these things.
- Before you carry out an investigation think about what the most likely outcome is. Why is this the most likely outcome? Are your ideas based on something you have done or seen before?

Be able to use simple scientific equipment

SCENARIOS – Examples of the skill in action:

In *Habitats (Do You Live Around Here?)* Extension Task, the children use simple scientific equipment to investigate how things decay. They use a variety of foodstuffs and containers to record the process of mould development.

In *Food and Farming (Survival)* Task 4, the children use simple scientific equipment to find out why milk is kept cold. The children look at all the different types of container that milk is stored in, and then design and make their own storage to keep milk fresh.

In *Rainforests (Saving The World)* Task 6, the children use simple scientific equipment to investigate the best conditions for growing plants. The children use a variety of different plant materials, containers, soil, etc and take digital photographs of their work before, during and after the investigations.

TEACHERS' RUBRIC:

Beginning	Developing	Mastering
The child uses simple scientific equipment with some help. Such use may not be sufficiently correct to produce accurate results.	The child independently uses simple scientific equipment. Such use may not be sufficiently correct to produce accurate results.	The child independently uses simple scientific equipment sufficiently to produce accurate results.

CHILDREN'S RUBRIC:

I'm getting used to it	I'm getting better	I'm really getting it
I can use some equipment to carry out an investigation. My teacher helps me decide what to use and helps me use it.	I usually choose what equipment to use for our science investigations. My teacher gives me some ideas on how to use the equipment properly.	I always choose my own equipment for science investigations. I use the equipment very carefully. My teacher says that all of my measurements are very accurate and that I see lots of detail.

LEARNING ADVICE:

How To Progress From Beginning To Developing

Suggest the following to the children

- Think carefully about your investigation. What evidence do you need to collect to find out whether your ideas are correct?
- Talk to your teacher about the kind of evidence you need to collect in your investigation, e.g. measuring length and height, looking closely at movement or colour, finding out how much of something there is. Now take each piece of evidence you need and think of some ways in which you might gather that evidence.
- Choose the equipment you think you need to use and carry out your investigation. Discuss with your teacher afterwards how well your chosen method and equipment worked. Should you have used a different piece of equipment? Why? Why not? Are there any other pieces of equipment you could have used that would have worked equally well?

How To Progress From Developing To Mastering

Suggest the following to the children

- Think carefully about your investigation. Have a very clear idea about what evidence you need to collect to find out whether your ideas are correct.
- Make a list all of the equipment you could use to look at your evidence. Think of equipment that you might not have in school, but that you have seen on the Internet or in reference materials. How would you use it and why?
- Now choose what equipment you are going to use in your investigation and say or write the reasons why you have chosen these things.
- Check that you can use all the equipment you have chosen accurately. Perhaps you can work in pairs and set each other "accuracy tasks" with each piece of equipment before beginning your investigations.
- When you have carried out your investigations show your teacher how you used each piece of equipment and demonstrate its accurate use.

Be able to test ideas using evidence from observation and measurement

SCENARIOS – Examples of the skill in action:

In *Rainforests (Saving The World)* Task 6, the children conduct experiments to discover the best conditions for growing plants. The children observe and measure the plants as they grow, and use this evidence to test their ideas about the types of plants that grow in rainforests, why the plants grow upwards towards the light and why the plants grow so well in their natural environment.

In *Time Zones (Time and Place)* Task 2 Part 2, the children test their ideas about how shadows are formed and affected by the positioning of a light source. The children test their ideas by raising and lowering the light source, making the shadow longer and shorter.

In *Food and Farming (Survival)* Task 7, the children test their ideas about how cress grows depending on the conditions it is under. The children set up an investigation with one changing factor and observe and take measurements about how the plants grow, where the leaves are, how the leaves are growing and the direction the plant is growing in. The children then record their results, stating why they think these things happened the way they did.

