



I'm Alive



Living things



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## Basic Information

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This section details the time allocation for this unit of work, links to other subjects and Assessment for Learning opportunities.

### Timings

This unit of work is intended to last about 6  $\frac{3}{4}$  weeks.

The following suggested timings are approximate guides and are dependent on each school's individual context.

	No of Hours	No of Weeks
Entry Point, Knowledge Harvest, Explain the Theme	6	$\frac{3}{4}$
Science	18	2 $\frac{1}{4}$
Geography	8	1
Art	6	$\frac{3}{4}$
Physical Education	6	$\frac{3}{4}$
International	4	$\frac{1}{2}$
Exit Point	6	$\frac{3}{4}$

### Links to other IPC subjects

ICT & Computing learning goals are included in the subject learning. Links to music are provided at the end of tasks where appropriate.

#### Mathematics links

Suggestions of how to include links to Mathematics are provided where appropriate at the end of tasks.

## Learning Goals

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### Art Learning Goals

Children will:

1.01 Know about some of the forms used by artists in their work

 **1.02 Be able to use a variety of materials and processes**

 **1.03 Be able to suggest ways of improving their own work**

 **1.04 Be able to comment on works of art**

### Geography Learning Goals

Children will:

1.02 Know about similarities and differences between different localities

1.04 Know about the weather and climatic conditions in particular localities and how they affect the environment and the lives of people living there

1.05 Know that the world extends beyond their own locality and that the places they study exist within a broader geographical context

1.06 Know that people can harm or improve the environment

 **1.09 Be able to describe the geographical features of the school site and other familiar places**

 **1.11 Be able to use maps at a variety of scales to locate the position and simple geographical features of the host country and their home country**

 **1.12 Be able to use secondary sources to obtain simple geographical information**

 **1.13 Be able to express views on the attractive and unattractive features of an environment**

 **1.14 Be able to communicate their geographical knowledge and understanding in a variety of ways**

### International Learning Goals

Children will:

1.01 Know that children within the class and school have different home countries

1.03 Know about some of the similarities and differences between the lives of children in the different home countries and in the host country

 **1.04 Be able to respect one another's individuality and independence**

 **1.05 Be able to work with each other where appropriate**

## Physical Education Learning Goals

Children will:

 **1.02 Be able to perform simple activities with control and coordination**

 **1.03 Be able to repeat and develop simple actions**

 **1.05 Be able to apply movements in sequence**

1.07 Be able to observe, copy and develop actions performed by others

1.08 Be able to improve performance through observation and repetition

## Science Learning Goals

Children will:

1.01 Know that scientific enquiry involves asking questions, collecting evidence through observation and measurement

 **1.02 Be able to pose simple scientific questions**

 **1.03 Be able to identify ways of finding out about scientific issues**

 **1.04 Be able, with help, to conduct simple investigations**

1.06 Know about the basic conditions needed for living things to survive

1.07 Know about the differences between living things and things that have never been alive

1.08 Know that living things grow and reproduce

1.09 Know that the features of the school environment affect the types of living things found there

1.10 Be able to sort living things into simple groups

1.11 Be able to recognise living things in the school environment

- 1.12 Understand that different locations support different living things
- 1.13 Know the names of the main external body parts of humans and animals
- 1.14 Know the names and characteristics of a range of animals
- 1.15 Know about the importance of exercise and healthy eating
- 1.16 Know about the role of drugs as medicines
- 1.19 Understand how to treat animals with care and sensitivity
- 1.20 Know the names of the parts of plants
- 1.21 Know that seeds grow into plants
- 1.22 Know that plants need light to grow
- 1.23 Know that plants need water to grow

## ICT & Computing Opportunities

The table below shows you where you can cover the following ICT & Computing Learning Goals.

Task	Goals
Art Task 1	1.7
Geography Task 1	1.4
Geography Task 2	1.1, 1.4
International Task	1.1, 1.4
Science Extension Task	1.7
Science Task 3	1.1, 1.5, 1.6
Science Task 6	1.4

## Assessment for Learning

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Are your children busy, or are they busy learning? This is the question that we need to be able to answer throughout each IPC unit – what improvements are being made to children’s learning as a result of studying this theme?

There are **three areas of learning** to reflect on, and **three types of learning** to assess.

### The Three Areas of Learning: Academic, Personal and International

The three *areas* include **academic, personal and international learning**. To reflect on these, you will need access to the IPC Learning Goals for each subject (including International) and the IPC Personal Goals – a list of these can be found in Appendix A of the [IPC Implementation File](#). You can also find a full list of IPC Learning Goals in the [Assess section](#) of the Members’ Lounge.

### The Three Types of Learning: Knowledge, Skills and Understanding

The three *types* of learning include **knowledge, skills and understanding**. We believe that differentiating between knowledge, skills and understanding is crucial to the development of children’s learning. We also believe that knowledge, skills and understanding have their own distinct characteristics that impact on how each is planned for, learned, taught, assessed and reported on. The implications of these differences are therefore far-reaching and deserve proper consideration.

**Knowledge** refers to factual information. Knowledge is relatively straightforward to teach and assess (through quizzes, tests, multiple choice, etc.), even if it is not always that easy to recall. You can ask your children to research the knowledge they have to learn but you could also tell them the knowledge they need to know. Knowledge is continually changing and expanding – this is a challenge for schools that have to choose what knowledge children should know and learn in a restricted period of time.

*The IPC does not provide examples of knowledge assessment (tests or exams) as the knowledge content of the curriculum can be adapted to any national curricula requirements.*

**Skills** refer to things children are able to do. Skills have to be learned practically and need time to be practiced. The good news about skills is the more your practice, the better you get at them! Skills are also transferable and tend to be more stable than knowledge – this is true for almost all school subjects.

*The IPC supports skills tracking and assessment through the [IPC Assessment for Learning Programme](#). This programme includes Teachers’ Rubrics, Children’s Rubrics and Learning Advice.*

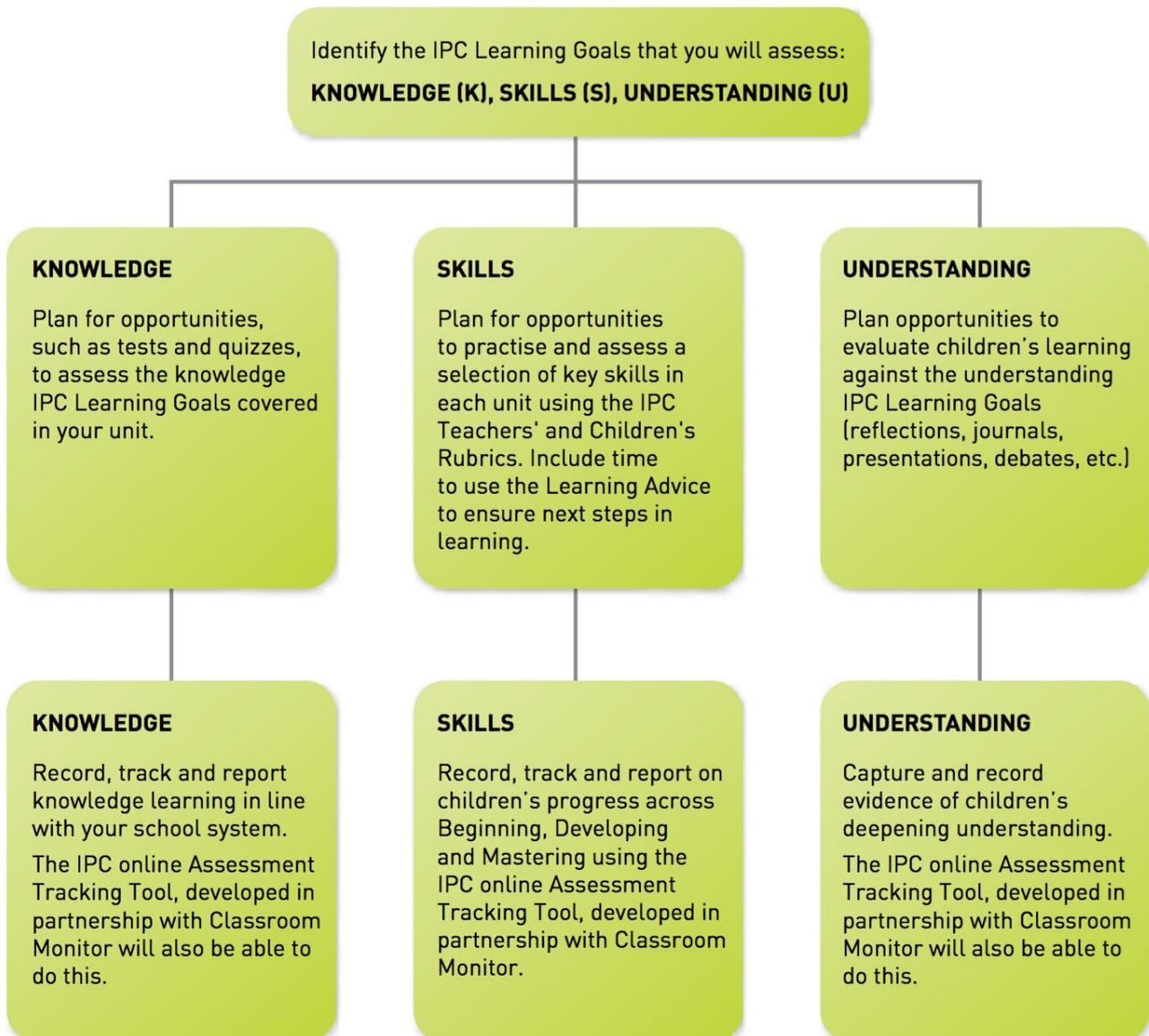
**Understanding** refers to the development or ‘grasping’ of conceptual ideas, the ‘lightbulb’ moment that we all strive for. Understanding is always developing.

