

2018 national curriculum assessments

# Key stage 1

## Teacher assessment exemplification

### Science



Standards  
& Testing  
Agency

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# Guidance

## Teacher assessment judgements

- Teachers should assess their pupils according to their school's assessment policy, and use the statutory [teacher assessment framework](#)<sup>1</sup> to make a judgement at the end of the key stage. This judgement should be based on day-to-day evidence from the classroom, which shows that a pupil has met the 'pupil can' statements in the framework. Teachers should not produce evidence specifically for the purpose of local authority moderation. However, a sample of evidence from the pupil's classroom work must support how teachers have reached their judgements.
- Local authorities may find it useful to refer to the exemplification materials to support external moderation visits. The materials show what meeting the 'pupil can' statements might look like for each standard. However, moderators should not expect or require teachers to provide specific evidence similar to the examples in this document.
- When making a statutory end-of-key stage judgement against the teacher assessment frameworks, year 2 teachers should have evidence from the classroom that pupils have grasped all the 'working scientifically' statements and all the 'science content' taught in the final year of the key stage. A single example of a pupil's work may also provide evidence for multiple statements.
- Teachers should base their teacher assessment judgement on a broader range of evidence than that shown in this document. Evidence will come from day-to-day work in the classroom and may include work from different curriculum subjects, although a pupil's work in science alone is likely to produce the range and depth of evidence required. Teachers can also use pupils' answers to test questions as evidence to support their judgements.
- Teachers should consider a range of evidence from the classroom on which to base their teacher assessment judgements. This may include:
  - pupils' recordings of, and responses to, their practical science work
  - teachers' records or notes about a pupil's practical science work
  - answers to questions in science quizzes
  - summative tasks used by schools

## Using exemplification materials

- Exemplification materials provide examples of pupils' work to support teachers in making judgements against the statutory teacher assessment frameworks at the end of the key stage. If teachers are confident in their judgements, they do not need to refer to this document.
- Exemplification materials illustrate only how 'pupil can' statements in the frameworks might be met. They do not dictate a particular method of teaching or the evidence expected from the classroom, which will vary from school to school.
- This document contains examples of science work taken from a sample of year 1 and year 2 pupils. It shows teachers how they might judge whether a pupil has met the expected standard within key stage 1 (KS1) science.
- When considering science content that has been taught before the final year of the key stage, year 2 teachers will draw on assessment judgements that have been made earlier in the key stage. There is no requirement to produce specific evidence for these statements. The 'pupil can' statements relating to science content indicate where the topic appears in the national curriculum.
- Where specific sections of a statement are exemplified, these are highlighted in bold.

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<sup>1</sup> [www.gov.uk/government/publications/teacher-assessment-frameworks-at-the-end-of-key-stage-1](http://www.gov.uk/government/publications/teacher-assessment-frameworks-at-the-end-of-key-stage-1)

# Key stage 1 science teacher assessment framework

Teachers should follow the guidance for using this science framework set out in the complete [teacher assessment frameworks](#).

## Working at the expected standard

### Working scientifically

The pupil can, using appropriate scientific language from the national curriculum:

- ask their own questions about what they notice
- use different types of scientific enquiry to gather and record data, using simple equipment where appropriate, to answer questions:
  - observing changes over time
  - noticing patterns
  - grouping and classifying things
  - carrying out simple comparative tests
  - finding things out using secondary sources of information
- communicate their ideas, what they do and what they find out in a variety of ways

### Science content

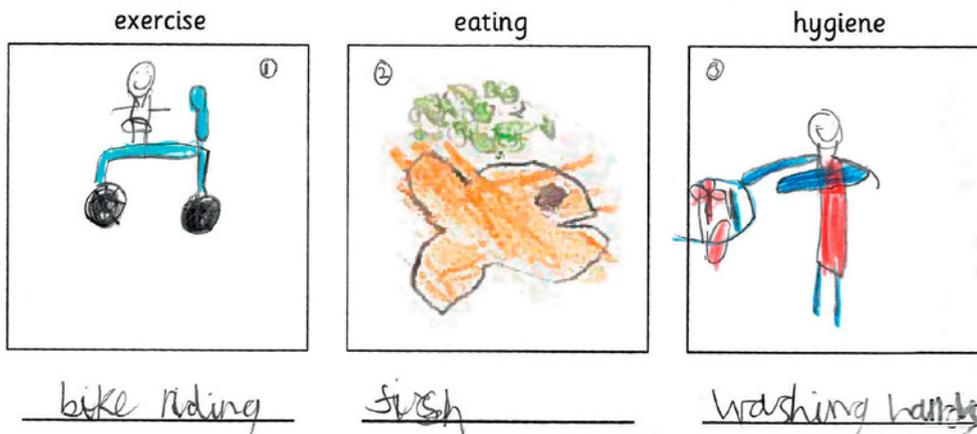
The pupil can:

- name and locate parts of the human body, including those related to the senses (year 1), and describe the importance of exercise, a balanced diet and hygiene for humans (year 2)
- describe the basic needs of animals for survival and the main changes as young animals, including humans, grow into adults (year 2)
- describe the basic needs of plants for survival and the impact of changing these and the main changes as seeds and bulbs grow into mature plants (year 2)
- identify whether things are alive, dead or have never lived (year 2)
- describe and compare the observable features of animals from a range of groups (year 1)
- group animals according to what they eat (year 1), describe how animals get their food from other animals and/or from plants, and use simple food chains to describe these relationships (year 2)
- describe seasonal changes (year 1)
- name different plants and animals and describe how they are suited to different habitats (year 2)
- distinguish objects from materials, describe their properties, identify and group everyday materials (year 1) and compare their suitability for different uses (year 2)

# Exemplification: working at the expected standard

<b>Title</b>	<b>Exercise, diet and hygiene</b>
<b>Science content statement(s)</b>	The pupil can name and locate parts of the human body, including those related to the senses (year 1) and <b>describe the importance of exercise, a balanced diet and hygiene for humans</b> (year 2).
<b>Working scientifically statement(s) (if applicable)</b>	The pupil can, using appropriate scientific language from the national curriculum: <ul style="list-style-type: none"> <li>ask their own questions about what they notice</li> <li>communicate their ideas, what they do and what they find out in a variety of ways</li> </ul>
<b>Context</b>	Following practical work about a healthy lifestyle in personal, social, health and economic (PSHE) education, the pupils watched a short video clip showing children exercising, eating and washing. They then discussed the video in pairs, after which the teacher asked questions and the class discussed the answers. Pupils were asked to independently complete the task below.
<b>Comment</b>	The pupil recognised that fish is part of a balanced diet, and explained that it is good for your brain and body. In discussion about how healthy the meal was, the pupil talked about the peas they had drawn as being part of the diet, and also mentioned fruit, as well as fish. In conversation, the pupil used the term 'germs' to explain why hand washing was important for good health.