TEACHERS' RUBRIC:

Beginning	Developing	Mastering
With some help the child is able to test ideas using observation and measurement. The observation and measurement may not be sufficiently accurate to produce reliable results.	The child is able to independently test ideas using observation and measurement. The observation and measurement may not be sufficiently accurate to produce reliable results.	The child is able to independently test ideas using observation and measurement. The observation and measurement are sufficiently accurate to produce reliable results.

CHILDREN'S RUBRIC:

I'm getting used to it	I'm getting better	I'm really getting it
I try to find out whether the ideas I have about what might happen are true. Some things are hard to understand. I need some help from my teacher or a friend to work out how to do this.	I think about my ideas and I am sure about most of them. I use measuring and/or looking to find out whether they are true. My teacher gives me some help at the end to help me use my measurements and observations to see if my ideas are true or not.	I think about the ideas I have about what might happen. I am sure I know what they mean. By looking and measuring carefully I can say whether my ideas are good ones or not without any trouble. I can do all this on my own.

LEARNING ADVICE:

How To Progress From Beginning To Developing

Suggest the following to the children

- Work with a friend or with your teacher. Think about the idea you are investigating. Choose some of the most important words. Each of you should now write down or think about what they mean. Now share your ideas. Before you begin your investigation make sure you are as clear as you can be about your ideas.
- Think about why your measurements and observations didn't work out too well. Is it because you didn't do things carefully enough, or because you weren't clear what to measure or observe? Before you do another investigation, check with your teacher about how clear you really are.
- Think about why you can't draw any conclusions from your investigation. Why do you think that is? What could you do better next time? Could you make your first idea clearer? Make sure you know what it is you are investigating. Choose the best way of measuring or looking.

How To Progress From Developing To Mastering

Suggest the following to the children

- Write down what you are going to investigate. Now imagine your teacher is going to read it and question you. What might they not be clear about? Make your ideas as clear as you can before you talk with your teacher.
- Think about what you will have to measure or observe during your investigation. Imagine yourself actually doing the investigation. Is there anything that might be difficult to measure or observe? If there is, make the changes before you begin investigating.

Be able to link evidence to broader scientific knowledge and understanding

SCENARIOS – Examples of the skill in action:

In *People of Different Ages (Young and Old)* Task 6, the children design and make a new toddler breakfast food. The children begin by researching the sorts of foods that toddlers like, as well as what foods are good for young children. The children then link this evidence to their broader understanding and knowledge of foods to create their own product.

In *Clothing and Music (Fashion)* Extension Activity, the children link evidence that they have found about which colours show up the best in the dark to their broader scientific knowledge and understanding of colours, patterns and materials to design a fashionable jacket that can be seen if a light shines on it.

TEACHERS' RUBRIC:

Beginning	Developing	Mastering
The child suggests some links between current evidence and previous knowledge or developing understandings, but these links may not be appropriate enough to provide an extended explanation for what has been seen.	The child is able to make some appropriate links between current evidence and previous knowledge or developing understandings. These links begin to provide an extended explanation for what has been seen.	The child uses previous knowledge and developing understandings appropriately to provide an extended explanation for what has been seen.

CHILDREN'S RUBRIC:

I'm getting used to it	I'm getting better	I'm really getting it
My teacher tells me that I have done some science in the past that might be connected to this investigation I can think of something but don't understand how it might help me now.	While I am doing an investigation and talking with my teacher I often realise I have done something in science before that is linked to this work. This gives me some more ideas.	When I am thinking about what has happened in my investigation I often think of some other science things that I know about. They help me think about what I have seen in this investigation. My friends and my teacher agree with me when I tell them.

LEARNING ADVICE:

How To Progress From Beginning To Developing

Suggest the following to the children

- Think about something you have found out in the past that is connected in some way to this investigation. Think about one way that it is connected to what you found out in this investigation.
- Talk with a friend or your teacher about your investigation. Try to think together about other scientific things you know about or have done that might help you explain what you have just seen.

