


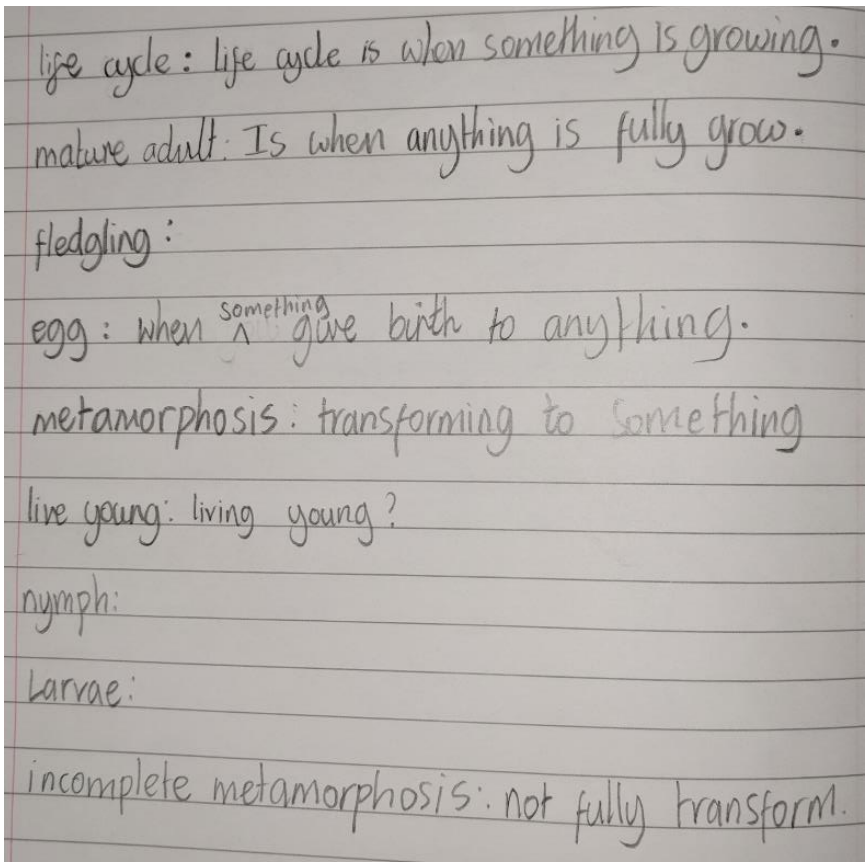



Examples of Work

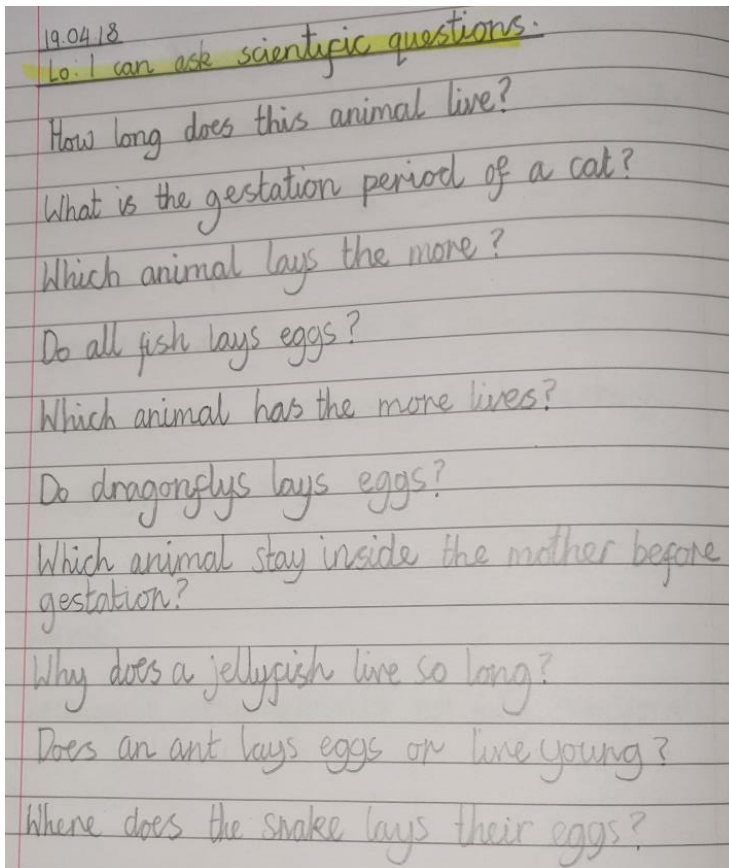
Melissa


Living things and their habitats - Year 5

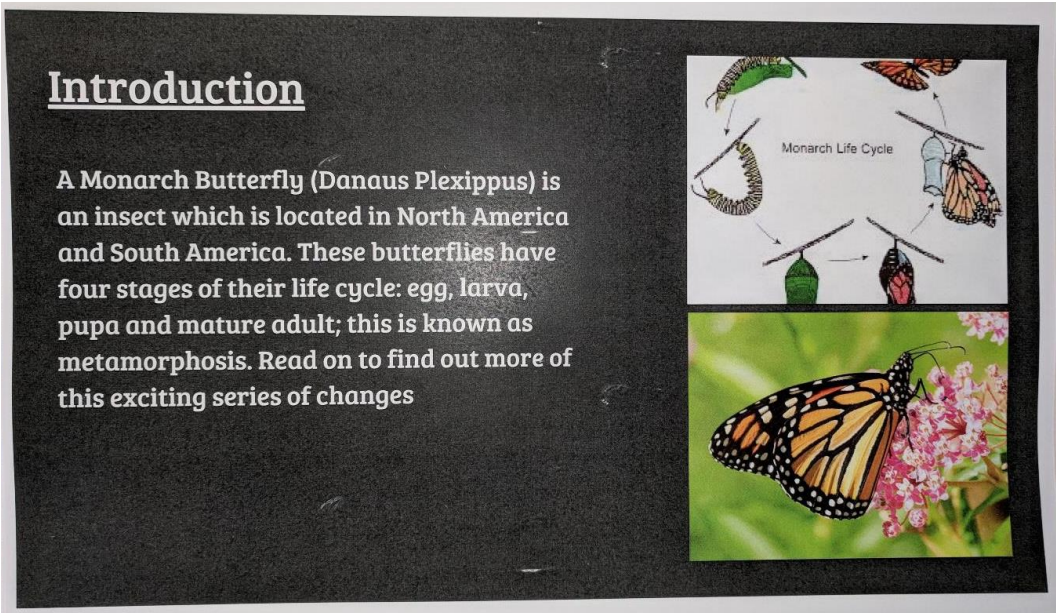
	Year	5	Topic	Living things and their habitats
	Focus of assessment (National Curriculum statements)			
	<ul style="list-style-type: none"> Describe the differences in the life cycles of a mammal, an amphibian, an insect and a bird. Describe the life process of reproduction in some plants and animals. 			
	Description of activity			
	The pupils were given the key vocabulary for the unit and asked to write definitions for the words that they already knew.			


EVIDENCE OF LEARNING		ASSESSMENT
Oral evidence	Examples of work	Knowledge
		This shows that Melissa is already aware of some of the key vocabulary.
Teacher observations		Working scientifically


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	<ul style="list-style-type: none"> Describe the differences in the life cycles of a mammal, an amphibian, an insect and a bird. Describe the life process of reproduction in some plants and animals. 			
	Description of activity			
	The pupils were given some images of a variety of animals and asked to generate questions about their life cycles.			


EVIDENCE OF LEARNING		ASSESSMENT
Oral evidence	Examples of work	Knowledge
		<p>Melissa's questions show that she knows that some animals lay eggs and others do not. She also knows that animals live for different amounts of time She shows an awareness of gestation.</p>
Teacher observations		Working scientifically
		<p>Melissa asks questions linked to the topic.</p>