**Draw some pictures that would help someone live a healthy lifestyle.**



Describe the importance of exercise, eating the right foods and hygiene for humans:

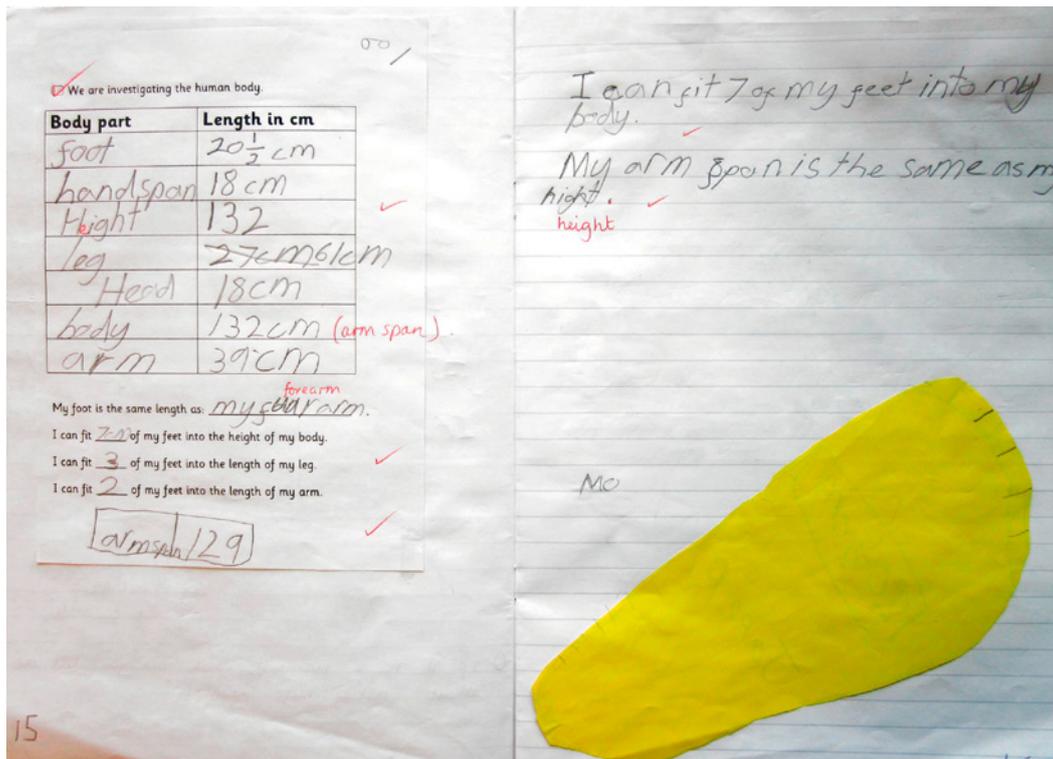
1. bike riding make your leg muscles strong and bigger.
2. fish helps your brain to help your body.
3. when you wash your hands the germs go away.

1. bike riding make your leg muscles strong and bigger

2. fish helps your brain to help your body

3. when you wash your hands the germs go away

Title	Measuring the body
<b>Science content statement(s)</b>	The pupil can: <ul style="list-style-type: none"> <li>describe the basic needs of animals for survival and <b>the main changes as young animals, including humans, grow into adults</b> (year 2)</li> <li><b>name and locate parts of the human body</b>, including those related to the senses (year 1) and describe the importance of exercise, a balanced diet and hygiene for humans (year 2)</li> </ul>
<b>Working scientifically statement(s) (if applicable)</b>	The pupil can, using appropriate scientific language from the national curriculum: <ul style="list-style-type: none"> <li>ask their own questions about what they notice</li> <li>use different types of scientific enquiry to gather and record data, using simple equipment where appropriate, to answer questions:               <ul style="list-style-type: none"> <li>noticing patterns</li> </ul> </li> </ul>
<b>Context</b>	<p>In previous lessons, pupils had named and located various parts of their bodies.</p> <p>In this lesson, the teacher drew around one pupil on paper and asked the class to demonstrate how they could measure parts of the body accurately. They then measured parts of their body using a ruler and were asked to write about any patterns they noticed. They were able to choose which parts they measured, to help clarify the naming and locating of parts of the body.</p> <p>Following the activity, pupils asked questions about patterns in growth, for example, "Will my arm span still be the same as my height when I am an adult?"</p>
<b>Comment</b>	<p>The pupil made appropriate observations and used simple equipment, naming and locating the parts of the body in order to be able to look for differences and similarities in their sizes.</p> <p>Given that the measurements generated come from real life data, the teacher allowed leeway in the comparisons that the pupil made.</p>

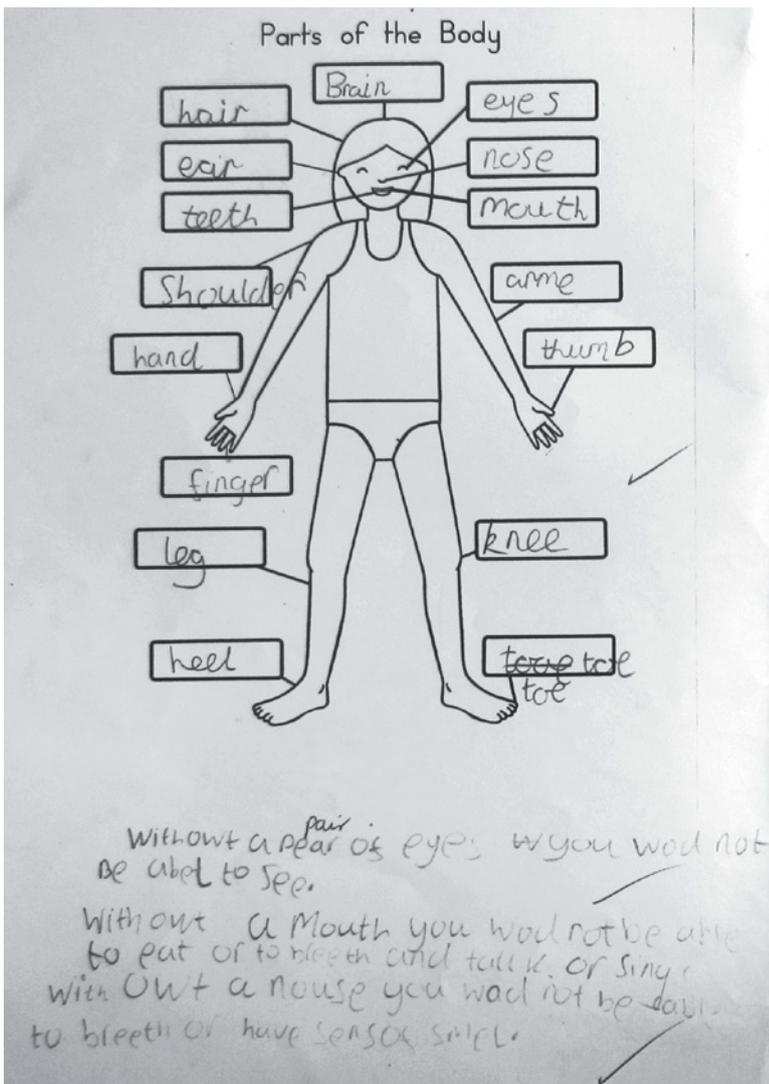


Title	Senses
<b>Science content statement(s)</b>	<b>The pupil can name and locate parts of the human body, including those related to the senses</b> (year 1), and describe the importance of exercise, a balanced diet and hygiene for humans (year 2).
<b>Working scientifically statement(s) (if applicable)</b>	The pupil can, using appropriate scientific language from the national curriculum, communicate their ideas, what they do and what they find out in a variety of ways.
<b>Context</b>	In previous lessons, pupils had learnt about the parts of the human body, how to name and locate them, and about their different functions.  In this lesson, pupils were set a task of making a fruit salad. Afterwards, they shared ideas with the class about how the fruit looked, smelled, tasted and felt. The teacher listened to what pupils were saying as they made the fruit salad and noted their observations.
<b>Comment</b>	The pupil named the parts of the body relating to some of the senses and explained how she was able to feel, taste and smell the fruit, using appropriate language. This was shown by the teacher's notes documenting the pupil's ideas.