*The IPC units can’t assess understanding for you, but they do allow you to provide a whole range of different experiences through which children’s understandings can deepen.*

**(Please note:** as well as the IPC Assessment for Learning Programme, we also offer an online Assessment Tracking Tool, developed in partnership with Classroom Monitor. Please email [members@fieldworkeducation.com](mailto:members@fieldworkeducation.com) for more information on how to sign up to this tool.)

## Planning for Assessment

Once you have planned for the different IPC Learning Goals for each subject it is important to plan for assessment opportunities within each unit of work. Assessment needs to be balanced but rigorous to ensure that the children have learned what we planned for them to learn. The diagram below illustrates the processes you may want to use to ensure this happens.



## Helping Children Reflect on Their Own Learning

In addition to teacher assessment, it is also vital to include children in reflecting on their learning and setting next steps for improvement. Ask the children to carry out self-assessments throughout each unit (using the Children's Rubrics to assess skills, and other methods chosen by the school for knowledge and understanding).

They could use the following headings to list/make notes on their newly acquired knowledge, skills and

understanding – ‘new things I now **know**’, ‘new things that I can **do**’ and ‘new things I am beginning to **understand**’.

Ask the children to evaluate different aspects of their learning – what did they do well, what could improve next time and how, what did they find the most/least interesting? How did they prefer to learn – as an individual/in pairs/small groups/large groups/as a whole class? What was their preferred method of researching and recording - writing/talking/making, etc.? This evaluation aspect will also support the development of the IPC Personal Goals.

## **Further Information**

For more information on assessment, and knowledge, skills and understanding, please refer to:

- [The IPC Implementation File](#)
- [The Assessment for Learning Implementation File](#)
- [The IPC Self-Review Process](#)

Or contact the Membership Support team at [members@fieldworkeducation.com](mailto:members@fieldworkeducation.com)

## The Entry Point

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Make miniature gardens or terrariums (i.e. glass or plastic containers for plants) with the children. Divide the class into small groups. They will each need a plastic or glass jar (this could be recycled and brought in from home), a handful of stones, potting compost, decorative ornaments and small indoor plants such as spider plants.

The following website provides a useful starting point:

- [reekoscience.com/science-experiments/miscellaneous/how-to-create-terrarium-vivarium-self-sustainable-bottle-garden](https://reekoscience.com/science-experiments/miscellaneous/how-to-create-terrarium-vivarium-self-sustainable-bottle-garden) – Reeko's science website explains how to make a bottle garden.

Take the children to a local garden centre so that they can choose their own plants and help you to buy the stones and potting compost.

The children should try to identify and name the common plants they see. They should read the information tags on the plants to find out which ones are best suited for the conditions in their terrarium, i.e. small plants that don't take up a lot of space.

Are deciduous or evergreen plants more appropriate for an indoor environment? If the children are not familiar with these terms you will have an opportunity to come back to them later in the unit.

Encourage the children to take responsibility for looking after their gardens. Ask them, what do our gardens need in order to grow? Spend some time talking about this as a class and establish that in order to grow, plants need the following things: light, water and food. Tell the children that it's their job to look after their garden the best they can. You could explore the idea of 'looking after' the garden in the way they might look after a pet.

Children within each group could take turns to water the garden (warn them not to overwater!) and observe and record how much the plants grow. Take digital photographs, too, to provide a visual record. Compare the growth of the gardens over the course of the unit. Do the gardens grow at different rates? Can they explain this?

# Knowledge Harvest

Give each of the children a sheet of paper divided into four columns. The first column is headed 'Alive', the second column 'Never Alive', the third column 'Was Alive' and the final column 'Not Sure'.

Take the children on a short walk around the school and the school grounds. Ask them to write or draw on their paper the things they see that fit under each of the four headings. For example, they might draw a bird as 'Alive', a stone as 'Never Alive', a log as 'Was Alive', but a seed as 'Not Sure'.

Alive	Never Alive	Was Alive	Not Sure
Children and teachers	Stone	Log	Seed
Bird	Metal bin	Twig	
Tree		Fallen leaf	
Flowers			
Butterfly			

Back in the classroom, discuss the children's findings. Can they explain their choices? What does 'Alive', 'Never Alive' and 'Was Alive' mean?

Tell the children there are seven characteristics (or 'signs') of life. Write them on the board:

- Feeding
- Moving
- Growing
- Reproducing
- Breathing
- Responding
- Removing waste

Explain what each process means and talk about examples from your walk. Ask the children to look again at the table they completed on their walk and allow them to make changes to their initial choices. Can they move any of the things listed in the 'Not Sure' column to the one of the other columns? Discuss the things the children placed in the 'Not Sure' column, e.g. the seed. Ask them, how can we find out if this seed is alive? If we plant it in soil and it grows, is it alive? Try it and see!

## The Big Idea

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How do we know that you are alive but a fire is dead? A fire can move and grow. We can even 'feed' a fire with fuel to make it spread! There are many ways of finding out what is alive and what is dead, as you will discover!

## Explaining The Theme

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In Science, we'll be finding out:

- Where we can find living things
- How living things move
- How living things grow and change
- What all living things need
- How living things stay healthy

In Geography we'll be finding out:

- About places where plants and animals live
- About different places where we can live
- About animals that are endangered

In Art, we'll be finding out:

- How to draw movement in animals and people
- How to create a still life picture

In Physical Education, we'll be finding out:

- About the different ways we can move
- How to put on a 'lively' performance

In International, we'll be finding out:

- How we look after the young and the old
- How we look after the world's people, plants and animals

# The Big Picture

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## **The seven signs of life**

It may seem perfectly obvious to you which things are alive and which things are not. Your dog moves and is alive; your car moves but is not. The television is motionless and is dead; the cactus is motionless but is alive. For young children the distinction is not always so easy.

Most living things demonstrate the seven essential life processes, these are:

### **1. Feeding**

All living things need food for energy, growth and repair.

Wild animals need to work hard to find enough food to survive, while at the same time avoiding predators who want to eat them! Life is easier for humans - we can grow or buy all the food we need. Plants are different to both animals and people because they can make their own food. They do this by using energy from the Sun to create food in the form of sugars and by absorbing water and nutrients from the soil.

Every food chain starts with the Sun and plants – without plants, animals and people could not exist.

### **2. Moving**

People and animals move. Plants move too but very slowly so that we only notice it over a period of time. They don't need to move around in the way that animals do because they can use the sunlight to produce their own food by photosynthesis. Animals have to be out and about, always on the look-out for food or ready to retreat in the face of danger.

### **3. Growing**

Living things are growing, repairing and renewing all the time. These processes occur by cell division. The cells then specialise so they are adapted to carry out their function, e.g. a foetus forms from a bundle of cells that divide and specialise into different organs.

### **4. Reproducing**

Life is finite. If living things did not reproduce, then life on Earth would quickly die out. New plants grow from seeds, people and animals have babies. Reproduction of living things often results in a miniature of the adult but much more exciting are the life cycles of animals that undergo a metamorphosis, i.e. a transformation, where the young change significantly on their way to becoming an adult – tadpoles to frogs, caterpillars to butterflies, maggots to flies.

### **5. Breathing**

Most living things need oxygen. Mammals and birds breathe in oxygen using their lungs and breathe out carbon dioxide. Most fish breathe using gills. Amphibians, some small water creatures, such as molluscs and earthworms, breathe in oxygen and filter out carbon dioxide through their skin. Plants, on the other hand, do the opposite: they take in carbon dioxide and give out oxygen.

## 6. Responding

Living things are aware of what is going on around them and respond accordingly. We respond unconsciously when we enter a darkened room and our pupils grow larger but we respond consciously when we have a conversation with our friends on the phone.

Living things are sensitive and non-living things are not. Green plants will grow towards the sunlight. Sunflower heads turn to follow the Sun during the day (heliotropism). Dogs can detect and distinguish thousands of smells. People can identify a huge range of colours.

## 7. Removing waste

Excretion is common to everything that lives. Some of it is gaseous (carbon dioxide from our lungs) and some is liquid and solid waste.

For some smaller animals, waste gases seep through their skin. With other animals and humans, blood circulates oxygen and nutrients through the body to the cells and carries away waste.

For further information:

- [oum.ox.ac.uk/thezone/animals/life/index.htm](http://oum.ox.ac.uk/thezone/animals/life/index.htm) – Oxford University Museum of Natural History website has useful information on life processes.

## Adaptation

Every species has adapted to its own special way of life.