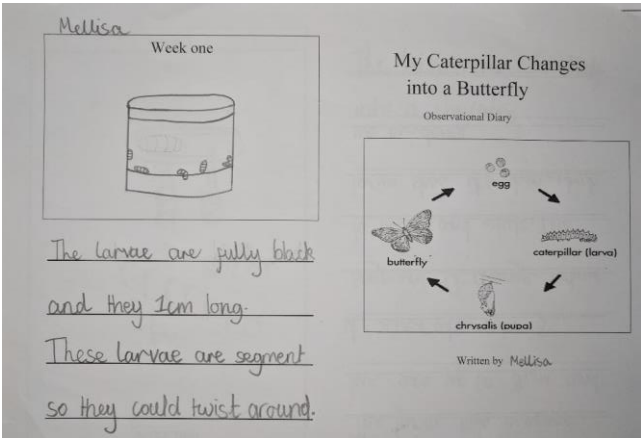
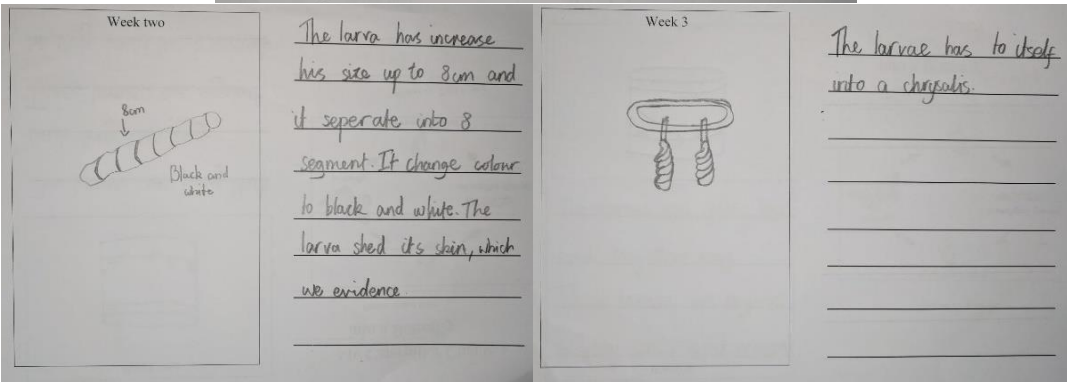
	Year	5	Topic	Living things and their habitats
	Focus of assessment (National Curriculum statements)			
	<ul style="list-style-type: none">• Describe the differences in the life cycles of a mammal, an amphibian, an insect and a bird.• Describe the life process of reproduction in some plants and animals.			
	Description of activity			
	The pupils each researched the life cycle of a butterfly of their choice.			


EVIDENCE OF LEARNING		ASSESSMENT
Oral evidence	Examples of work	Knowledge
		Her slides show a good understanding of the four stages of an insect's life cycle.
Teacher observations		Working scientifically
		Melissa used a number of websites for her research and took notes. She created these slides from her notes.



	Year	5	Topic	Living things and their habitats
	Focus of assessment (National Curriculum statements)			
	<ul style="list-style-type: none"> Describe the differences in the life cycles of a mammal, an amphibian, an insect and a bird. Describe the life process of reproduction in some plants and animals. 			
	Description of activity			
	The pupils each researched the life cycle of a butterfly of their choice. (Continued from the previous page.)			


EVIDENCE OF LEARNING		ASSESSMENT
Oral evidence	Examples of work	Knowledge
	 <p>Eggs Its life starts with a female butterfly laying hundreds of eggs in a cluster on the underside of a leaf. This is because, predators have a lower chance hunting these innocent eggs. These eggs are camouflaged by their green colour and they are about the same size as a sesame seed. Not like humans, the Monarch butterfly abandoned their eggs and flies away. As a result of this they have survived by their self. The eggs incubate for 5-7 days until it is complete. At last, the larva is ready. Firstly, the larva chews a hole and it takes several minutes to slowly emerge towards the world. After that, it eats the nutrient-rich shell and journey on to find milkweed leaves.</p> <p>Larva These hungry larva are like virtual eating machines that keep on increasing and increasing. At this stage it just likely to be two millimetres in length. For a fact, the larva could fit the top of a pin. As it grows, the larva change colour as it sheds its skin each time so that it can conceal itself away from predators and it changes from black and white into yellow, black and green. Each time it sheds its skin, this is called instar, which marks a new stage of their life cycle. Now it increases its size, the larva is ready for the next stage: Pupation.</p> <p>Pupa Since the larva is ready, it looks for the underside of a twig and attaches itself by using a silk-like substance from its spinneret. For the last time, the larva molts and the skin will slowly form a green shell; the chrysalis. This protect the larva which is going to be a mature butterfly. For a few days, it will be immobile until the process has complete.</p> <p>Mature Adult Gingerly, the mature adult Monarch butterfly emerge from the chrysalis. The Monarch Butterfly is fully transformed: it has four, colourful wings, which has an orange, black and white mainly, with six legs and two antennae. Its wings are still compacted, this means that the Monarch Butterfly has inflated all the fluids into the veins of its wings to expand. It takes about approximately 30 minutes and after that it is now ready for its first flight into the wild. Now that, it is off, it will reproduced and starts the life cycle once again.</p>	Her slides show a good understanding of the four stages of an insect's life cycle.
Teacher observations		Working scientifically