"It was tasty! I used my nose to smell it. I touched the banana. We tasted it in our mouths and my tongue. I liked it."

<b>Title</b>	<b>Parts of the body</b>
<b>Science content statement(s)</b>	<b>The pupil can name and locate parts of the human body, including those related to the senses</b> (year 1), and describe the importance of exercise, a balanced diet and hygiene for humans (year 2).
<b>Working scientifically statement(s) (if applicable)</b>	The pupil can, using appropriate scientific language from the national curriculum, communicate their ideas, what they do and what they find out in a variety of ways.
<b>Context</b>	In this lesson, the teacher wanted to find out what pupils remembered from year 1 before starting on year 2 objectives. Pupils were first asked to work in groups to list as many body parts as they could on an outline of the human body. They were then asked to work independently to label parts of the body on a diagram, and then to choose 3 body parts and explain their use. Lastly, they were prompted to justify which body part they thought was the most important and why.
<b>Comment</b>	The pupil identified the main parts of the body as well as the function of a range of different parts (brain/eyes/teeth), explained what would happen without this body part (eye/mouth/nose), and justified which they thought was most important (brain/eyes/mouth/nose). They used appropriate language throughout.



Without a pair of eyes you would not be able to see.

Without a mouth you would not be able to eat or to breathe and talk or sing.

Without a nose you would not be able to breathe or have a sense of smell.

Continued overleaf

✓ We are learning to name body parts.

Brain  
The Brain does all the thinking and if someone calls you Brany it's beacos its your Brain.

### eyes

Eyes ~~make~~ make you see and finde sum helpful things and the thig that maces you see proply it is theeeee pyuple <sup>pupile</sup> it is a littel blak dot in the midel of your eye.

### Teeth

Your teeth mace you eat stuf and talk and sing.

Some good scientific vocabulary

Q. Which body part do you think is the most important?

- Are brain and eyes also are mouth and noses because if we did not have a brain we could not think

if we did not have eyes we could not see.

#### **Brain**

The Brain does all the thinking and if someone calls you Brany it's beacos its your Brain.

#### **eyes**

Eyes make you see and finde sum helpful things and the thig that maces you see proply it is theeeee pyuple (pupile) it is a little blak dot in the midel of your eye.

#### **Teeth**

Your teeth mace you eat stuf and talk and sing.

Q. Which body part do you think is the most important?

A. Are brain and eyes also are mouth and noses because if we did not have a brain we could not think if we did not have eyes we could not see.

<b>Title</b>	<b>Animal survival needs</b>
<b>Science content statement(s)</b>	<b>The pupil can describe the basic needs of animals for survival</b> and the main changes as young animals, including humans, grow into adults (year 2).
<b>Working scientifically statement(s) (if applicable)</b>	The pupil can, using appropriate scientific language from the national curriculum, communicate their ideas, what they do and what they find out in a variety of ways.
<b>Context</b>	<p>In previous lessons, pupils carried out their own research about some of the animals they observed on the school field. They had also been taught about animals needing food, water, shelter and air to breathe, in order to survive.</p> <p>In this activity, pupils were asked to choose their favourite animal and were put into groups based upon their choice. They were then asked to create a home for the animal that would provide for all of its survival needs. A photograph was taken of the home, which was annotated during an ICT lesson.</p> <p>The pupil was later asked by the teacher to clarify the annotation “Moist leaves to slurp away the water”, and they replied that it is the ladybird that is drinking the water.</p>
<b>Comment</b>	The pupil demonstrated an understanding of the basic needs of animals for survival, using appropriate scientific language and a model.

# My Ladybird home

**Food**  
Nice fresh leaves for aphids to live on.

**Water**  
Moist leaves to slurp away the water.



**Shelter**  
To protect you from your predators and shelter from the weather.

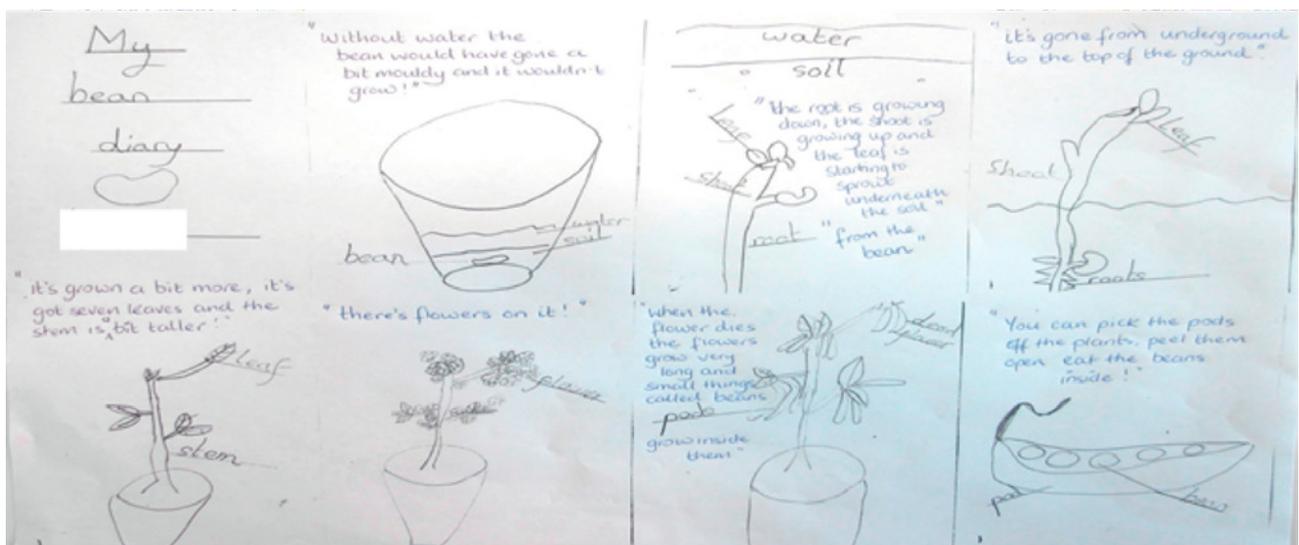
**Special feature**  
Good doorway to walk through and for lots of air to get in so you can breathe.