Plants, animals and people can adapt to living almost anywhere on Earth. In the hot, dry desert, a prickly pear cactus can survive on the small amount of water stored in its stems; people can shelter from the sun in air-conditioned buildings; scorpions can bury themselves in the ground during the day and come out only at night to feed. In polar regions, adapting to the cold presents different challenges. Plants stay small and close to the ground to avoid the cold, harsh wind; animals grow thick layers of fat or fur as protection from freezing temperatures; and people have developed icebreaker ships and snow mobiles to help them travel across vast areas of ice and snow.

## Camouflage

Camouflage is one way in which animals adapt to their particular habitat. For both predators and prey, it provides a useful disguise. Many animals use camouflage to hide within their surroundings or to trick other animals into thinking they are more dangerous than they really are. Arctic foxes change their brown fur to white in the winter months. Chameleons change their skin colour to hide from prey and to signal their mood. Insects are grand masters of camouflage: leaf insects can look just like real leaves, moths can disappear against the bark of a tree, and stick insects can become indistinguishable from twigs. Camouflage is an important weapon in the animal's armoury.

## Endangered species

In every country across the world, species of animals and plants are endangered. The greatest threat to wild animals comes from people destroying their natural habitats by building farms and urban developments, polluting and over-exploiting resources, introducing non-indigenous species and unsustainable harvesting. Conservationists suggest there are currently around 35,000 animal species that need protection. Every year the International Union for Conservation of Nature (IUCN) produces a Red



List of animals, plants and fungi that are threatened in the wild – and the lists gets longer each year. Part of the problem is that recognising the threat to some animals can become a political or economic argument between governments and conservation groups. For protection policies to work, our first challenge is to get all parties to reach an agreement.

## Science Learning Goals

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Children will:

1.01 Know that scientific enquiry involves asking questions, collecting evidence through observation and measurement

 **1.02 Be able to pose simple scientific questions**

 **1.03 Be able to identify ways of finding out about scientific issues**

 **1.04 Be able, with help, to conduct simple investigations**

1.06 Know about the basic conditions needed for living things to survive

1.07 Know about the differences between living things and things that have never been alive

1.08 Know that living things grow and reproduce

1.09 Know that the features of the school environment affect the types of living things found there

1.10 Be able to sort living things into simple groups

1.11 Be able to recognise living things in the school environment

1.12 Understand that different locations support different living things

1.13 Know the names of the main external body parts of humans and animals

1.14 Know the names and characteristics of a range of animals

1.15 Know about the importance of exercise and healthy eating

1.16 Know about the role of drugs as medicines

1.19 Understand how to treat animals with care and sensitivity

1.20 Know the names of the parts of plants

1.21 Know that seeds grow into plants

1.22 Know that plants need light to grow

1.23 Know that plants need water to grow

# Science Task 1

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## Learning Goals

1.01 Know that scientific enquiry involves asking questions, collecting evidence through observation and measurement

 **1.02 Be able to pose simple scientific questions**

 **1.03 Be able to identify ways of finding out about scientific issues**

 **1.04 Be able, with help, to conduct simple investigations**

1.09 Know that the features of the school environment affect the types of living things found there

1.11 Be able to recognise living things in the school environment

1.12 Understand that different locations support different living things



## Research activity

Refer back to the tables from the knowledge harvest and point out the animals that have been placed in the 'Alive' column. Remind the children that these animals share the '7 signs of life' and because this unit is about things that are alive, we are going to look for some animals to study.

Ask the children, where can we find animals living in the school grounds? Where should we look?

Divide the class into small groups. Look along the sides of paths, in the soil, under stones, in over heads, under leaves, in the corners of the school building, in a lump of turf dug up from the edge of the playing field, etc.

Alternatively, you could widen your search and take the class out and about in the local area. Look in hollow trees, fallen logs, hedges, leaf litter, long grass, ditches, woods, elds, walls, water troughs and shallow ponds.

Tell the children that habitats can be big such as an ocean or a forest or small such as the space under a leaf or stone. A very small place where plants and animals live is called a 'micro-habitat'. Encourage the children to use their senses: touching, smelling, listening and looking. Discuss what is special about each place, e.g. is it damp or dry? Warm or cold? Are there lots of animals or only a few? Do they live together or alone? Do the plants provide food or protection? Is there evidence of human activity?

Animals and plants depend on each other. For example, ask the children to consider the following statements:

- Plants need animals
- Animals need plants

Plants need animals for fertilisation and seed dispersal. Animals need plants for shelter and food.

You can illustrate how local plants and animals depend on each other by drawing a local food chain. For example:

Grain -> chicken -> human

Algae -> fish -> human

**Note:** all food chains start with a plant because plants can produce their own food. The arrow -> shows who eats whom.

Look at the animals in your local food chain and help the children to identify, name and sort them into groups according to what they eat, i.e. herbivores eat plants, carnivores eat meat and omnivores eat both meat and plants.

Ask the children if they think habitats change with the seasons or the weather. Invite the children to describe and name the different seasons in your locality or country and talk about how the weather and/or the length of the day changes at different times of the year. For example:

- Will we find more/fewer butterflies in summer when the weather is warmer and more/fewer birds in winter when the weather is colder?
- Will we expect to find more/fewer snails and slugs after it rains?
- Will we find more/fewer living things in sunny, windy or sheltered locations?
- Will we find different creatures at night time compared to daytime?

If your school is in a region where there is little seasonal variation in the weather throughout the year, you may find it useful to link up with an IPC school in a different part of the world to compare your research and findings.

Conditions will vary from place to place and you'll find different living things at different seasons of the year but most places are worth visiting at any time. The purpose of the task is to develop a concept of the local environment and a link between places (habitats) and animals.

**Safety note:** make sure you adhere to your school's safety rules at all times. Don't take the children near deep water. Make sure the children wash their hands thoroughly after this task.



## Recording activity

Give the children a notebook so that they can make a tally of the numbers of animals found in each place. They should make field sketches, take photographs and videos, and try to identify the creatures they spot. Provide them with a simple identification sheet, a classification key and reference books to help with this.

When they return to the classroom, the children should be able to draw a pictorial chart to show the different places where animals were found. Ask them, which types of animals did they find in each place? Can they explain why? How are the animals suited to the places where they live? The children could each take one animal. Draw a picture of it and label the parts of its body that are adapted to the place where they found it. For example, a ladybird has wings so that it can move easily from one blade of grass to another. Its bright colour suggests it might be poisonous and this warns off creatures that would otherwise eat it. Ask the children: does our evidence suggest that a ladybird is a carnivore or herbivore?

You could suggest that the children look at an animal's body structure using the photographs and videos you took to help you decide whether it is a carnivore or herbivore. Carnivorous animals usually have strong jaws, sharp teeth, forward-facing eyes, sharp claws and powerful leg muscles to hunt prey. Compare photographs of birds - garden birds and birds of prey - consider how and why their bodies are structured differently. Birds of prey tend to be bigger and faster with longer, sharper claws and talons, larger hooked beaks and powerful muscles for hunting.

Ask questions about the findings, e.g. How many spiders did you find in each place? The children can answer this by drawing a chart or graph to show where they found spiders.

Ask the children, do you think your findings will be the same at different times of the year or in different types of weather? In summer or in winter? In daytime or night time? On a sunny day, a frosty day or a rainy day?

At the end of the task, the children should be able to make a link between the animal and the place where you might find it and know that all animals are adapted to the places where they live.

## Personal Goals

- Adaptability
- Communication
- Cooperation
- Enquiry
- Resilience
- Respect
- Thoughtfulness

## Science Task 2

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### Learning Goals

1.01 Know that scientific enquiry involves asking questions, collecting evidence through observation and measurement

 **1.02 Be able to pose simple scientific questions**

 **1.03 Be able to identify ways of finding out about scientific issues**

 **1.04 Be able, with help, to conduct simple investigations**

1.10 Be able to sort living things into simple groups

1.13 Know the names of the main external body parts of humans and animals

1.14 Know the names and characteristics of a range of animals

1.19 Understand how to treat animals with care and sensitivity

1.20 Know the names of the parts of plants

1.21 Know that seeds grow into plants

1.22 Know that plants need light to grow



## Research activity

Recall the previous task and start by trying to identify, name and group a variety of common animals including fish, amphibians, reptiles, birds, mammals and insects. Provide the class with opportunities to observe how animals move. You can watch clips from science documentaries and study creatures in the school grounds.

The following websites provide a useful starting point:

- [bbc.co.uk/nature/collections](http://bbc.co.uk/nature/collections) – the BBC website has a collection of video clips from its natural history archive.
- [bbc.co.uk/wildlifefinder](http://bbc.co.uk/wildlifefinder) – the BBC Nature website has information and videos on the world's most amazing animals.
- [animals.nationalgeographic.co.uk/animals/?source=NavAniHome](http://animals.nationalgeographic.co.uk/animals/?source=NavAniHome) – National Geographic website has features and videos about animals.

As they watch the video clips ask the children to look for the different ways in which animals move.

How many different kinds of movement are there? (running, hopping, swimming, walking, jumping, flying, crawling)

Help the children to describe and compare the structure of a variety of animals and link this to movement. Include fish, amphibians, reptiles, birds, mammals and insects. For example, you could observe how a frog's long, muscular back legs are perfectly designed for jumping. Invite the children to find other examples of how body structure is linked (or suited) to movement. Don't forget to include pets also - they make good subjects for observation.