How To Progress From Developing To Mastering

Suggest the following to the children

- Before you begin your investigation think about everything you already know about it or everything you can already do. When you say what you think is going to happen make sure you give the reasons why, using what you already know or can do. Then see if you are right. Does using what you already know help?
- Think about the investigation you have just done. What was it about? Now draw a mind map that includes everything you know about this idea or about the skills you used. It doesn't matter whether you learned these things in school or not. When you have finished your mind map see if anything helps you give a fuller explanation of what happened.

Be able to use evidence to draw conclusions

SCENARIOS – Examples of the skill in action:

In *Rainforests (Saving The World)* Task 3, the children investigate which colours are easiest/most difficult to see in an outdoor environment. The children then talk about their results and draw conclusions about the different colours of animals found in the rainforests. The children think about camouflage, and bright colours that act as a warning to other animals.

In *Time Zones (Time and Place)* Task 4 Part 2, the children use a globe and a light source to gather evidence about the effect of the Earth's axis on sunlight throughout the world. The children use a globe to show summer and winter in the Northern Hemisphere and what happens to the light source when the globe is tilted or spun in a certain direction. The children use this evidence to draw conclusions about day length, energy levels that reach the Earth at different times of year and the angles at which the sun's radiation passes through the atmosphere.

TEACHERS' RUBRIC:

Beginning	Developing	Mastering
With some help, the child draws some conclusions, appropriate or otherwise, about what has been seen. These conclusions are supported by evidence, though this evidence is not always appropriate.	The child independently draws some conclusions about what has been seen. Although these conclusions may not be complete, they are supported by some appropriate evidence observed in the investigation.	The child is independently able to draw reasonable conclusions about what has been seen, including those that are not definitive. These conclusions are well supported by a range of evidence that has been observed in the current investigation.

CHILDREN'S RUBRIC:

I'm getting used to it	I'm getting better	I'm really getting it
I can see what is happening in my investigation. I make some observations but I can't always work out whether they are helpful to me. I can't always explain what has happened or why. My teacher helps me a lot.	I can say what has happened and sometimes I think I can say why it happened. Sometimes, though, I don't know why. I don't always use the right observations and measurements in my explanation. My teacher helps me sometimes; then I'm better at it.	I make lots of good observations and notes. When someone asks me to talk about what I have found out I use my observations and notes to explain things to them. I do this on my own and my teacher doesn't really need to help me.

LEARNING ADVICE:

How To Progress From Beginning To Developing

Suggest the following to the children

- Play the *Silly Reasons* game before each investigation. For example: *How do you know that I like eating onions?* What silly answer could you give? How about: *Because they are the same shape as oranges.* Would that show that I liked eating onions? Now think of a better answer. How about *I see you buying them in the shop.* Does that prove that I like eating onions or that someone in my house does? What's an even better answer? How about: *Because you always have them in your sandwiches.* When you do your investigation make sure you can use the best reasons to explain what has happened.

How To Progress From Developing To Mastering

Suggest the following to the children

- As you do your investigation make lots of notes about what you see happening. Don't just wait until the end. When you repeat your investigation and something slightly different happens, make sure you can explain why before doing the investigation again.
- Imagine you are a detective. You have to say why you think the person you caught is guilty. Imagine looking at all of the evidence you have collected. Now imagine that your teacher is going to ask you every time why you think your conclusions about your investigations are true. What will you say?

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 judgment about whether each child is generally at beginning, developing or mastering stage in each of the important science skills and at 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 children do another investigation. However, two days of activity 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, you can write different investigations on cards and let them draw one out of a hat.

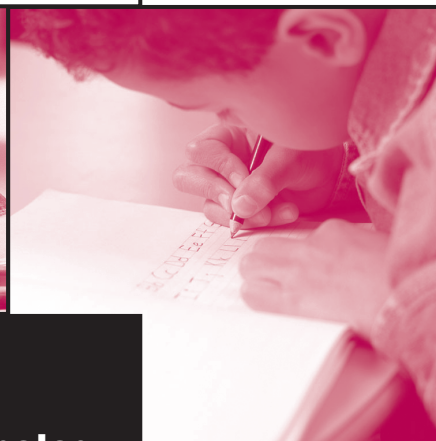
Try some of the following ideas.