<b>Title</b>	<b>Bean diary</b>
<b>Science content statement(s)</b>	The pupil can describe the basic needs of plants for survival and the impact of changing these and <b>the main changes as seeds and bulbs grow into mature plants</b> (year 2).
<b>Working scientifically statement(s) (if applicable)</b>	The pupil can, using appropriate scientific language from the national curriculum, use different types of scientific enquiry to gather and record data, using simple equipment where appropriate, to answer questions, observing changes over time.
<b>Context</b>	In previous lessons, pupils had been growing beans and observing the changes that occur as they grow over a number of weeks.  In this activity, the pupil was asked to show the stages of growth using pictures. The teacher spoke to them about it and wrote down on their work some of the comments they made.
<b>Comment</b>	The pupil observed and described the main changes as the beans grew into mature plants over an extended period of time.

"Without water the bean would have gone a bit mouldy and it wouldn't grow!"

"the root is growing down, the shoot is growing up and the leaf is starting to sprout underneath the soil"  
"from the bean"

"it's gone from underground to the top of the ground"



"it's grown a bit more, it's got seven leaves and the stem is a bit taller!"

"there's flowers on it!"

"When the flower dies the flowers grow very long and small things called beans grow inside them"

"You can pick the pods off the plants, peel them open eat the beans inside!"

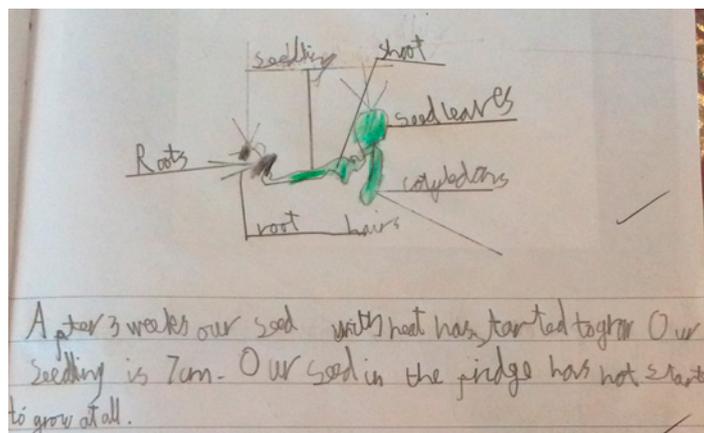
<b>Title</b>	<b>What do plants need to grow?</b>
<b>Science content statement(s)</b>	<b>The pupil can describe the basic needs of plants for survival and the impact of changing these</b> and the main changes as seeds and bulbs grow into mature plants (year 2).
<b>Working scientifically statement(s) (if applicable)</b>	The pupil can, using appropriate scientific language from the national curriculum: <ul style="list-style-type: none"> <li>• use different types of scientific enquiry to gather and record data, using simple equipment where appropriate, to answer questions: <ul style="list-style-type: none"> <li>○ observing changes over time</li> <li>○ carrying out simple comparative tests</li> </ul> </li> <li>• communicate their ideas, what they do and what they find out in a variety of ways</li> </ul>
<b>Context</b>	Across a series of lessons, pupils carried out comparative tests to investigate what would happen when they planted seeds with or without light and in a warm or cold place. Initial assessment had already shown that the pupils know plants need water to grow.  The pupil observed the plants grown in the dark and commented that they grew faster but did not look as healthy as the ones grown in the light. He recorded his observations of the plants grown at different temperatures in words and pictures. He used the word cotyledon because he had remembered it from a class text. This is not an expectation at KS1. He then summarised his learning from the two enquiries.
<b>Comment</b>	The work demonstrated that the pupil knows the basic needs of plants, including good soil, which is not a requirement at KS1.

seedling

Roots

After 3 weeks our seed with heat has started to grow. Our seedling is 7cm. Our seed in the fridge has not started to grow at all.

Now that I have observed our seeds, I think that a plant needs these to grow well: light, heat, water, good soil, care.

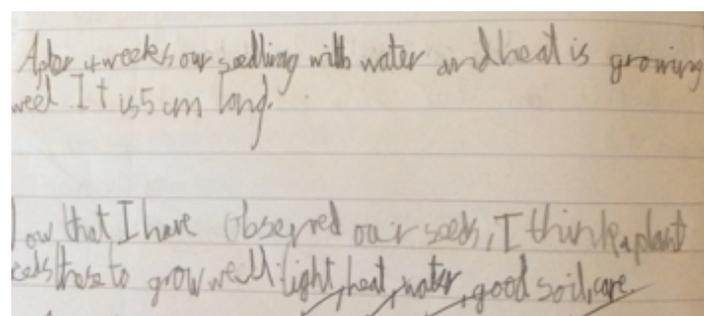


shoot

seed leaves

cotyledons

root hairs



After 4 weeks our seedling with water and heat is growing well. It is 5cm long.

<b>Title</b>	<b>Classifying frogs as living and never lived</b>
<b>Science content statement(s)</b>	The pupil can: <ul style="list-style-type: none"> <li>● <b>describe the basic needs of animals for survival</b> and the main changes as young animals, including humans, grow into adults (year 2)</li> <li>● <b>identify whether things are alive, dead or have never lived (year 2)</b></li> </ul>
<b>Working scientifically statement(s) (if applicable)</b>	The pupil can, using appropriate scientific language from the national curriculum, communicate their ideas, what they do and what they find out in a variety of ways.
<b>Context</b>	In previous lessons, pupils had made a 3D model of an island and populated it with models of animals in different habitats. This pupil had chosen to make a clay frog.
<b>Comment</b>	The pupil demonstrated an understanding of the differences between the clay and real animals, both in terms of the basic needs for survival of the real animal and some of the life processes common to all living things. Pupils do not need to be taught the life processes to evidence this statement. She used some appropriate scientific language to do this and some vocabulary that went beyond the expectations of the KS1 programme of study.



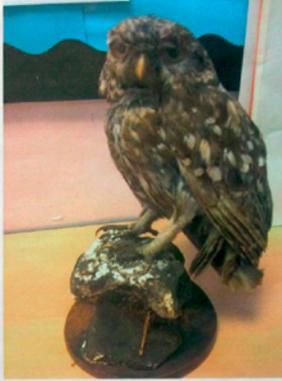
My clay animal is made out of a **natural** material called clay. A real frog would be made of **bones** and **flesh** and **muscles** and **green skin**. My clay animal needs care but my real animal would need **glue**, **water**, a **shelter** under **logs** and **beige** all around it and it would need to **excrete** from its bottom. My clay animal can't communicate, eat, think, touch, its heart can't pump blood around the body, drink, excrete, taste, breathe, see, move, smell and hear. A real frog would be able to communicate, think, touch, pump blood, drink, excrete, taste, breathe, see, move, smell and hear.

<b>Title</b>	<b>Classifying owls as alive, once alive, never lived</b>
<b>Science content statement(s)</b>	<b>The pupil can identify whether things are alive, dead or have never lived (year 2).</b>
<b>Working scientifically statement(s) (if applicable)</b>	N/A
<b>Context</b>	<p>In previous activities, the pupils had been learning about animals, focusing on night-time animals in particular. A local bird of prey display team came into school to enable the pupils to gain first-hand experience of real owls. Pupils were encouraged to bring owl-related objects (for example, toys) in from home to compare to the real owls. One pupil brought in a stuffed owl and another pupil brought in a wooden sculpted owl.</p> <p>In this activity, pupils were asked to see if they could spot the similarities and differences between the various owls, using their knowledge of the features of living animals to explain how they know which owl is alive, which once lived and which has never lived.</p>
<b>Comment</b>	The pupil noticed similarities and differences between the owls and explained how they know which owl is alive, which one lived and which has never lived.