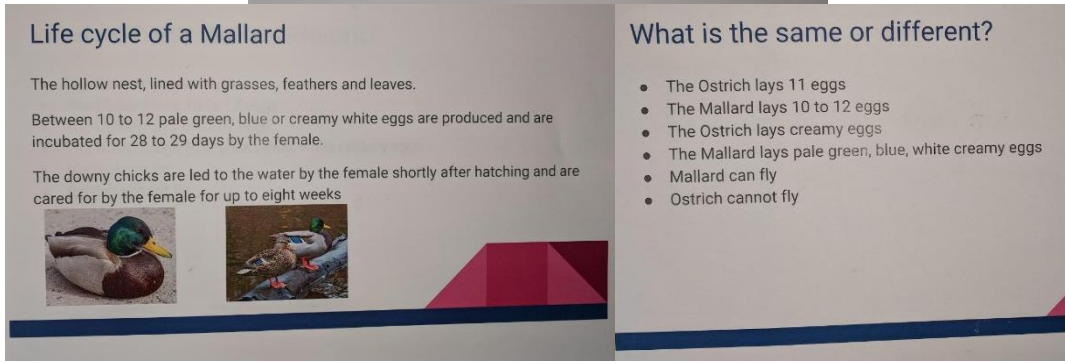
	Year	5	Topic	Living things and their habitats
	Focus of assessment (National Curriculum statements)			
	<ul style="list-style-type: none"> Describe the differences in the life cycles of a mammal, an amphibian, an insect and a bird. Describe the life process of reproduction in some plants and animals. 			
	Description of activity			
	The class had some caterpillars in the classroom that they observed over a number of weeks. When the butterflies emerged, they were released into the playground.			


EVIDENCE OF LEARNING		ASSESSMENT
Oral evidence	Examples of work	Knowledge
		
Teacher observations		Working scientifically
		Melissa makes close observations over a period of time and records these using words, drawings and scientific diagrams.


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	<ul style="list-style-type: none">• Describe the differences in the life cycles of a mammal, an amphibian, an insect and a bird.• Describe the life process of reproduction in some plants and animals.			
	Description of activity			
	The class visited a local pond during the summer term to pond dip. They used a key to identify the animals which included the dragonfly nymph. They then saw two dragonflies mating and a female laying eggs. The whole life cycle in one visit!			


EVIDENCE OF LEARNING		ASSESSMENT
Oral evidence	Examples of work	Knowledge
<p>“Those dragonflies are mating. It is a male and female, and the male is giving the female sperm to fertilise the eggs. (This visit occurred after the pupils had learnt about the process of reproduction in humans.)</p> <p>“The nymph is the young dragonfly. It must metamorphosise like the caterpillar.”</p>	  <p>(Illustrative images from www.arkive.org)</p>	<p>Melissa makes links to her knowledge about the life cycles of other animals and compares them.</p>
Teacher observations		Working scientifically