- Do apples bounce higher than oranges?
- Does the material used 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 a variety of skills that have been focused on over the course of the milepost. Let the children carry out their investigations. Observe them closely. Compare what you see to the judgments you have made from your evidence at the end of the milepost.

MILEPOST 2



Technology

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

programme

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

Be able to design and make products to meet specific needs

SCENARIOS – Examples of the skill in action:

In *Airports (Connections)* Task 2, the children design and make an in-flight entertainment pack for other children. They consider entertainment value, the amount of space it will take up, the cost of producing the packs, safety issues, and the duration of the flights the packs would be used on. They need to design a pack that is entertaining and diverse for a range of children, that doesn't take up too much space on board, is safe, and that is cost efficient. The children work in groups to design and make their product.

In *Development (Different Places Different Lives)* Task 2, the children imagine that they live in a developing country and have access to a controlled number of resources. They design and make a product to transport 5 kilograms of fish up a river. They have to use the materials they are given to make a craft to transport the fish. The craft must float and be able to support the weight of the fish.

In *Inventions and Machines* Task 2, the children brainstorm "problems" that they could help solve. For example, are there any devices, games, tools, equipment or ideas that would be helpful at home, school, work, or during leisure time? Once the children have chosen a problem to work with, they work in groups to design a product that will alleviate the problem. The children then make their product to serve this specific need and display them for the other children.

TEACHERS' RUBRIC:

Beginning	Developing	Mastering
The child has valid ideas for a product to meet a specific need, but needs help to formulate a design and a workable plan to make the product.	The child can produce a design and a plan for a product to meet a specific need. His/her ideas are not always suitable and the child needs teacher help to ensure his/her finished product meets the specified need.	The child can produce a design and a workable plan to make a product to meet a specific need. His/her ideas are usually suitable and the finished product meets the specified need.

CHILDREN'S RUBRIC:

I'm getting used to it	I'm getting better	I'm really getting it
I have some ideas about things I could make to do a particular thing. My teacher says my ideas are good and helps me to design and make my product.	I have some ideas about things I could make to do a particular thing, but sometimes my teacher tells me that some of my ideas won't work. I can design and make my product by myself and my teacher helps me to make sure my product does what I want it to.	I have lots of ideas about things I could make to do a particular thing. I can design and make my product by myself and it usually turns out the way I wanted it to. My teacher tells me that I couldn't have done any better.

LEARNING ADVICE:

How To Progress From Beginning To Developing

Suggest the following to the children

- Write down everything you use in a morning. What types of things do you use and how do they work? Choose one thing and look at it carefully. What different parts is it made up of? What is it made of? What does it do? What does each part do? How big is it? Are there any other products that do the same thing? Use your observations here to help you with ideas for future work.
- Look at the designs and plans of older children. What do their plans look like? Were their plans successful in producing something? Speak to the older child about their plans and finished products and whether they had to change anything.
- Look again at other children's plans. Look carefully at everything they have included in their plans – lists of materials and equipment, the level of detail in the plans, time scales, etc. Use this to help you in your own work.

How To Progress From Developing To Mastering

Suggest the following to the children

- When planning what you are going to make think about what you want the product to do – why are you making it? Do your ideas satisfy the need?
- Share your initial ideas with friends or with your teacher. Have a brainstorming session with other children before you begin work to share your ideas.
- Choose a product that you use regularly, for example an alarm clock. Is there anything about it that you think could work better? For example, would it be better if your alarm clock had a louder ring, or if it was connected to a lamp that switches on when the alarm goes off, etc? Think about how you could change your alarm clock to make it better. Can you make a design for this?