**Living, Once Lived and Never Lived**



I no this Owl's is not alive because it is stud still and it is made out of wood.



This stuffed owl has wons bin a live but now its stuffed but it cuts a live ones because it has a sharp beak, strong talons and the fethers are very soft. I no it isn't a live because it can't move, poo, eat, hear, bring pelis (pellets) up are have eggs.



Owl has to fly, hop, blink and move its head that is how they move. Owl's have to youse there tallons, eyes and ears to catch there prey like mice, vols and rats. Owl's have to bring pelis (pellets) from there big beak and they have to lay small eggs.

I no this owl's is not alive because it is stud still and it is made out of wood.

This stuffed owl has wons bin a live but now its stuffed but it was a live wons because it has a sharp beak, strong talons and the fethers are very soft. I no it isn't a live because it can't move, poo, eat, hear, bring pelis (pellets) up are have eggs.

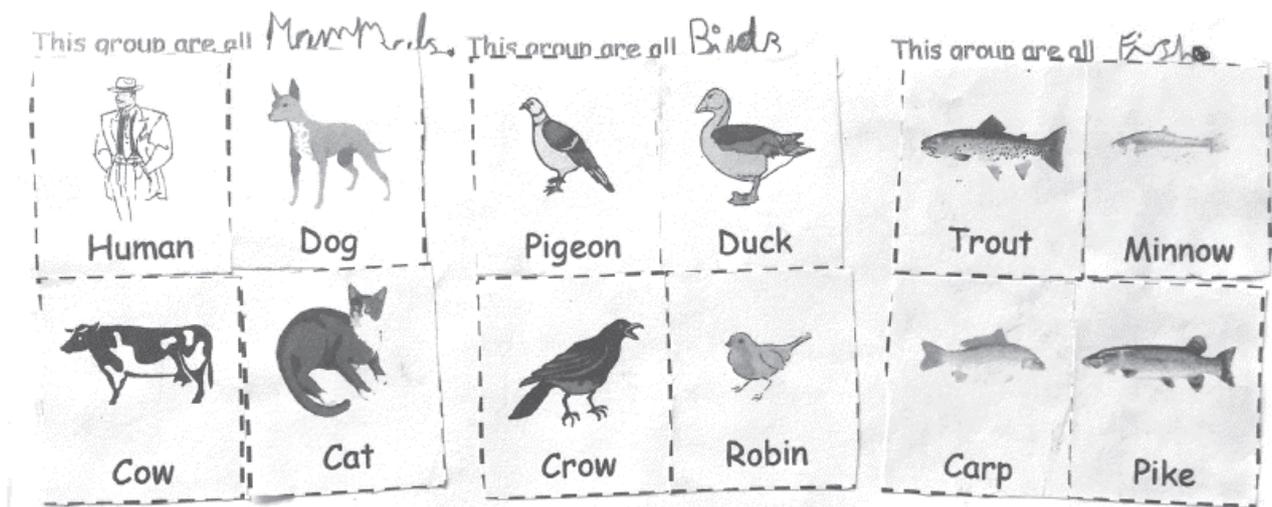
Owl has to fly, hop, blink and move its head that is how they move. Owl's have to youse there tallons, eyes and ears to catch there prey like mice, vols and rats. Owl's have to bring pelis (pellets) from there big beak and they have to lay small eggs.

<b>Title</b>	<b>Classifying objects as alive, once alive, never lived</b>
<b>Science content statement(s)</b>	<b>The pupil can identify whether things are alive, dead or have never lived (year 2).</b>
<b>Working scientifically statement(s) (if applicable)</b>	The pupil can, using appropriate scientific language from the national curriculum, use different types of scientific enquiry to gather and record data, using simple equipment where appropriate, to answer questions, grouping and classifying things.
<b>Context</b>	<p>In previous activities, the class had a treasure hunt to find a variety of objects, for example, something made of metal, a seed and something from an animal. They were then asked to group them and share the criteria (such as found outside/inside) before being asked to sort objects according to if they were living/once alive/had never been alive.</p> <p>In this activity, pupils were given a new set of pictures and a sorting diagram. They were asked to sort the pictures into groups based on whether they thought that they were living/once alive/had never been alive, and give a reason for their decision. Adults in the class spoke to the pupils and noted down what they said on sticky notes, looking especially for justification of their decisions. Additional objects were also included (for example, a Barbie doll).</p>
<b>Comment</b>	The pupil grouped items by identifying whether things are alive, once alive or have never lived, providing some justification.

Living, Once alive or Has never been alive?

Living	Once alive	Has never been alive
	<p>- apple - I think it has been once alive because I think it came from a tree and was once growing</p>	<p>- shoe - I don't think it can grow or eat or drink anything</p>

<b>Title</b>	<b>Mammals, birds, fish</b>
<b>Science content statement(s)</b>	<b>The pupil can describe and compare the observable features of animals from a range of groups (year 1).</b>
<b>Working scientifically statement(s) (if applicable)</b>	<ul style="list-style-type: none"> <li>use different types of scientific enquiry to gather and record data, using simple equipment where appropriate, to answer questions, grouping and classifying things.</li> </ul>
<b>Context</b>	<p>In previous lessons, pupils had been taught about the basic features of different mammals, fish and birds.</p> <p>In this lesson, they were asked to group a variety of common animals and write a sentence to justify each of their classifications.</p>
<b>Comment</b>	The pupil compared the simple, observable features of the animals provided in order to group them, and described the way that they did this.



This is what is similar about them: they all give milk to their babies. They all have ears.

This is what is similar about them: they all have a pair of wings. They all have a beak.

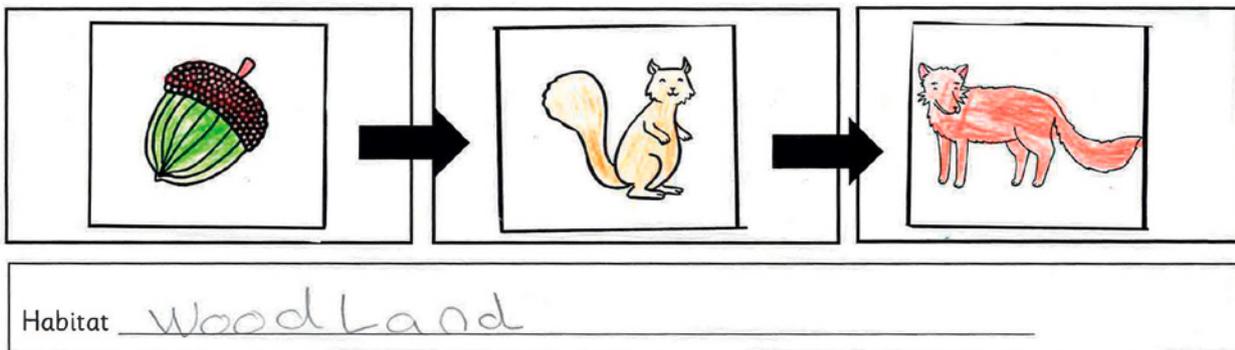
This is what is similar about them: they all have fins. They live in water.