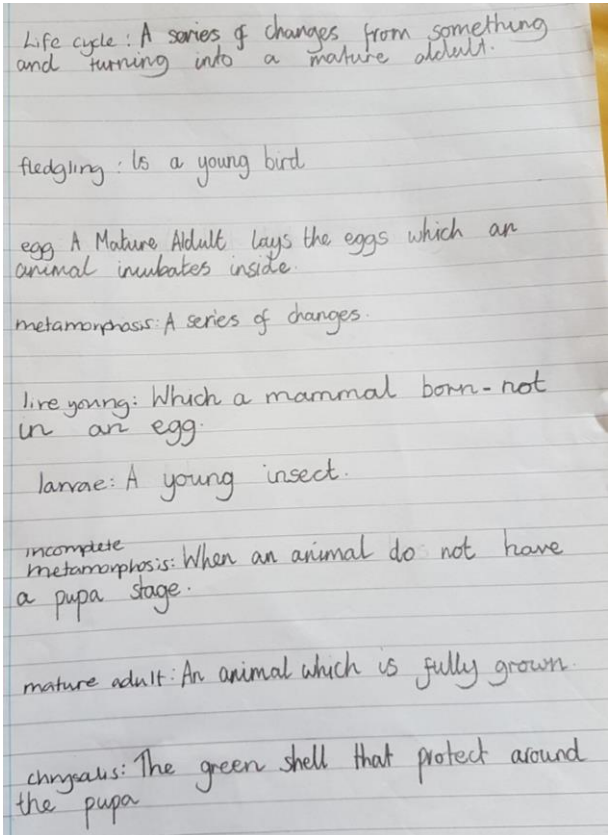
	Year	5	Topic	Living things and their habitats
	Focus of assessment (National Curriculum statements)			
	<ul style="list-style-type: none"> Describe the differences in the life cycles of a mammal, an amphibian, an insect and a bird. Describe the life process of reproduction in some plants and animals. 			
	Description of activity			
	The pupils were asked to choose two birds from the Arkive website and to find out about their life cycles. The pupils were then asked to create a PowerPoint to compare the two life cycles.			


EVIDENCE OF LEARNING		ASSESSMENT
Oral evidence	Examples of work	Knowledge
		Melissa describes the difference between the life cycle of two birds.
Teacher observations		Working scientifically
		Melissa located the relevant information and made notes.

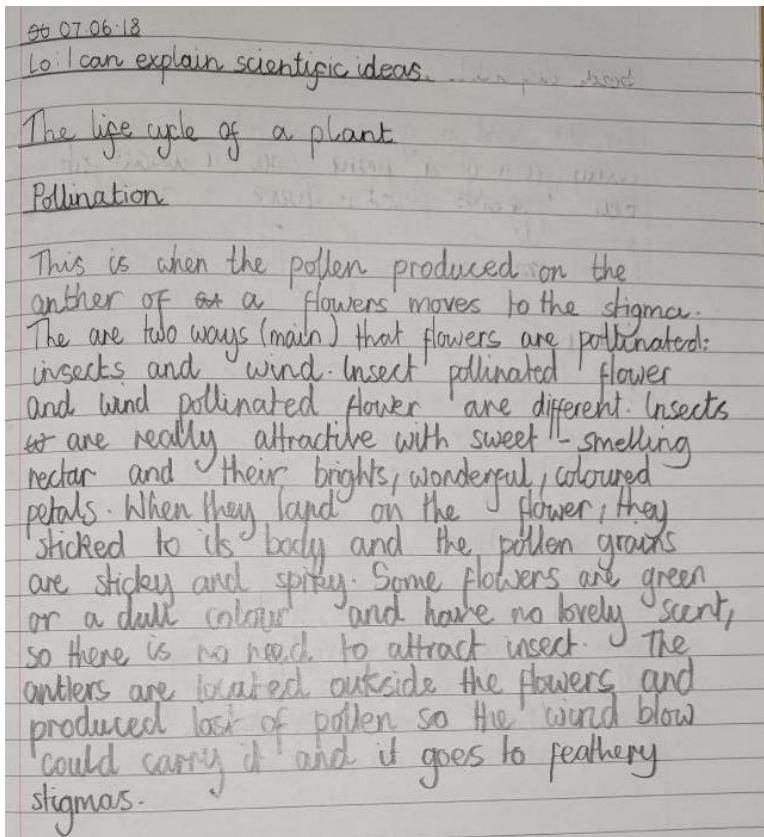
	Year	5	Topic	Living things and their habitats
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	Description of activity			
	During a reading lesson, the pupils found out about other life cycles and recorded them as diagrams.			