Be able to make usable plans

SCENARIOS – Examples of the skill in action:

In *Inventions and Machines* Task 2, the children work in groups to solve a problem by inventing a new product. When the children have decided what problem they are going to work with, and what product they are going to make, they draw up detailed plans of how they are going to make their product. They detail the steps they will take in the production process, as well as all the equipment and materials they will need. The children follow these plans when they make their product.

In *People of Different Ages (Young and Old)* Task 2, the children devise something that will help a parent with a new baby: to transport it, to feed it, or to otherwise care for it. The children ask other children and adults for their ideas, before deciding what they are going to make. They then draw up plans of how they will make their product and what equipment and materials they will use, and show them to an adult or teacher to get their feedback and any other ideas. The children then collate all that they have found out and create a labelled plan which they then use to make their product.

In *Time Zones (Time and Place)* Task 1, the children use their imaginations and knowledge of the Sun and shadows to design a sundial. They choose the shape, size and positioning of their sundials and make a prototype. The children test their sundials and make changes where required. The children then use this research to create a usable plan for a permanent sundial. They draw a diagram with labels to explain how it will be made and how it will work. They include the materials and equipment they will need to make their sundials.

TEACHERS' RUBRIC:

Beginning	Developing	Mastering
The child can make basic 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 his/her plans are usable in the classroom.	The child can make detailed plans for a product and include 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 plans for a product and include a list of all the equipment needed. The child includes a step-by-step plan of how he/she is going to make the product and it 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 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 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 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 to create a plan.
- Look at the work and plans of older children. Ask the older 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 consider to be a usable plan. When you have all created your usable plans, come back together as a group and compare your plans. Are they similar? Which is the most usable? 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 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 use simple tools and equipment with some accuracy

SCENARIOS – Examples of the skill in action:

In *Development (Different Places Different Lives)* Task 2, the children make a craft to transport 5 kilograms of fish up a river. They use string, leaves, coconut husks, wood, plastic bags, pieces of plastic and small tyres. The children work with simple tools and equipment to shape and fix these materials together to make their craft.

In *Food (Chocolate)* Task 2, the children make their own chocolate bars. They follow a recipe provided by the teacher, and use a bain-marie and simple cooking utensils to make their chocolate bars.

In *Archaeology (Treasure)* Task 2, the children make a decorative piece of jewellery. They choose suitable materials, colours and techniques and use simple tools and equipment to make their jewellery.

TEACHERS' RUBRIC:

Beginning	Developing	Mastering
The child needs close supervision to use simple tools and materials to make products. He/she has little skill with basic tools and often has to redo his/her work.	The child can use some tools and materials to make products. He/she works with some accuracy but needs some supervision to ensure he/she is using tools correctly. The child sometimes needs teacher help to redo or modify his/her work.	The child can use a range of tools and materials to make products. His/her 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 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 glue, do you often make a mess and stick things in the wrong place? Ask a child who is good at gluing to show you how they do it. Can they give you any ideas about how to do it better, for example, balancing your wrists on the table to make your hands steadier, 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 identify and implement improvements to their designs and products

SCENARIOS – Examples of the skill in action:

In *Archaeology (Treasure)* Task 3, the children try out and wear pieces of decorative jewellery that they have made. They discuss and evaluate both their own work and the work of other children, checking their original designs against the finished products to identify any improvements they could make. The children could then implement the suggested changes.

In *Development (Different Places Different Lives)* Task 2, the children make a vehicle to transport 5 kilograms of fish up a river. When the children have designed and made their crafts, they test them out using a pool of water. The children look closely at the materials that have been used and their suitability for the craft. After the testing, the children make improvements to their craft to make it as effective as possible.

In *Airports (Connections)* Task 2, the children design and make in-flight entertainment packs for other children. When all the packs have been completed, the children compare each other's work and suggest any improvements they think should be made. The children then make any changes to their work that they feel will make it more effective.