**Mammals**  
 they all give milk to their babies.  
 They all have ears.

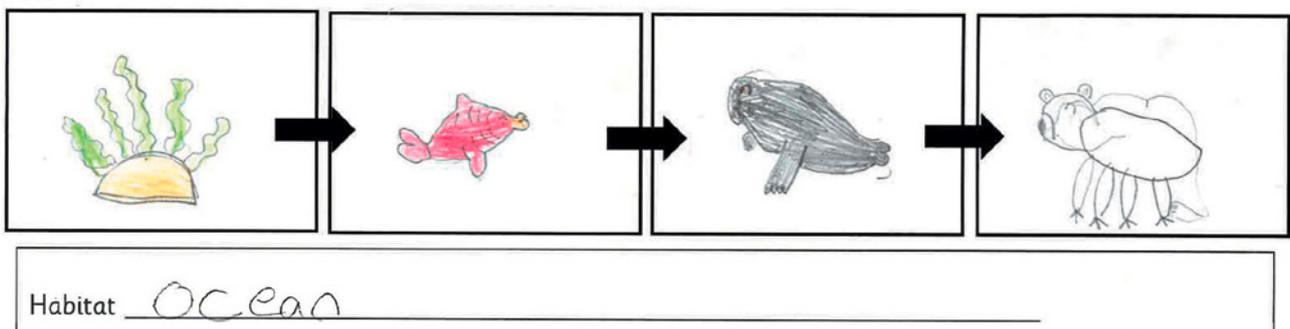
**Birds**  
 they all have a pair of wings.  
 They all have a beak.

**Fish**  
 they have fins.  
 They live in water.

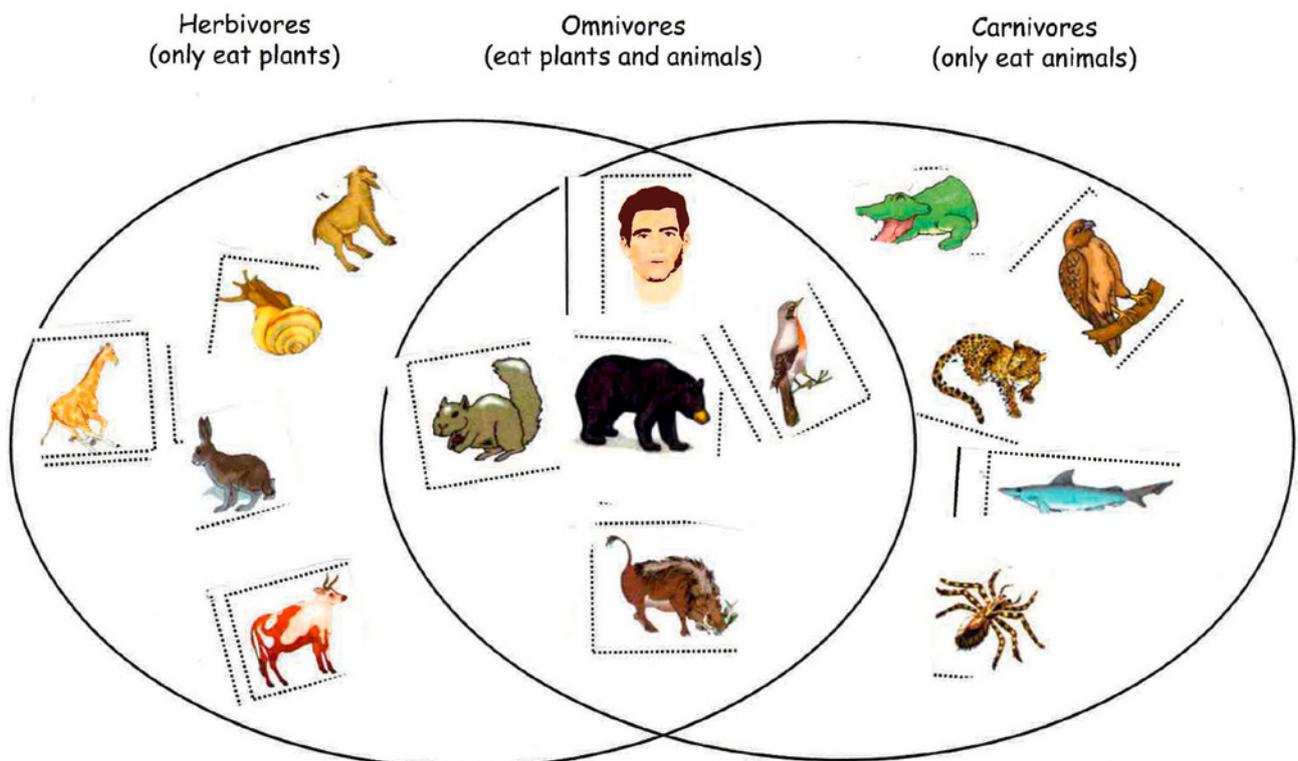
<b>Title</b>	<b>Food chains (woodland and ocean)</b>
<b>Science content statement(s)</b>	The pupil can group animals according to what they eat (year 1), describe how animals get their food from other animals and/or from plants, <b>and use simple food chains to describe these relationships</b> (year 2).
<b>Working scientifically statement(s) (if applicable)</b>	N/A
<b>Context</b>	In previous lessons, pupils had visited a wildlife centre and observed woodland animals in their habitat. They had been asked to use secondary sources of information to find out about an animal of their own choice, and to share their findings about its habitat, diet and features. They had grouped animals according to their diet and been introduced to the terms herbivore, carnivore and omnivore.  In this lesson, pupils were first asked to select pictures of plants and animals to create a woodland food chain, using the template provided. They were then asked to draw plants and animals in a food chain for a different habitat.
<b>Comment</b>	The pupil selected appropriate pictures to stick in the correct order for a woodland food chain. They then decided which plants and animals to draw in a food chain for a different habitat. The pupil illustrated that food chains begin with a plant and correctly identified subsequent feeding relationships in both habitats.



 I worked independently to write a Food Chain.



<b>Title</b>	<b>Grouping animals according to what they eat – Venn diagram</b>
<b>Science content statement(s)</b>	<b>The pupil can group animals according to what they eat</b> (year 1), describe how animals get their food from other animals and/or from plants, and use simple food chains to describe these relationships (year 2).
<b>Working scientifically statement(s) (if applicable)</b>	The pupil can, using appropriate scientific language from the national curriculum: to use different types of scientific enquiry to gather and record data, using simple equipment where appropriate, to answer questions, grouping and classifying things.
<b>Context</b>	In previous lessons, pupils had visited a wildlife centre and observed woodland animals in their habitat. They had been asked to use secondary sources of information to find out about an animal of their own choice and to share their findings about its habitat, diet and features.  In this lesson, pupils were given pictures of familiar animals to sort into groups according to their diet, using a Venn diagram.
<b>Comment</b>	The pupil correctly sorted the animals into groups, according to what they eat. When questioned, the pupil explained what each of the terms means and justified the classification of the squirrel as an omnivore, explaining that, whilst mostly herbivore, it will eat insects and small rodents if hungry. It is not required that pupils use the terms herbivore, omnivore and carnivore, but they need to understand that animals have different diets.