EVIDENCE OF LEARNING		ASSESSMENT
Oral evidence	Examples of work	Knowledge
<p>"Birds, frogs, insects and fish lay eggs. Mammals have live babies. Insects and amphibians have a metamorphosis."</p>		<p>Melissa is secure in describing the differences in the life cycles of different groups of animals.</p>
Teacher observations		Working scientifically
		<p>Melissa records her research using life cycle diagrams.</p>

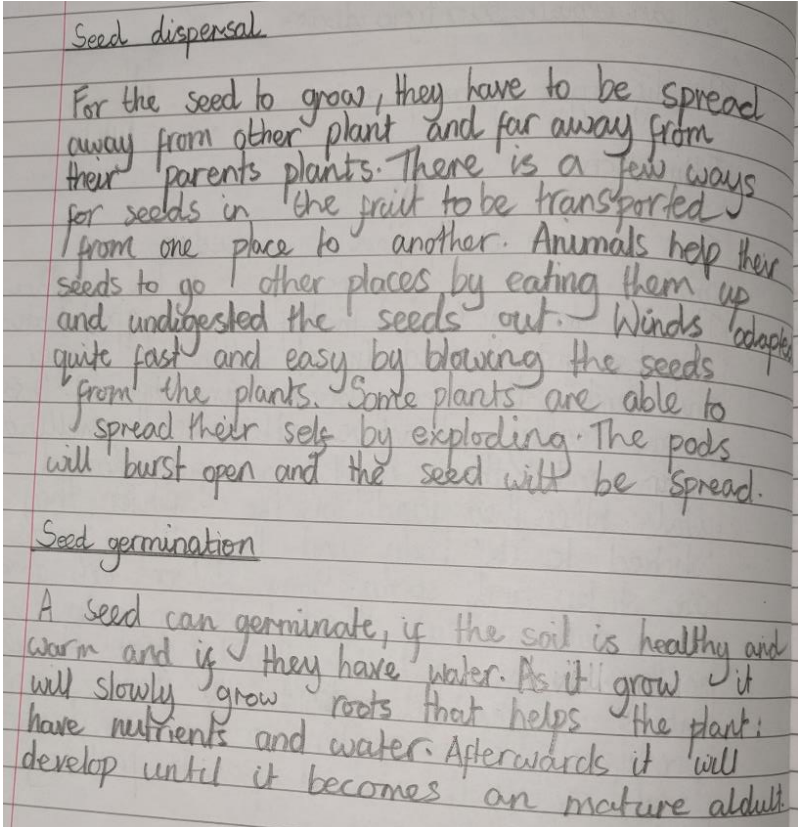
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	Description of activity			
	The pupils were given the same key vocabulary as they were at the start of the topic and asked to write definitions for the words that they now knew.			


EVIDENCE OF LEARNING		ASSESSMENT
Oral evidence	Examples of work	Knowledge
		Melissa's knowledge now extends to fledgling and larvae and a better understanding of incomplete metamorphosis.
Teacher observations		Working scientifically


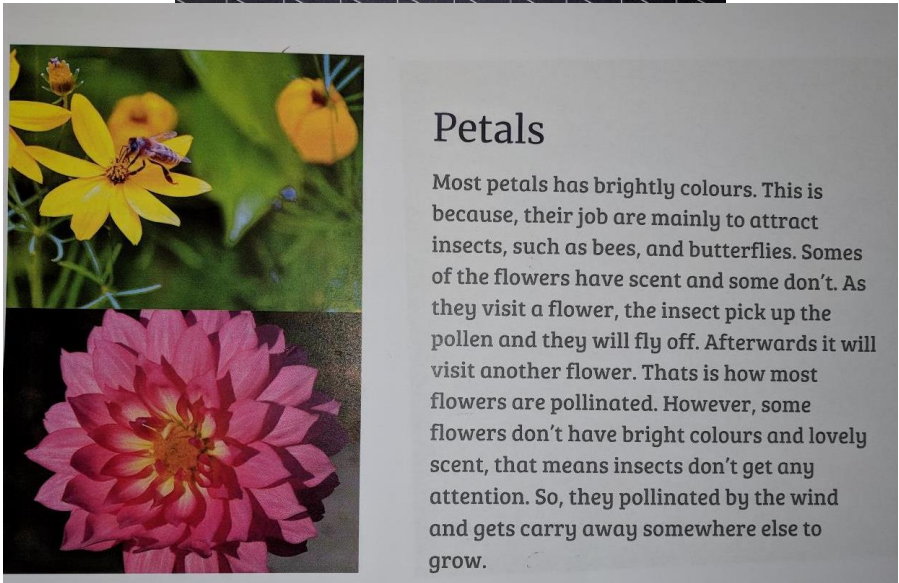
	Year	5	Topic	Living things and their habitats
	Focus of assessment (National Curriculum statements)			
	<ul style="list-style-type: none"> Describe the life process of reproduction in some plants and animals. 			
	Description of activity			
	<p>Before the class learnt about asexual reproduction, the teacher wanted to find out what they had remembered from Year 3 about the life cycle of flowering plants. The pupils were given the key vocabulary which they discussed in pairs before writing about what they knew.</p>			