Try to observe animals at first hand, e.g. watch a snail moving on a glass (or transparent plastic) sheet from underneath. Observe insects and other 'mini-beasts' found in the school grounds – you can place them carefully in transparent containers to do this but make sure you put them back where you found them as soon as possible.

**Note:** ensure that the children treat animals with sensitivity. Always return animals to the place where you found them.

Now compare animals to plants. What is different about how plants move? When we see branches swaying in the wind is the plant moving by itself? Observe a houseplant growing towards the light, a daisy opening its petals to the sun, or a Venus Flytrap catching a meal.

Notice how the stem allows the plant to bend and grow towards the light. But what keeps plants in one place? The roots fix the plant in the soil. How is it possible then for plants to spread and grow in other areas? Seeds can be blown by the wind or carried by animals, in their fur or on their feet, far away from the parent plant. Invite the children to identify, name and label the main parts of a common plant.



## Recording activity

Show the children how to sort the animals they have observed into groups based on different criteria. They could sort them according to the following:

- How many legs they have – group animals that have no legs, six legs, more than six legs
- How they move – group animals that y, swim, crawl, hop, etc.

The children could draw the animals in different groups, e.g. in the group with six legs they might draw a bee, fly, ladybird and beetle; in the group with more than six legs they might draw a centipede, millipede, spider, etc.

Older/more able children can record the movement of the animals they observe in various ways, e.g. through video recordings, computer animations, drawings and written descriptions.

For each animal they observe, the children should record which parts of the animal's body move. Whether the animal changes shape when it moves. If any parts move when the animal is not moving, e.g. feelers, eyes? Can the children imitate the movement of different animals?

**Music link:** can the children select appropriate music (or create their own music) to reflect the movement of different animals? Which instrument best suggests the hopping movement of a frog or the sliding movement of a snail?

Can the children imitate the movement of different animals through dance and drama? See Physical Education Task 1.

Together with the class, listen to '*The Carnival of the Animals*' by Camille Saint-Saëns. Discuss the sounds of the instruments they can hear and the animals they represent.

## Personal Goals

- Communication
- Cooperation
- Enquiry
- Respect
- Thoughtfulness

## Science Task 3

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### Learning Goals

1.01 Know that scientific enquiry involves asking questions, collecting evidence through observation and measurement



**1.02 Be able to pose simple scientific questions**



**1.03 Be able to identify ways of finding out about scientific issues**



**1.04 Be able, with help, to conduct simple investigations**

1.06 Know about the basic conditions needed for living things to survive

1.08 Know that living things grow and reproduce

1.22 Know that plants need light to grow

1.23 Know that plants need water to grow



## Research activity

All living things grow. (Refer back to the '7 signs of life' and the knowledge harvest.)

Begin this task by reading the traditional story 'The Enormous Turnip' or by showing the class a stop-motion video to illustrate the growth of a plant.

The following websites provide a useful starting point:

- [youtube.com/watch?v=UQ\\_QqtXoyQw](https://www.youtube.com/watch?v=UQ_QqtXoyQw) – YouTube has a time-lapse video of a dandelion flower turning into a dandelion clock.
- [youtube.com/watch?v=lmlFXIXQQ\\_E&feature=related](https://www.youtube.com/watch?v=lmlFXIXQQ_E&feature=related) – YouTube has a time-lapse video of birch trees growing, shedding their leaves then resting during the different seasons in one year.
- [youtube.com/watch?v=G2RuVxdr0mA](https://www.youtube.com/watch?v=G2RuVxdr0mA) – YouTube has this time-lapse video showing the germination of a climbing bean.

*(To watch a YouTube video in **safe mode**, scroll to the bottom of the page and click on the 'safety' tab which brings up the 'Safety mode' information. Under this section, select the 'on' option, then click 'save')*

Help the children to investigate how things change as they grow, e.g. seeds grow into plants, caterpillars grow into butterflies and children grow to become adults.

Do living things carry on growing, like the enormous turnip in the fairy story? Will you stop growing when you are an adult? Adults might not get any taller but their hair and nails will continue to grow. Their skin will grow and repair itself.

Ask them, are you growing now? How do you know that you're growing? (They're getting bigger/taller each year. They are out-growing their clothes, etc.) As a take-home task, the children could talk to their parents about how much they have grown since they were a baby.

Recall the entry point: have the plants in your miniature gardens started to grow yet? How can you tell? Help the children to measure and record their plants' growth at intervals using tape measures, 'before' and 'after' photographs, by counting the leaves, etc.

Keep some other faster-growing plants in the classroom to observe how they change as they grow. Plants such as Brassica (cabbage) complete their life cycle within a month and tomato plants will show the complete cycle from seed to seed in a relatively short time.

What do plants need in order to grow? Through looking after their terrarium plants, the children will have discovered that plants need water, light and a suitable temperature to grow and stay healthy. They might want to change the conditions of one of their plants to find out what needs are important for the plant.

Now compare plants to humans and other animals. What are their basic needs for survival and growth? Are they the same? Water, food, air... is there anything else? Light.



## Recording activity

Ask the children to record the growth and change of their classroom plants at regular intervals by drawing, writing, taking photographs and recording the height of the plants.

Observe and record other examples of growth, e.g. in the plants in the school grounds or the children's hair and nails!

The children could measure each other's height at the beginning and the end of the school year and record the results in a bar chart or line graph.

**ICT link:** show the children how to record the data collected from their research onto a simple spreadsheet. Later, they can compile the information to create line graphs and charts to show the growth of their plants and make PowerPoint presentations of their findings.

## Personal Goals

- Adaptability
- Communication
- Cooperation
- Enquiry
- Respect
- Thoughtfulness

## Science Task 4

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### Learning Goals

1.01 Know that scientific enquiry involves asking questions, collecting evidence through observation and measurement

 **1.02 Be able to pose simple scientific questions**

 **1.03 Be able to identify ways of finding out about scientific issues**

1.06 Know about the basic conditions needed for living things to survive

1.07 Know about the differences between living things and things that have never been alive

1.08 Know that living things grow and reproduce



### Research activity

Recall Science Task 3 when you observed the growth of plants. Talk about how the plants you have been looking after in your miniature gardens have grown too. Tell the children that their parents have been looking after them since they were a baby – and look how much they have grown! Can anyone remember what it was like to be a baby?

Bring a doll – as realistic as possible – in to the classroom and ask the children to talk about the ways in which the doll is life-like. Discuss the things the doll can do, e.g. it can close its eyes and it might be able to ‘cry’, ‘talk’ and ‘walk’, etc. Give a life-like baby doll to each group and challenge them to look after it for the day – change its nappy, feed it, talk to it, rock it to sleep, etc. Afterwards the children could report back on whether this is like looking after a real baby. Some children will have baby brothers and sisters and will be able to relate this to the experience of looking after the doll.

What can a baby do that a doll can't?

If at all possible, ask a parent to bring a real baby to school. Ask the children to say what the baby can do that the doll can't. Ask the parent to help with this. Stand one of the children next to the baby and ask all the children to say what the older child can do that the baby can't.

Encourage the children to use books and other resources to find out more about babies, toddlers and young children.

The following website provides a useful starting point:

- [kidshealth.org/parent/growth/growing/childs\\_growth.html](https://www.kidshealth.org/parent/growth/growing/childs_growth.html) – KidsHealth website has useful information about children's growth patterns.



### **Recording activity**

Ask the children to draw the baby and the child, and to put next to each the 'I can' statements. Compare these with what the children said about the doll. The children should be able to say what a baby can do that a doll can't.

Through this task the children will see that we are living things – and we grow and change, unlike the baby doll.

### **Personal Goals**

- Adaptability
- Communication
- Cooperation
- Enquiry
- Respect
- Thoughtfulness

## Science Task 5

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### Learning Goals

1.01 Know that scientific enquiry involves asking questions, collecting evidence through observation and measurement

 **1.02 Be able to pose simple scientific questions**

 **1.03 Be able to identify ways of finding out about scientific issues**

1.08 Know that living things grow and reproduce

1.10 Be able to sort living things into simple groups



### Research activity

Watch a time-lapse video of a boy or girl growing into old age.

The following video is a useful starter for this task:

- [youtube.com/watch?v=A91Fwf\\_sMhk&feature=related](https://www.youtube.com/watch?v=A91Fwf_sMhk&feature=related) – YouTube has this time-lapse video of a baby boy ageing 85 years in 40 seconds.

*(To watch a YouTube video in **safe mode**, scroll to the bottom of the page and click on the '**safety**' tab which brings up the '**Safety mode**' information. Under this section, select the '**on**' option, then click '**save**')*

Ask the children to cut out pictures of people of different ages from catalogues and magazines to use as a sorting task. Include babies, toddlers, children, teenagers, twenty- and thirty-somethings, middle-aged and elderly people.



## Recording activity

Ask the children to work in groups to sort the pictures. Talk about how we change as we grow from babies to old age. Glue the pictures onto long strips of card and curl them round to make a 'life cycle hat'.

The children could draw time-lapse sketches of themselves at different ages to show how they think they will grow and how their appearance will change. They could then cut out their pictures and place them on a timeline. Their ages in years could be written across the bottom of the timeline. On the top of the timeline, they could write short descriptions, e.g. 'I might be 6 feet tall when I am 18 years old'; 'when I am 27, I might have a baby'; 'I could be a grandparent when I am 60', and so on. Ask the children to glue their cut-out pictures against their approximate ages on the timeline.