<b>Title</b>	<b>Seasonal change</b>
<b>Science content statement(s)</b>	<b>The pupil can describe seasonal changes</b> (year 1).
<b>Working scientifically statement(s) (if applicable)</b>	The pupil can, using appropriate scientific language from the national curriculum, use different types of scientific enquiry to gather and record data, using simple equipment where appropriate, to answer questions: <ul style="list-style-type: none"> <li>● observing changes over time</li> <li>● grouping and classifying things</li> </ul>
<b>Context</b>	This activity was carried out at the end of the summer term after pupils had taken part in several walks to explore their local environment at different times of the year. They were given a set of images and asked to sort them into the 4 seasons. They then added other features for each season, in addition to the names of the months that occur within each season. They were not told the names of the seasons.
<b>Comment</b>	The pupil identified the images of weather, plants and animals, including human activity, according to season. They also named the 4 seasons and the months in which each season occurs. The pupil added appropriate additional features for each season.

Spring  
frosty mornings  
March  
April  
May  
blossom grows  
frogs lay frog spawn  
animals have babies  
spring flowers



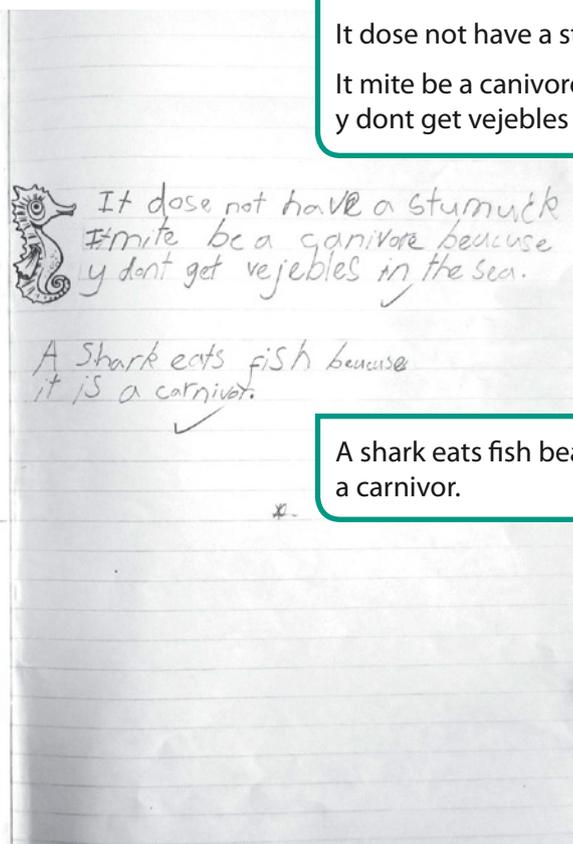
Summer  
butterflies visit the garden  
trees have leaves  
flowers grow  
June  
July  
August  
strawberries

Winter  
Snow  
bare trees  
animals hibernate  
December  
January  
February



Autum  
leaves change colour and drop off  
harvest  
September  
October  
November

<b>Title</b>	<b>Grouping animals according to what they eat</b>
<b>Science content statement(s)</b>	<b>The pupil can group animals according to what they eat</b> (year 1), describe how animals get their food from other animals and/or from plants, and use simple food chains to describe these relationships (year 2).
<b>Working scientifically statement(s) (if applicable)</b>	The pupil can, using appropriate scientific language from the national curriculum: <ul style="list-style-type: none"> <li>• use different types of scientific enquiry to gather and record data, using simple equipment where appropriate, to answer questions: <ul style="list-style-type: none"> <li>○ grouping and classifying things</li> </ul> </li> <li>• communicate their ideas, what they do and what they find out in a variety of ways</li> </ul>
<b>Context</b>	In previous lessons, pupils had classified familiar animals into groups, based on their features, and observed living snails and their diet in a snailarium in the classroom.  In this lesson, pupils watched a video clip showing 3 animals at a zoo and described the animals, diets. They were introduced to the terms herbivore, omnivore and carnivore, and carried out a sorting activity as a class on the whiteboard. Pupils were then given pictures of animals and asked to sort them using the same terms. They also had to write a sentence about one of the animals and justify their choice.
<b>Comment</b>	The pupil used the appropriate scientific language and applied it to familiar animals, grouping the pictures correctly according to what they eat, as well as adding some illustrations of their own to demonstrate understanding of the concept. The pupil also suggested that a seahorse might be a carnivore, based on an understanding of potential food sources and body structure.

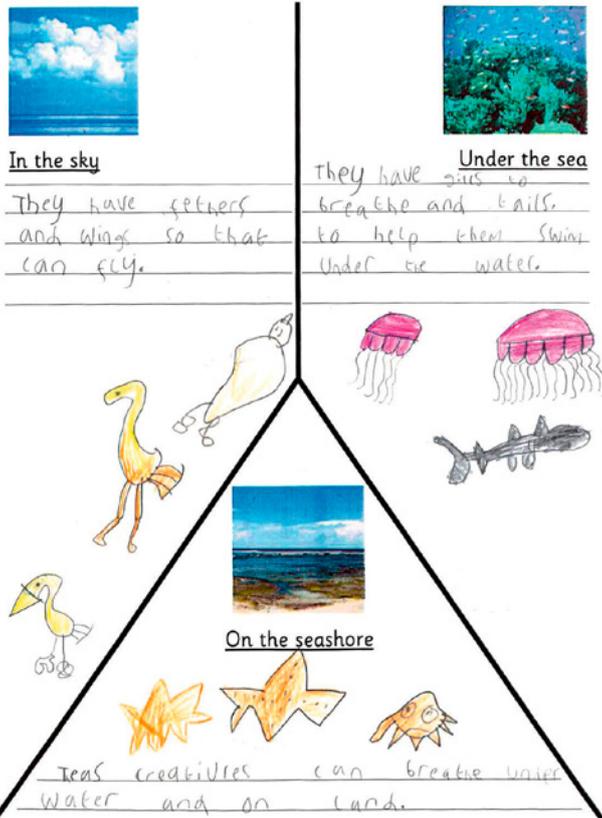


It dose not have a stumuck  
It mite be a canivore because  
y dont get vejebles in the sea.

A shark eats fish beacuse it is  
a carnivore.