EVIDENCE OF LEARNING		ASSESSMENT
Oral evidence	Examples of work	Knowledge
		<p>The sentence about “green or dull” coloured flowers is slightly unclear but shows an understanding that wind pollinated flowers are different to insect pollinated flowers.</p>
<p>Teacher observations</p> <p>It is not essential for pupils to use the terms ‘anther’ and ‘stigma’.</p>		<p>Working scientifically</p>



	Year	5	Topic	Living things and their habitats
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	<ul style="list-style-type: none"> Describe the life process of reproduction in some plants and animals. 			
	Description of activity			
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EVIDENCE OF LEARNING		ASSESSMENT
Oral evidence	Examples of work	Knowledge
		<p>This writing shows a good understanding of the life cycle of flowering plants.</p>
Teacher observations		Working scientifically



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	Focus of assessment (National Curriculum statements)			
	<ul style="list-style-type: none"> Describe the life process of reproduction in some plants and animals. 			
	Description of activity			
	While the teacher consolidated the Year 3 learning with some pupils, the rest of the pupils created PowerPoints which they later shared with the less secure pupils.			


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Teacher observations		Working scientifically

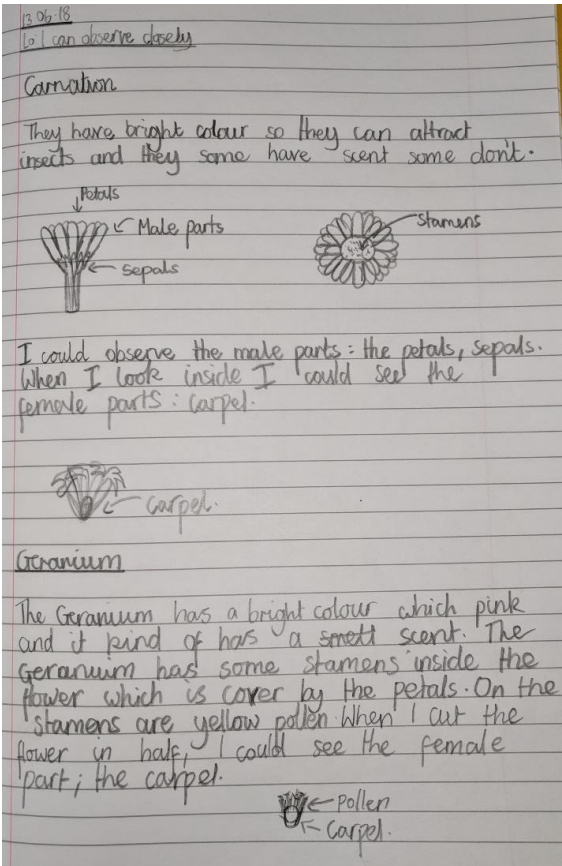
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Oral evidence	Examples of work	Knowledge
	<p>Sepals</p> <p>Sepals are special types of leaves that form a ring around the petals. They protect the flower when it is still a little plant. After the flower is open the sepals is still could be seen underneath the petals. Most of the sepals are green or brown, but some plants they are the same colour as the petals.</p> 	
Teacher observations		Working scientifically
	 <p>Nectaries</p> <p>The nectaries are the part of a flower that make nectar. Insects like nectar that give them energy. Also bees make honey with nectar too. The nectar are usually in the centre. That means insects has to go deep down to reach the nectar. While they are doing that the pollen from the anther stick to their body and they will carry it to another flower.</p>	