TEACHERS' RUBRIC:

Beginning	Developing	Mastering
The child recognises whether his/her finished product or plan is good or needs improvement, but is unable to identify possible changes or modifications. The child has to be shown how to make improvements to the product.	The child recognises whether his/her finished product or plan is good or needs improvement and can suggest at least one way to make it better. His/her ideas are not always practical or don't lead to an improvement in the product or plan.	The child recognises whether his/her finished product or plan is good or needs improvement and can suggest at least one possible way to make it better. His/her ideas are practical and 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
I know if my work is good or if I need to change it to make it better. I find it difficult to think of how to make it better, so I ask my teacher for ideas. My teacher shows me how to make changes to my work to make it better.	I know if my work 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. Sometimes when I make changes, I think my work looked better before.	I know if my work 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.

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?
- 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?

Be able to identify the ways in which products in everyday use meet specific needs

SCENARIOS – Examples of the skill in action:

In *Clothing and Music (Fashion)* Task 2, the children design something for a cyclist to wear at night to be seen and to be safe. The children research what is available at the moment for cyclists, what materials have reflective properties, etc. The children use products that are in everyday use to make their clothing.

In *People of Different Ages (Young and Old)* Task 1, the children look at baby equipment, for example, a carrying sling, a buggy, a pram, or a car seat. They make a list of each piece of equipment's attributes, and what makes it fit for its purpose. The children then compare this equipment with similar equipment that can be found in the host and home countries. The children then classify all the equipment in terms of purpose: safety, comfort, ease of use, etc.

In *Habitats (Do You Live Around Here?)* Task 2, the children find out about insulation and products in everyday use that have good insulating properties. The children go on to work with different materials, like fabric, polystyrene, etc to discover their insulating properties.

TEACHERS' RUBRIC:

Beginning	Developing	Mastering
The child, with guidance, can identify what products are used for. His/her range of ideas is limited and the child can only talk about products that he/she has used or seen being used first-hand.	The child can identify what some products are used for. His/her knowledge is somewhat limited to products that he/she has used or has seen being used first-hand, but is quick to grasp new ideas. The child can make connections between products that meet the same need.	The child can identify what lots of products are used for. He/she can talk about products that he/she has used, that he/she has seen being used and things that he/she hasn't seen before. The child can make connections between products that meet the same need, for example, clothing suited to a particular type of weather, etc.

CHILDREN'S RUBRIC:

I'm getting used to it	I'm getting better	I'm really getting it
I can talk about what some different products are for and why people use them. If the product is something I haven't seen before I don't know what it is for or why people use it. I feel better talking about things that I have used or I have seen my family and friends use.	I can talk about what some different products are for and why people use them. I usually talk about things that I have used or seen my family and friends use, but when I see something new I find it quite easy to remember what it is for and how to use it. I know that there are lots of different products that do the same thing.	I can talk about what lots of different products are for and why people use them. I find it quite easy to talk about products I haven't seen before and know that there are lots of different products that do the same thing.

LEARNING ADVICE:

How To Progress From Beginning To Developing

Suggest the following to the children

- Choose a product that you have used today. What did you use it for? Does everybody use this product in the same way? Does the product do anything else that you don't necessarily use it for? For example, if you choose a mobile phone, do you only use it to make calls, or do you also use it to check email, to play games, do you use the alarm clock function, etc?
- Talk to your friends about something that they do regularly and what they use to do it. Do you use similar products? Why? Why not?
- Ask your parents about the last electrical appliance they bought? Why did they buy it? What does it do? Why did they choose the one they did? Now talk to your friends about what they found out from their parents. Are there any similarities between what you found out?

How To Progress From Developing To Mastering

Suggest the following to the children

- Ask your teacher to organise a class "discovery" session. Bring in an item from home that the other children are going to examine. The objects can be things that most homes have, items from different countries that are not well-known in the host country, or (preferably) unusual items that are not readily available. All the items should be placed in a box at the front of the class and each child (including yourself) should choose an item. Spend some time studying the object: try it out and try to decide what it is for. Present your ideas to the rest of the class, making sure you justify your reasoning. Now ask the "owner" of the object to tell you if your ideas were correct or not and, if necessary, demonstrate how to use the product.