<b>Title</b>	<b>Animals suited to habitats: seaside</b>
<b>Science content statement(s)</b>	The pupil can name different plants and animals <b>and describe how they are suited to different habitats</b> (year 2).
<b>Working scientifically statement(s) (if applicable)</b>	The pupil can, using appropriate scientific language from the national curriculum, use different types of scientific enquiry to gather and record data, using simple equipment where appropriate, to answer questions: <ul style="list-style-type: none"> <li>● grouping and classifying things</li> <li>● finding things out using secondary sources of information</li> </ul>
<b>Context</b>	In this lesson, the pupils were asked to think about the animals they had seen on a recent class visit to the seaside and sort them according to whether they would see them in the sky, underwater or on the seashore. They were then asked to write a short caption saying why these animals are suited to live in that specific habitat.  Further discussion about where the animals found their food took place following this activity.
<b>Comment</b>	The pupil had sorted, but not named, animals that they had found in each of the places and described, with reference to breathing and moving, why each was suited to its habitat. For example, they identified that some animals have gills and can therefore breathe underwater. They added other animals that they knew about from secondary sources.  In the subsequent discussion, the pupil described how and where the animal would find its food at the seaside.

### What creatures do we find at the seaside?

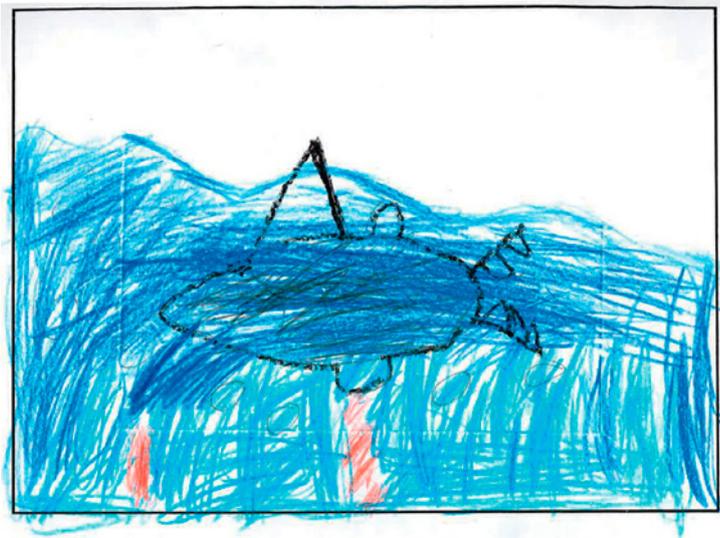


**In the sky**  
They have feathers and wings so that can fly.

**Under the sea**  
They have gills to breathe and tails to help them swim under the water.

**On the seashore**  
Teas creatures can breathe under water and on land.

<b>Title</b>	<b>Animals suited to habitat: sharks</b>
<b>Science content statement(s)</b>	The pupil can name different plants and animals and <b>describe how they are suited to different habitats</b> (year 2).
<b>Working scientifically statement(s) (if applicable)</b>	The pupil can, using appropriate scientific language from the national curriculum, use different types of scientific enquiry to gather and record data, using simple equipment where appropriate, to answer questions, finding things out using secondary sources of information.
<b>Context</b>	In previous lessons, the pupils had learned about the idea of a habitat, and had visited a wildlife centre to observe woodland animals in their habitat.  In this lesson, pupils used secondary sources of information (non-fiction texts and the internet) to find out about an animal of their own choice. They were asked to produce a short piece of text about their chosen animal (in this case a shark) and to give an example of why that animal is suited to its habitat.
<b>Comment</b>	The pupil gave a written description of how the shark is suited to its ocean habitat in terms of breathing and movement. The pupil explains that a shark cannot survive out of the water because it would not be able to breathe. When questioned by the teacher, the pupil also described how the shark eats small fish that live in the ocean.



sharks live in the ocean.  
 They are suited to their  
 habitat because they have  
 fins to help them steer and balance  
 in the water. They have got  
 gills to breathe under water  
 but they can't breathe out of water

Sharks live in the ocean. They are suited to their habitat because they have fins to help them steer and balance in the water. They have got gills to breathe underwater but they can't breathe out of water.

<b>Title</b>	<b>Distinguishing objects from materials</b>
<b>Science content statement(s)</b>	N/A
<b>Working scientifically statement(s) (if applicable)</b>	The pupil can, using appropriate scientific language from the national curriculum, use different types of scientific enquiry to gather and record data, using simple equipment where appropriate, to answer questions, finding things out using secondary sources of information.
<b>Context</b>	In previous lessons, the pupils had observed, first hand, a range of familiar solid materials, named them, been introduced to appropriate scientific language to describe their observable properties, and used their observations to sort the materials according to these properties.  In this lesson, the focus was on distinguishing objects from materials, something that pupils often confuse. Pupils were also asked to describe a property of the material.
<b>Comment</b>	The pupil correctly named the different familiar objects, the material each was made from, and used appropriate scientific language to describe the properties of each.



This is a Key ✓  
 It is made of metal ✓  
 It is hard ✓

Key  
 metal  
 hard



This is a newspaper ✓  
 It is made of paper ✓  
 It is flexible ✓

newspaper  
 paper  
 flexible



This is a jumper ✓  
 It is made of wool ✓  
 It is soft ✓

jumper  
 wool  
 soft



This is a bag ✓  
 It is made of plastic ✓  
 It is squashy and flexible ✓

bag  
 plastic  
 squashy  
 and flexible

<b>Title</b>	<b>Making a kite</b>
<b>Science content statement(s)</b>	The pupil can distinguish objects from materials, describe their properties, identify and group everyday materials (year 1) and <b>compare their suitability for different uses</b> (year 2).
<b>Working scientifically statement(s) (if applicable)</b>	The pupil can, using appropriate scientific language from the national curriculum, use different types of scientific enquiry to gather and record data, using simple equipment where appropriate, to answer questions, grouping and classifying things.
<b>Context</b>	The class had previously sorted a range of everyday materials by their observable properties and had been introduced to appropriate scientific language to describe these. To introduce the idea of suitability for purpose, the pupils had flown kites in the playground and talked about what made a good kite. They were then given a range of materials and asked to choose suitable ones to use when making a kite, specifying their reasons.
<b>Comment</b>	The pupil sorted materials according to their suitability for different parts of a kite. Some direct references were made to properties and behaviour of the materials, for example: <ul style="list-style-type: none"> <li>• 'light'</li> <li>• 'spiky affect to chop the wind'</li> <li>• 'to support the materials.'</li> </ul>

I can identify and name a variety of everyday materials, including wood, plastic, glass, metal, water, and rock



I can identify and compare the suitability of a variety of everyday materials, including wood, metal, plastic, glass, brick, rock, paper and cardboard for particular uses

Materials I will use to make my kite and the reasons I choose them.

String  
So you can fly it without it flying away.

Machstick  
To give a spiky affect to chop the wind.

Twirler  
To unround the string.

Foil  
I'll use it to hold the other materials. It's a lite metal so it isn't heavy which means it will fly.

Pipcleaner  
I will use it to hold the other materials and also to support the materials at the side.

Bubble rap  
The bottem materil of the kite. You also told me it is light.

**String**  
So you can fly it without it flying away

**Machstick** To give a spiky affect to chop the wind.

**Twirler**  
To unround the string.

**Pipcleaner**  
I will use it to hold the 3 other matiriels and also to support the materials at the side.

**Foil**  
The materiel at the top of the kite. It's a lite metal so it isn't heavy which means it will fly.

**Bubble rap**  
The bottem materil of the kite.

You also told me it is light.





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