## Personal Goals

- Adaptability
- Communication
- Cooperation
- Enquiry
- Respect
- Thoughtfulness

## Science Task 6

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### Learning Goals

1.01 Know that scientific enquiry involves asking questions, collecting evidence through observation and measurement

 **1.02 Be able to pose simple scientific questions**

 **1.03 Be able to identify ways of finding out about scientific issues**

 **1.04 Be able, with help, to conduct simple investigations**

1.06 Know about the basic conditions needed for living things to survive

1.08 Know that living things grow and reproduce

1.19 Understand how to treat animals with care and sensitivity



### Research activity

Ask the children, do animals change as they grow?

Observe the life cycles of different animals in the school grounds. You could ask the children to investigate the life cycles of the creatures that they observed in Science Task 1. Help the children to realise that there is a sequence of events in every life cycle.

Ask the children to compare animal life cycles. For example, baby worms, snails, woodlice, spiders and centipedes are like miniature adults but insects have more complex life cycles. Most follow the 'egg – larva – pupa – adult' cycle.

Think also about chance, i.e. not all caterpillars become pupae and only a few eggs become adults so caterpillars lay lots of eggs. Discuss the dangers young caterpillars face in the wild. Can the children think of any mini-beasts that look after their young before releasing them into the wild? (bees, ants, wasps)

You could keep some caterpillars to study their life cycle at first hand. You will need:

- An escape-proof transparent container with a mesh lid
- A supply of fresh food (the plant on which you found the caterpillar)
- A supply of water
- Suitable conditions for pupation
- Soil and bark

1. Put 5 centimetres of soil in the bottom of the container
2. Place the plant in the water
3. Cover the water with cardboard to prevent the caterpillars from falling in
4. Piece of bark for the pupae to hang from
5. Put some extra leaves from the plant on top of the soil for those caterpillars that fall off the plant
6. Change the food each day or when it shows signs of wilting
7. Remove any caterpillar droppings
8. Don't disturb the caterpillars when pupating
9. Record what happens

**Note:** teach the children how to look after the caterpillar with care and sensitivity. If it fails to grow and thrive in its new home you should return it to the place where you found it without delay.

A simpler option would be to keep some soil pupae in a container of damp soil. Make sure you maintain the pupae at a cool even temperature. Be patient and watch what happens.

Alternatively, you could visit a butterfly farm or provide reference books and DVDs for the children's own research.

The following video is a useful starting point:

- [youtube.com/watch?v=7AUeM8Mbalk](https://www.youtube.com/watch?v=7AUeM8Mbalk) – YouTube has this time-lapse video showing the complete life cycle of the Monarch butterfly.

*(To watch a YouTube video in **safe mode**, scroll to the bottom of the page and click on the 'safety' tab which brings up the 'Safety mode' information. Under this section, select the 'on' option, then click 'save')*



## Recording activity

Make a visual record of the sequence of events in the animal life cycles researched. For example, the children could make a video of the life of the caterpillar they observed. Annotated labels and commentary on the video should explain what is happening at each stage.



## Personal Goals

- Adaptability
- Communication
- Cooperation
- Enquiry
- Resilience
- Respect
- Thoughtfulness

## Science Task 7

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### Learning Goals

1.01 Know that scientific enquiry involves asking questions, collecting evidence through observation and measurement



**1.02 Be able to pose simple scientific questions**



**1.03 Be able to identify ways of finding out about scientific issues**



**1.04 Be able, with help, to conduct simple investigations**

1.06 Know about the basic conditions needed for living things to survive

1.20 Know the names of the parts of plants

1.22 Know that plants need light to grow

1.23 Know that plants need water to grow



## Research activity

What do all living things need in order to stay alive? They need light and air, and, most importantly, they need food and water.

Invite the children to think about the living things they discovered in the school grounds – the different plants and the minibeasts. What do they eat? You might feed the birds in winter but you don't feed the spiders or the worms! How do they survive? Where do they get their food from? Refer to Science Task 1. Recall the animals you researched, can the children recall which were herbivores, carnivores and omnivores? Recap on what these terms mean.

Draw pictures of a simple food chain on the board to help explain how all living things need each other. For example:

**Sun -> Plants -> Snails -> Garden birds -> Hawks**

**Sun -> Water Plants -> Fish -> Otters**

Make sure you draw a food chain that reflects your local environment. Start with the Sun and explain that the Sun provides light and food for plants to grow. Without plants, animals (and people) could not live. But what about the plants – where do they get their food from? (from the Sun via their leaves, from the soil via their roots)

Investigate the structure of a plant - what are the different parts of a plant called and what do they do? Use one of your classroom plants for your research. Consider the role of the roots, stem and leaves and link to the basic needs of plants, for example, the leaves make food from sunlight, the stem carries water from the roots to the leaves, the roots hold the plant upright and soak up water and nutrients from the soil, etc.

The following websites and books provide a useful reference point:

- [youtube.com/watch?v=Cd1M9xD482s](https://www.youtube.com/watch?v=Cd1M9xD482s) – YouTube has this Make Me a Genius video about the importance of plants to all life on Earth.
- [ecokids.ca/pub/eco\\_info/topics/frogs/chain\\_reaction/index.cfm](http://ecokids.ca/pub/eco_info/topics/frogs/chain_reaction/index.cfm) – EcoKids website has two interactive food chains: a Polar and a forest food chain.
- *Eyewitness Plant*, by David Burnie, Dorling Kindersley, 2003
- *The Life of Plants*, by Claire Llewellyn, Franklin Watts, 2006

As well as light and food, plants need water.

You could invite the children to carry out a simple experiment to show how plants drink up water.

Put some cut (white) flowers into a vase of water that has been coloured with food dye. Watch what happens. Take a cross-section of the stem to observe the tubes with a hand magnifier.



## Recording activity

The children should be able to talk about and explain food chains found in their local area.

Give the children cut-out pictures of different plants and animals and ask them to put them in the correct sequence to make a food chain. Ask them to work individually for this part of the task so that you can assess their knowledge.

Older and more able children might be able to draw their own food chains. Invite the children to make a video recording of the flower-drinking experiment or they could draw labelled pictures to explain what happened.

## Personal Goals

- Adaptability
- Communication
- Cooperation
- Enquiry
- Respect
- Thoughtfulness

# Science Extension Task

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## Learning Goals

1.01 Know that scientific enquiry involves asking questions, collecting evidence through observation and measurement

 1.02 Be able to pose simple scientific questions

 1.03 Be able to identify ways of finding out about scientific issues

1.15 Know about the importance of exercise and healthy eating

1.16 Know about the role of drugs as medicines



## Extension activity

Recap on what the children have learned in this unit about what plants and animals need in order to survive and stay healthy. Refer to the plants growing in your classroom and the animals you have researched in the previous tasks. Recall the 7 signs of life and the basic needs for survival (i.e. water, food, air, light). Now compare plants and animals to humans - what do humans need in order to survive and stay healthy? Invite the children to make suggestions. Focus on any ideas they may have about food, exercise and hygiene.

Divide the children into three groups. One group could research healthy foods, another group exercise and a third group hygiene. This research could work as a home-learning task, if you prefer. For example, you could ask the children in each group to create a visual diary over the course of a few days, as follows:

- **Food** - the children could take photographs or videos, or draw pictures of all the healthy foods or meals they have eaten at home or at school, e.g. they might take a photograph of their healthy breakfast or evening meal or they could plan and prepare a healthy school meal using the principles of a healthy and varied diet. Challenge the children to find out where the food they eat comes from originally. Help them to make the connection that some of the food we eat, such as fruit and vegetables, is grown - this may be in the country where they live, but sometimes this food travels miles from other countries to be sold in our supermarkets. When they drink milk, or eat eggs, do they know which animals these foods come from? For some of the foods in their diary, see if they can trace them back to their origins.
- **Exercise** - the children could take photographs or videos, or draw pictures of the sports or other physical activities they have taken part in, e.g. they might take a video of themselves playing football.
- **Hygiene** - the children could take photographs or videos, or draw pictures of how they have been careful about hygiene, e.g. they might take a video of themselves washing

their hands or helping with the washing-up.

For each photograph, video or drawing the children make, they should be able to say why this particular food, exercise or hygiene habit is healthy. The children should know that we need to eat healthy foods for energy and growth; we need to exercise to strengthen our bones and muscles; and we need to take care with personal hygiene in order to avoid germs.

The following website is useful for the children's research into healthy eating and exercise:

- [kidshealth.org/kid/stay\\_healthy/](https://kidshealth.org/kid/stay_healthy/) – KidsHealth website has many features, written for children, about how we can keep fit and eat well.

Encourage the children to share their diaries with the class. Ask them: what happens if we don't eat a healthy diet; if we don't exercise enough; if we don't care about hygiene? Here you could link to the role and use of the medicines we take when we are ill. Focus on the minor illnesses the children have experienced such as coughs, colds, flu, sore throat, and how germs are spread from one person to another on our hands - thus linking back to hygiene.

Display the children's visual diaries in the knowledge harvest or put them together to create a slideshow for the parents at the exit point activity (see ICT link below).

**ICT link:** scan or insert the children's photographs, videos or drawings into the computer to create a slideshow. The children could enter their explanation text to appear as a pop-up annotation (activated by the mouse) next to each image in the slideshow.