Be able to suggest improvements to products in everyday use

SCENARIOS – Examples of the skill in action:

In *Airports (Connections)* Task 1, the children look at entertainment packs that they have been given whilst travelling. The children bring in things they have been given for this purpose, and think about the types of things that are usually contained in these packs: comics, magazines, games, food snacks, etc. The children find out as much as possible about the range of entertainment packs that are available and think of ways to improve them. They then design and make their own entertainment packs incorporating their suggested improvements.

In *Inventions and Machines* Task 1, the children begin by identifying “problems” that they or their friends or family have, for example, oversleeping. They then look at products that are currently available to help this problem, in this case, alarm clocks. The children think about why an alarm clock might not work as well as it could (maybe it’s not loud enough) or how they could improve it to make it more effective. The children compose a list of all possible improvements they could make to the product, before choosing one and drawing up plans detailing how it would work better than the current product.

In *People of Different Ages (Young and Old)* Extension Task, the children look at mobility equipment for babies and older people. They identify any shortcomings they feel the equipment has and talk to the people who use the equipment to see if they agree. The children work together with the users to suggest improvements to the equipment to make it more comfortable, more practical to use, easier to store, etc.

TEACHERS' RUBRIC:

Beginning	Developing	Mastering
The child has difficulty in identifying possible improvements to products in everyday use. He/she does recognise some things that could be better, but is unable to articulate how they could be improved.	The child can talk about things that he/she would change about a product in everyday use, but has difficulty in suggesting specific improvements to the product. For example, "I don't think the lamp is bright enough, but I don't know how to make it brighter".	The child can identify things he/she would change about a product in everyday use and offer practical improvements that he/she would make. For example, "I don't think the lamp is bright enough. I could add space for an extra bulb, or make it bigger, or make the lampshade from a material that lets through more light".

CHILDREN'S RUBRIC:

I'm getting used to it	I'm getting better	I'm really getting it
When I look at a product I have to think quite hard about things that I don't like or don't think work very well. I can't think of any ways to make it better. My teacher helps me.	When I look at a product I think of things about it that I don't like, or that I don't think work very well. I find it difficult to think of how to change these things to make them better. I get ideas from my teacher or friends.	When I look at a product I can think of some things that I would change to make it better. I have lots of ideas about what I could do to improve it, and my teacher tells me that lots of my ideas would work.

LEARNING ADVICE:

How To Progress From Beginning To Developing

Suggest the following to the children

- Collect together some similar products that do the same thing, for example, different types of lamp. Work together with a group of other children and try out each of the lamps. Which do you think are best and why? How would you change the lamps you didn't think worked so well to make them better? Can you get any ideas about the design of the lamp you thought was best to help you?
- Think about something that you use regularly, for example a telephone, games console, etc. Is there anything about this product that you don't like? Think about how you could change this to make it work better for you.
- Why do you think there are many products available that do the same thing? Why do you think products with the same purpose are different sizes, made of different materials, etc?

How To Progress From Developing To Mastering

Suggest the following to the children

- Ask your teacher to set you a "problem". For example, the room you are in doesn't have enough light and the lighting that is available isn't bright enough. How would you change the lighting that is currently there to make it brighter?
- Share your ideas with your friends and teacher about things you use before you begin work.
- Look at products that have been made in the last 5 years, compared to those made in the last 20 years. How have the designs been improved? For example, mobile phones were huge even 10 years ago and were only used to make calls, compared to the tiny mobile phones of today that can be used for many purposes. How would you change the mobile phones of today to make them better – you could make a prototype of a mobile phone that could be released in the next 10 years.

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 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 under supervision.
- The children could make something to decorate the school. When thinking of what they could make, think about what time of year is it. 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 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.

RECORD SHEET FOR CLASSROOM USE

Subject:

Milepost:

Skill:

Teacher:

Date:

Pupils	Beginning	Developing	Mastering