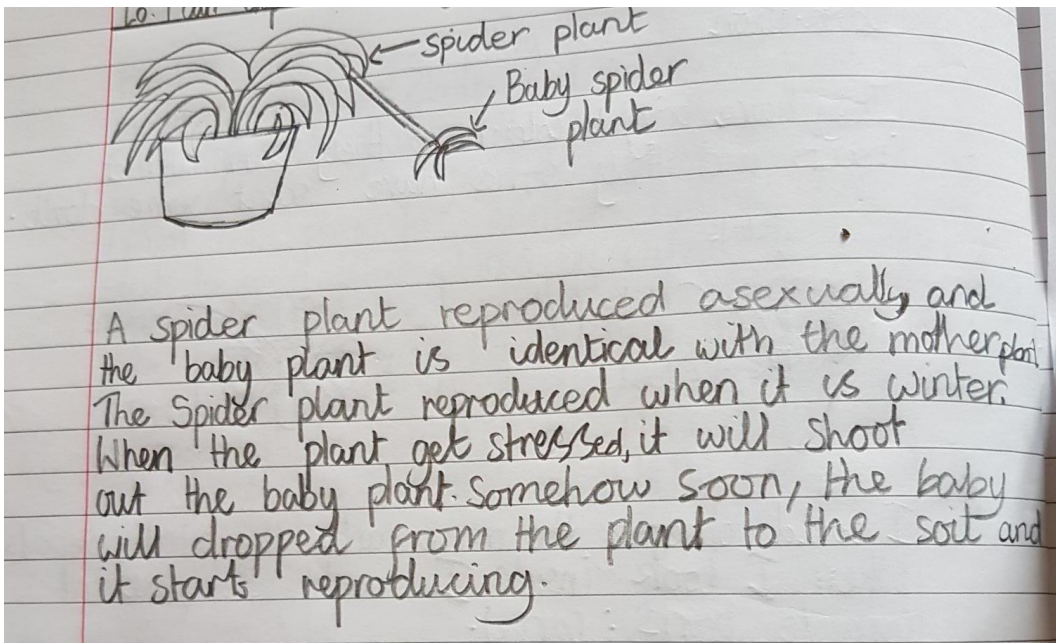
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Oral evidence	Examples of work	Knowledge
	<p>Carpels</p> <p>The carpel is the female part of the flower. This is where the seeds are made. There are three parts of the carpel: the stigma, the style, and the ovary. The stigma is covered in a sticky substance. Its has to "catch" the grains of pollen. The style holds up the stigma and the ovary contains the ovules. When the flower pollinated the pollen sticks to the stigma and travels down to the style and ovary. After that it becomes a seed. This is called fertilization.</p> 	Melissa's knowledge of sexual reproduction goes beyond the requirements of the Key Stage 2 curriculum.
Teacher observations		Working scientifically
	<p>Stamens</p>  <p>The stamens are the male parts of the flower. This make the pollen. Pollen is yellow powdery thing that makes a flower reproduced.</p>	

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	<ul style="list-style-type: none"> Describe the differences in the life cycles of a mammal, an amphibian, an insect and a bird. Describe the life process of reproduction in some plants and animals. 			
	Description of activity			
	Outside, the pupils looked for flowers and made careful observations of them.			

EVIDENCE OF LEARNING		ASSESSMENT
Oral evidence	Examples of work	Knowledge
		
Teacher observations		Working scientifically
		Melissa presents her observations clearly in a mix of text and labelled diagrams.

	Year	5	Topic	Living things and their habitats
	Focus of assessment (National Curriculum statements)			
	<ul style="list-style-type: none"> Describe the life process of reproduction in some plants and animals. 			
	Description of activity			
	<p>The class had a spider plant in their class which they noticed had 'babies' The teacher used this as an opportunity to teach about asexual reproduction. The teacher then asked the pupils to compare this to plants they had previously grown.</p>			

EVIDENCE OF LEARNING		ASSESSMENT
Oral evidence	Examples of work	Knowledge
<p>"The strawberries that we grew also had runners. These are a bit like the baby plants on the spider plant. It is also a bit like when we grew potatoes. We planted one and then more grew underground."</p>	 <p>A spider plant reproduced asexually and the baby plant is identical with the mother plant. The Spider plant reproduced when it is winter. When the plant get stressed, it will shoot out the baby plant. Somehow soon, the baby will dropped from the plant to the soil and it starts reproducing.</p>	<p>Melissa describes asexual reproduction as producing identical offspring to the parent.</p> <p>Melissa identifies other plants that also reproduce asexually.</p>
Teacher observations		Working scientifically



Overall summary

Secure

Melissa describes the differences between the life cycles of different groups of animals. She shows an understanding of the process of sexual reproduction of animals and plants and has an awareness that plants can also reproduce asexually, resulting in identical offspring.