## Personal Goals

- Adaptability
- Communication
- Cooperation
- Enquiry
- Respect
- Thoughtfulness

## Geography Learning Goals

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Children will:

1.02 Know about similarities and differences between different localities

1.04 Know about the weather and climatic conditions in particular localities and how they affect the environment and the lives of people living there

1.05 Know that the world extends beyond their own locality and that the places they study exist within a broader geographical context

1.06 Know that people can harm or improve the environment

 **1.09 Be able to describe the geographical features of the school site and other familiar places**

 **1.11 Be able to use maps at a variety of scales to locate the position and simple geographical features of the host country and their home country**

 **1.12 Be able to use secondary sources to obtain simple geographical information**

 **1.13 Be able to express views on the attractive and unattractive features of an environment**

 **1.14 Be able to communicate their geographical knowledge and understanding in a variety of ways**

# Geography Task 1

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## Learning Goals

1.02 Know about similarities and differences between different localities

1.04 Know about the weather and climatic conditions in particular localities and how they affect the environment and the lives of people living there

 **1.12 Be able to use secondary sources to obtain simple geographical information**

 **1.14 Be able to communicate their geographical knowledge and understanding in a variety of ways**



## Research activity

Show the class a picture of the depths of the ocean. Ask them, can anything live here at the bottom of the deepest, darkest ocean? Or here in this hot and dry desert? Show them a picture of a vast, sandy desert. Invite suggestions from the class.

Show the children pictures of an angler fish and a scorpion (or other ocean/desert animals of your choice). Ask the children to find out about these two animals and the extreme habitats in which they live. Provide them with books and access to the internet.

The following websites and books provide a useful starting point:

- [animals.nationalgeographic.com/animals/fish/anglerfish/?source=A-to-Z](https://animals.nationalgeographic.com/animals/fish/anglerfish/?source=A-to-Z) – National Geographic website has a photograph and facts about the angler fish.
- [animals.nationalgeographic.com/animals/bugs/scorpion/?source=A-to-Z](https://animals.nationalgeographic.com/animals/bugs/scorpion/?source=A-to-Z) – National Geographic website has a photograph and facts about the scorpion.
- *Deserts, Planet Earth Series*, by Steve Parker, QED Publishing, 2008
- *Essential Habitats series*, by Barbara Taylor et al, Ticktock Ltd, 2009



## Recording activity

Ask the children to find out, draw and write about any plants and animals that live in an extreme environment. They should draw labelled pictures to explain how these plants and animals have adapted to their surroundings. For example, the angler fish living in the darkest depths of the ocean tries to lure prey with its own luminous 'fishing rod'!

The children need to describe what conditions are like in each environment (climate, weather, landscape) and how the plants and animals have adapted to living there. They could put this information together to create a class mural, entitled: Who Lives in a Place Like This?

**ICT link:** the children could present their research as a PowerPoint display that their parents could view at the exit point (see later).

## Personal Goals

- Adaptability
- Communication
- Cooperation
- Enquiry
- Respect
- Thoughtfulness

## Geography Task 2

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### Learning Goals

1.02 Know about similarities and differences between different localities

1.04 Know about the weather and climatic conditions in particular localities and how they affect the environment and the lives of people living there

 **1.09 Be able to describe the geographical features of the school site and other familiar places**

 **1.11 Be able to use maps at a variety of scales to locate the position and simple geographical features of the host country and their home country**



### Research activity

As a class, discuss the similarities and differences between two environments (places) – these might be environments found in the host country, home country or another country. Together, you should locate these places on maps or globes at a variety of scales.

Help the children to find out about the characteristic features of these environments, e.g. what is the climate and landscape like? What types of plants or animals live here? What do people do in this environment?

Perhaps you could link up with another IPC school for this activity? The children could then record and share 'My environment' video diaries. As well as learning about indigenous plants and animals, the children could consider how the climate affects the clothes people wear, how they get to school, what activities they do after school, and so on. What are the similarities and differences between them and other children of a similar age living in other places?



## Recording activity

Invite the children, working in groups, to list the ways in which people live in the different environments you have researched. Collect this information in two lists:

- What we need wherever we are – food, drink, clothing, shelter
- What we need that is specific to that environment

Now ask the children to draw a person in one or more extreme environments. Ask them to draw what the person needs to live there, for example:

- Polar regions
- Desert
- Rainforest
- Rocky island
- Grassy plain

Show that while we all have the same basic needs to live, we also have specific needs in extreme environments.

Cut out 'people shapes' and add them to your mural (Who Lives in a Place Like This?) from the previous geography task. Dress them up or draw on suitable clothing to match the environment they live in. Draw pictures of their specially adapted houses/homes.

Bring out the idea that people can adapt through the use of clothing, buildings and technology to live almost anywhere.

## Personal Goals

- Adaptability
- Communication
- Cooperation
- Enquiry
- Respect
- Thoughtfulness

## Geography Extension Task

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### Learning Goals

1.05 Know that the world extends beyond their own locality and that the places they study exist within a broader geographical context

1.06 Know that people can harm or improve the environment



**1.12 Be able to use secondary sources to obtain simple geographical information**



**1.13 Be able to express views on the attractive and unattractive features of an environment**



## Extension activity

Show the children video clips or a gallery of photographs of a selection of endangered animals, e.g. gorilla, panda, rhinoceros, tiger, shark, green turtle, polar bear, etc. Ask the children if they know what all these animals have in common? Tell them that these animals are all endangered. Explain the meaning of the term 'endangered' – they are dying out and are in danger of extinction.

Provide the children with reference books and background information on these animals and their habitats. Discuss the reasons for their declining numbers in the wild. Explain how loss of habitat can have a drastic effect on plant life and on the animals that eat those plants.

Talk about what we can do to stop the decline in these animals, e.g. many zoos work to help save animals. Find out about the work of a local zoo or wildlife park in the host country that seeks to protect endangered species. Could you arrange a class visit to find out about the work it does?

The following websites and book provide a useful starting point:

- [arkive.org](http://arkive.org) – Arkive website has collections of photographs and videos of endangered species.
- [bbc.co.uk/wildlifefinder](http://bbc.co.uk/wildlifefinder) – BBC natural history website has information and videos on the world's most amazing animals.
- [wwf.org.uk](http://wwf.org.uk) – World Wide Fund for Nature website provides details of its work in more than 90 countries to conserve endangered species and habitats.
- *Eyewitness Endangered Animals*, by Ben Hoare and Tom Jackson, 2010

Ask the children to create a short documentary or drama to bring knowledge of the animals' problems to other classes in the school. Or, the animals themselves could speak out in a plea for help – with the children voicing their fears behind animal masks!

Enlist the help of other classes in the school to support your campaign and to spread awareness still further.

## Personal Goals

- Adaptability
- Communication
- Cooperation
- Enquiry
- Respect
- Thoughtfulness

## Art Learning Goals

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Children will:

1.01 Know about some of the forms used by artists in their work



**1.02 Be able to use a variety of materials and processes**



**1.03 Be able to suggest ways of improving their own work**



**1.04 Be able to comment on works of art**

# Art Task 1

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## Learning Goals

1.01 Know about some of the forms used by artists in their work

 **1.02 Be able to use a variety of materials and processes**

 **1.03 Be able to suggest ways of improving their own work**

 **1.04 Be able to comment on works of art**



## Research activity

Show the children examples of paintings from the following themes, for example:

1. Paintings from nature or a landscape with animals, e.g. *36 Views of Mount Fuji* by Katsushika Hokusai, *The Forest Fire* by Piero di Cosima; *Monarch of the Glen* by Sir Edwin Landseer
2. Paintings with lively people, e.g. *Two Dancers Entering the Stage* by Edgar Degas; *Swimming Race* by Alex Colville; *Olympic Torch Bearer* by Bill Hall
3. A 'still life', e.g. *Still Life with Oranges* by Henri Matisse; *Still Life with Apples* by Paul Cézanne; *Autumn Branch* by Sergei Ivanovich Osipov

Ask the children the following:

- Which picture do you like best? Why is that?
- Which pictures have living things in them? (Link to the science tasks.)
- How has the artist tried to show us that things are living? What special techniques has the artist used to show life and movement?



## Recording activity

Provide groups of children with digital cameras and ask them to photograph lively scenes happening around the school, e.g. children running about in the playground or taking part in PE, dance and drama lessons.

Or ask them to photograph a moving animal or plant in the school grounds, e.g. a bird ying or a tree swaying in the breeze. Offer a range of possible media - including a Draw and Paint package on the computer, if possible.

Discuss how movement can be depicted in artwork, e.g. by the blurring of the background behind the subject, repeated or overlapping images and lines to suggest movement. (You could refer to the MP1 specialist art unit to explore these techniques further.)

Offer a range of possible media – paint, oil pastels, crayons and chalks; including a Draw and Paint package on the computer, if possible.

Give the children time to explore suitable techniques. Encourage them to work on a large scale and to work in pairs or individually.

When the artworks are complete, encourage the children to say what they particularly like about each other's work. Try to steer their comments towards the specific skills and techniques used.

**ICT link:** the children could create an animation using computer software. Some basic animation software can be downloaded from the internet.

The following websites will provide a useful starting point:

- [kudlian.net/products/icananimate](http://kudlian.net/products/icananimate) – Kudlian website features I Can Animate software.
- [fluxtime.com](http://fluxtime.com) – FluxTime Studio website allows you make a free download.
- [toonboom.com/products](http://toonboom.com/products) – Toon Boom Animation website has a software called Animation-ish.

## Personal Goals

- Adaptability
- Communication
- Cooperation
- Enquiry
- Thoughtfulness

## Art Task 2

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### Learning Goals

1.01 Know about some of the forms used by artists in their work

 **1.02 Be able to use a variety of materials and processes**

 **1.03 Be able to suggest ways of improving their own work**

 **1.04 Be able to comment on works of art**



### Research activity

Contrast the movement shown in the artwork they created for Art Task 1 with a still-life painting, e.g. *Still Life with Oranges* by Henri Matisse; *Still Life with Apples* by Paul Cézanne.

Tell the children that a 'still-life' painting illustrates objects that are not moving. Still-life paintings usually depict owers, food, utensils and ornaments.

Ask the children to make a collection of objects that would be appropriate for a still-life painting that represents the work they have done so far on this unit, e.g. a stone, a plant, a ower, a reference book, a camera, etc. (Refer back to the knowledge harvest.)

Position a small table against the classroom wall and place a coloured drape or sheet of paper over the wall and on the table to create a contrasting background. Arrange the chosen objects on the table.

Discuss the techniques employed by Cezanne in his still-life paintings, for example:

- Cool colours, mainly blues and greys, create shadows in the background
- Warm reds, pinks and yellows create a roundness in the 3-D shapes
- Contrasting colours separate objects and areas in the composition

Show the children how to use these techniques in their own still-life painting.



## Recording activity

Ask the children, working individually, to create a still-life painting of their own based on the technique of one of their favourite artists from the research.

Encourage the children to comment on their own and others' work, suggesting what they like about it and what works well, etc. You could give each of the children two sticky notes to write down what they like about two different pieces of artwork (not their own). Include the rule that no artwork can have more than two sticky notes on it!

## Personal Goals

- Adaptability
- Communication
- Cooperation
- Enquiry
- Resilience
- Thoughtfulness

# Art Extension Task

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## Learning Goals

1.01 Know about some of the forms used by artists in their work

 **1.02 Be able to use a variety of materials and processes**

 **1.04 Be able to comment on works of art**



### Extension activity

Look at the painting *Monarch of the Glen* by Sir Edwin Landseer.

Ask the class, is this painting a still life? If not, why not? (Recall Art Task 2.) Discuss the following:

- Subject – what can you see in this painting?
- Colours – what colours has the artist used?
- Effect – what do you feel when you look at this painting?
- Purpose – why do you think the artist painted this subject?

Can the children take inspiration from this painting to create an animal artwork of their own? They could choose an animal they have studied previously in the science tasks or an endangered animal they have learned about in Geography Task 3.

Working individually, can they depict their chosen animal in a similar way to the *Monarch of the Glen*, e.g. the animal painted close-up in the foreground against its natural habitat in the background?

Encourage the children to use chalk to draw the animal (large) in the foreground and then to draw the landscape in the background. Then they should use paints to fill in the details with colour. You will need to show them how to mix realistic colours to represent their animals.

Mount the children's paintings gallery-style in decorative cardboard frames, sprayed with gold-coloured paint. Display them for the exit point activity.

## **Personal Goals**

- Adaptability
- Communication
- Cooperation
- Enquiry
- Resilience
- Thoughtfulness

## Physical Education Learning Goals

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Children will:

 **1.02 Be able to perform simple activities with control and coordination**

 **1.03 Be able to repeat and develop simple actions**

 **1.05 Be able to apply movements in sequence**

1.07 Be able to observe, copy and develop actions performed by others

1.08 Be able to improve performance through observation and repetition

# Physical Education Task 1

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## Learning Goals

 **1.02 Be able to perform simple activities with control and coordination**

 **1.03 Be able to repeat and develop simple actions**

 **1.05 Be able to apply movements in sequence**

1.07 Be able to observe, copy and develop actions performed by others

1.08 Be able to improve performance through observation and repetition



## Research activity

Tell the children – we've talked about plants and animals and other people being alive – now it's time to show me you are alive!

Take the class into the hall. Ask them, how many different ways can you move around in this space? They should explore jumping, running, hopping, sliding, leaping, skipping, bouncing, etc.

Encourage each of the children to try as many different movements as they can think of. Some movements will be fast, some slow, some close to the floor and some away from the floor, and so on.

Now concentrate on skills development and control in each movement, e.g. jumping – tell the children to jump and land on two feet, then jump and land on one foot. Jump in different directions: forwards, backwards and sideways. Encourage the children to use all the available space and to move without touching others.



## Recording activity

Now ask them if they can put together a sequence of movements to represent one of the animals they studied in Science Task 2. They could work in pairs or individually, e.g. two children could work together to imitate the movements of a spider.

Can the other children in the class recognise the animals they are imitating?



## Personal Goals

- Communication
- Cooperation

## Physical Education Task 2

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### Learning Goals

 **1.02 Be able to perform simple activities with control and coordination**

 **1.03 Be able to repeat and develop simple actions**

 **1.05 Be able to apply movements in sequence**

1.07 Be able to observe, copy and develop actions performed by others

1.08 Be able to improve performance through observation and repetition



### Research activity

Work with the children to devise movements that celebrate their own life and health. For example, each child could show off a special skill. Build these activities into sequences – groups of forward rolls, cartwheels or other activities. Make these into a presentation that others will enjoy. The theme: I'm alive!

Aim to put together and present a show that others will want to watch.



### Recording activity

Show the children how they can learn from each other. Can they copy the movements of another child? Can this movement be performed as a group?

Provide opportunities for practice and encourage collaboration between the children.

Video their performance as it progresses and review with the class. Would they like to suggest any changes and improvements? Are the timings right? Is it enjoyable to watch?

### Personal Goals

- Communication
- Cooperation

# Physical Education Extension Task

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## Learning Goals

 **1.02 Be able to perform simple activities with control and coordination**

 **1.03 Be able to repeat and develop simple actions**

 **1.05 Be able to apply movements in sequence**

1.07 Be able to observe, copy and develop actions performed by others

1.08 Be able to improve performance through observation and repetition



## Extension activity

Show your 'I'm Alive!' performance to the rest of the school and to the parents during the exit point activity.

**Music link:** can the children find a lively piece of music to accompany their performance? For example, they could try Herb Alpert's '*Spanish Flea*', '*To a Hummingbird*' by Edward MacDowell, '*The Carnival of the Animals*' by Camille Saint-Saëns or '*Flight of the Bumblebee*' by Nikolai Rimsky-Korsakov.

- [classicsforkids.com/music](https://www.classicsforkids.com/music) – Classics for Kids website features a recording of '*Flight of the Bumblebee*' by Rimsky-Korsakov.

## Personal Goals

- Communication
- Cooperation

## International Learning Goals

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Children will:

1.01 Know that children within the class and school have different home countries

1.03 Know about some of the similarities and differences between the lives of children in the different home countries and in the host country

 **1.04 Be able to respect one another's individuality and independence**

 **1.05 Be able to work with each other where appropriate**

# International Task 1

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## Learning Goals

1.01 Know that children within the class and school have different home countries

1.03 Know about some of the similarities and differences between the lives of children in the different home countries and in the host country



**1.04 Be able to respect one another's individuality and independence**



### Research activity

How are the young and the old looked after in the host and the home countries? Are they looked after in the same way or are there differences?

Ask the children to find out - from their parents - about child care, family life and care for the elderly in their home country.

Invite someone to talk to the class about child care, family life and care for the elderly in the host country.

Use prompt questions such as:

- Who looks after children when they are young?
- What vaccinations are given to children?
- What age are children when they start school?
- What sort of work do parents do?
- When do elderly people stop work?
- Who cares for the elderly members of the family?
- Where do our elderly people live?

If you have already connected with an IPC school for Geography Task 2, perhaps you can collaborate with them on this task also? Send them the questions you would like to ask about home life and care for the young and old in their country.



## Recording activity

Discuss the findings with the children:

- How are the countries alike?
- How are they different?
- What do all babies need?
- What do elderly people need?
- What is unique to each nationality and culture?

The children could record a video diary of their day-to-day lives at school and at home with their baby brothers and sisters and with their grandparents. These could be swapped and shared with partner IPC schools via email or through the IPC Members' Lounge. There will be differences – even within the same class.

## Personal Goals

- Adaptability
- Communication
- Cooperation
- Enquiry
- Respect
- Thoughtfulness

## International Extension Task

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### Learning Goals

1.01 Know that children within the class and school have different home countries

1.03 Know about some of the similarities and differences between the lives of children in the different home countries and in the host country

 **1.04 Be able to respect one another's individuality and independence**

 **1.05 Be able to work with each other where appropriate**



## Extension activity

Who looks after the world's people, plants and animals?

Is each country responsible for their own people, plants and animals? If one country decided to cut down all its forests could other countries interfere?

As the world becomes more globalised and industrialised, traditional ways of life are being lost.

You could research the following peoples:

- Kung San of southern Africa
- Ethnic groups of Papua Guinea
- Tuareg nomads of northern Africa
- Kayapo of the Brazilian rainforest

In groups, and with your help, the children should choose examples of people, plants and animals anywhere in the world that are in danger and should be saved or protected. They could prepare their findings as a mini oral presentation to the rest of the class, with accompanying pictures and books to support their message.

What can the children themselves do about it? Ask for their suggestions. Remind the children that even by saving tiny insects or small plants in their locality they could make a big difference in the world because of the way food chains work.

Through this activity, the children will become more aware of the wider world and their responsibilities as global citizens to protect all living things.

The children could explain their ideas and outcomes to the parents at the exit point. The following websites and books will be useful for research:

- [ngkids.co.uk/places](http://ngkids.co.uk/places) – National Geographic website has child-friendly information about different countries, people and animals.
- [iucn.org](http://iucn.org) – International Union for Conservation of Nature (IUCN) website details what, where and how they work to find solutions to the challenges threatening the environment. Useful for teacher reference.
- [wwf.org.uk](http://wwf.org.uk) – World Wide Fund for Nature website provides details of its work in more than 90 countries to conserve endangered species and habitats.
- [unep.org/wed](http://unep.org/wed) – United Nations Environment Programme website features information on World Environment Day and how different cities celebrate. Useful for teacher reference.
- *Eyewitness Endangered Animals*, by Ben Hoare and Tom Jackson, 2010
- *Peoples of the World* (internet-linked), by Usborne Publishing, Gillian Doherty and Anna Claybourne, 2011



## Personal Goals

- Adaptability
- Communication
- Cooperation
- Enquiry
- Morality
- Respect
- Thoughtfulness

## The Exit Point

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Create a 'Staying Alive' Exhibition to showcase everything the children have learned over the course of this unit. Invite other classes in the school and the children's parents to view and discuss your investigations.

Begin the exhibition with a 'hands-on' collection of objects (or realistic photographs) – some that are 'Alive', e.g. goldfish, insect, dog, baby, plant, sprouting potato, lima bean; and some that can be grouped under the heading 'Was Alive', e.g. pressed leaf, twig showing no signs of life, piece of fur fabric; and some that were 'Never Alive', e.g. doll, animal toy, pencil, etc. (Refer back to the knowledge harvest.) Ask the children from other classes and also challenge the parents to decide whether each one is 'Alive', 'Was Alive' or 'Never Alive'. The answers could be revealed beneath lift-up flaps next to the object. (The children should have written the answers themselves beforehand with a brief explanation.) Those who answered each one correctly could be given a prize – this could be a small packet of seeds or other item relevant to the topic.

Next, you could present the children's science findings in the form of a PowerPoint presentation or slideshow. Display the children's paintings from the art tasks and the class mural from Geography Task 1: Who Lives in a Place Like This?

Don't forget to decorate the hall with the children's miniature gardens. The children should talk about how they looked after the plants and show how much they have grown with graphs and photographs.

As a finale, the children could put on a performance to express how it feels to be alive with their 'I'm Alive' dance!

The IPC community would love to see examples of your learning, in any subject, at any stage of the learning process. If you have any pictures or stories you would like to share please visit our Facebook page at [facebook.com/InternationalPrimaryCurriculum](https://www.facebook.com/InternationalPrimaryCurriculum), tweet [@The\\_IPC](https://twitter.com/The_IPC) or email [stories@greatlearning.com](mailto:stories@greatlearning.com).

## Resources

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For this unit, you will need some, but not necessarily all, of the following:



### Equipment

- For terrariums: plastic or glass jar, stones, potting compost, decorative ornaments, small indoor plants, watering can
- For field work: notebooks, rulers, hand magnifiers, transparent containers
- Cardboard
- Tape measure
- Old magazines
- Painting materials, including paints, oil-pastels, chalks, crayons, etc.
- Objects for still-life paintings, e.g. stone, plant, vase of flowers, book, drape, etc.
- Digital camera
- Video recorder or video cam
- Recordings of any of the following: Herb Alpert's '*Spanish Flea*', '*To a Hummingbird*' by Edward MacDowell, '*The Carnival of the Animals*' by Camille Saint-Saëns or '*Flight of the Bumblebee*' by Nikolai Rimsky-Korsakov

Software:

- Word Cloud software ([wordle.net/create](http://wordle.net/create))
- Draw and Paint software
- Presentation software, e.g. Microsoft PowerPoint



### Links

<http://www.arkive.org>

Arkive website has collections of photographs and videos of endangered species.

[http://www.bbc.co.uk/schools/scienceclips/ages/5\\_6/science\\_5\\_6.shtml](http://www.bbc.co.uk/schools/scienceclips/ages/5_6/science_5_6.shtml)

BBC Schools Science has an interactive game for children aged 5-6 called Growing Plants.

[http://www.bbc.co.uk/schools/scienceclips/ages/6\\_7/science\\_6\\_7.shtml](http://www.bbc.co.uk/schools/scienceclips/ages/6_7/science_6_7.shtml)

BBC Schools Science has an interactive game for children aged 6-7 called Plants and Animals in the Local Environment.

**<http://www.classicsforkids.com/music>**

Classics for Kids website features a recording of 'Flight of the Bumblebee' by Rimsky-Korsakov.

**<http://www.fluxtime.com>**

FluxTime Studio website allows you make a free download.

**<http://www.iucn.org>**

International Union for Conservation of Nature (IUCN) website details what, where and how they work to find solutions to the challenges threatening the environment. Useful for teacher reference.

**[http://kidshealth.org/kid/stay\\_healthy/](http://kidshealth.org/kid/stay_healthy/)**

KidsHealth website has many features, written for children, about how we can keep fit and eat well.

**[http://kidshealth.org/parent/growth/growing/childs\\_growth.html](http://kidshealth.org/parent/growth/growing/childs_growth.html)**

KidsHealth website has useful information about children's growth patterns.

**<http://www.kidzone.ws/animals>**

KidsZone website has animal facts, photographs and resources.

**<http://www.kudlian.net/products/icananimate>**

Kudlian website features I Can Animate software.

**<http://animals.nationalgeographic.com/animals/fish/anglerfish/?source=A-to-Z>**

National Geographic website has a photograph and facts about the anglerfish.

**<http://animals.nationalgeographic.com/animals/bugs/scorpion/?source=A-to-Z>**

National Geographic website has a photograph and facts about the scorpion.

**<http://ngkids.co.uk/places>**

National Geographic website has child-friendly information about different countries, people and animals.

**<http://animals.nationalgeographic.co.uk/animals/?source=NavAniHome>**

National Geographic website has features and videos about animals.

**<http://www.oum.ox.ac.uk/thezone/animals/life/index.htm>**

Oxford University Museum of Natural History website has useful information on life processes.

**<http://reekoscience.com/science-experiments/miscellaneous/how-to-create-terrarium-vivarium-self-sustainable-bottle-garden>**

Reeko's Science website explains how to make a bottle garden.

**<http://www.bbc.co.uk/wildlifefinder>**

The BBC Nature website has information and videos on the world's most amazing animals.

**<http://www.bbc.co.uk/nature/collections>**

The BBC website has a collection of video clips from its natural history archive.

**<http://www.toonboom.com/products>**

Toon Boom Animation website has a software called Animation-ish.

**<http://www.unep.org/wed>**

United Nations Environment Programme website features information on World Environment Day and how different cities celebrate. Useful for teacher reference.

<http://www.wwf.org.uk>

World Wide Fund for Nature website provides details of its work in more than 90 countries to conserve endangered species and habitats.

[http://www.youtube.com/watch?v=UQ\\_QqtXoyQw](http://www.youtube.com/watch?v=UQ_QqtXoyQw)

YouTube has a time-lapse video of a dandelion flower turning into a dandelion clock.

[http://www.youtube.com/watch?v=A91Fwf\\_sMhk&feature=related](http://www.youtube.com/watch?v=A91Fwf_sMhk&feature=related)

YouTube has this time-lapse video of a baby boy ageing 85 years in 40 seconds.

[http://www.youtube.com/watch?v=lmIFXIXQQ\\_E&feature=related](http://www.youtube.com/watch?v=lmIFXIXQQ_E&feature=related)

YouTube has this time-lapse video of birch trees growing, shedding their leaves then resting during the different seasons in one year.

<http://www.youtube.com/watch?v=7AUeM8Mbalk>

YouTube has this time-lapse video showing the complete life cycle of the Monarch butterfly.

<http://www.youtube.com/watch?v=G2RuVxdr0mA>

YouTube has this time-lapse video showing the germination of a climbing bean.



## Books

A variety of books about nature, including:

*The Life of Plants*, by Claire Llewellyn, Franklin Watts, 2006

*Eyewitness Tree*, by David Burnie, Dorling Kindersley, 2004

*Eyewitness Plant*, by David Burnie, Dorling Kindersley, 2003

*Eyewitness Endangered Animals*, by Ben Hoare and Tom Jackson, 2010

*Deserts, Planet Earth Series*, by Steve Parker, QED Publishing, 2008

*Essential Habitats series*, by Barbara Taylor et al, Ticktock Ltd, 2009

*Revealed Rainforest*, by Jen Green, Dorling Kindersley, 2004

*How Animals Work*, by David Burnie, Dorling Kindersley, 2010

*Peoples of the World (Internet-linked)*, by Usborne Publishing, Gillian Doherty and Anna Claybourne, 2011



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