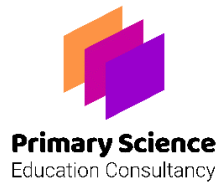





## Examples of Work


Charlotte

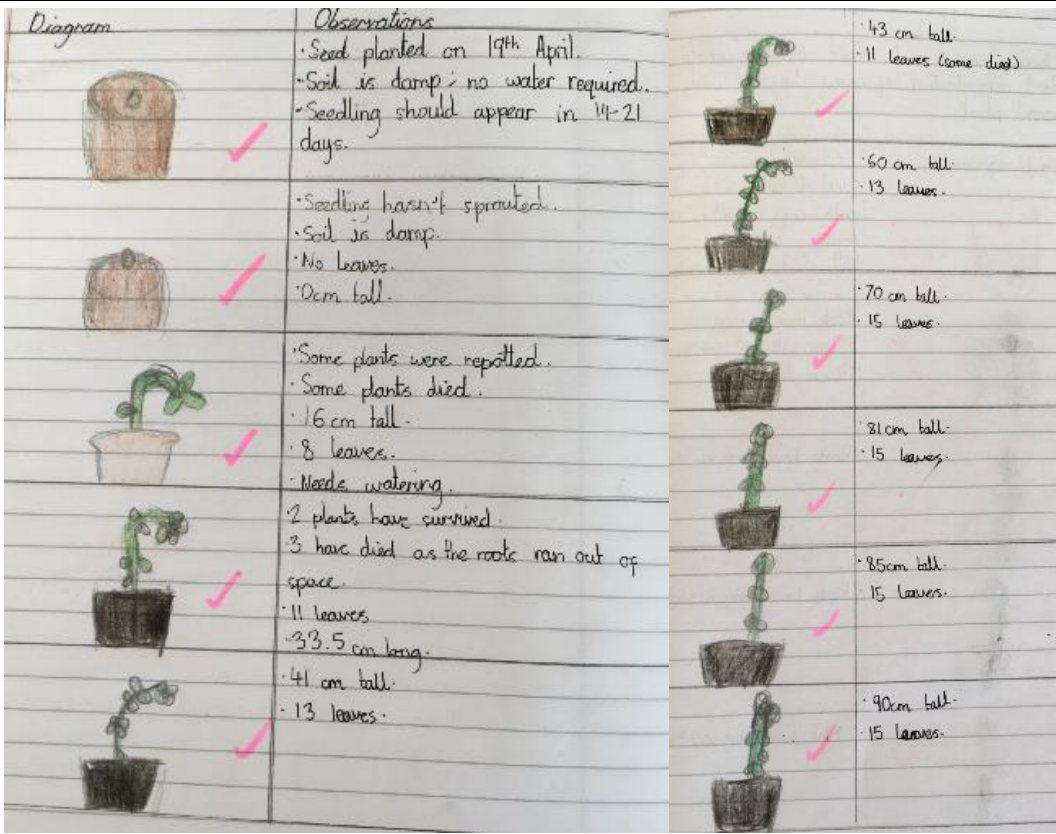
Living things and their habitats - Year 5




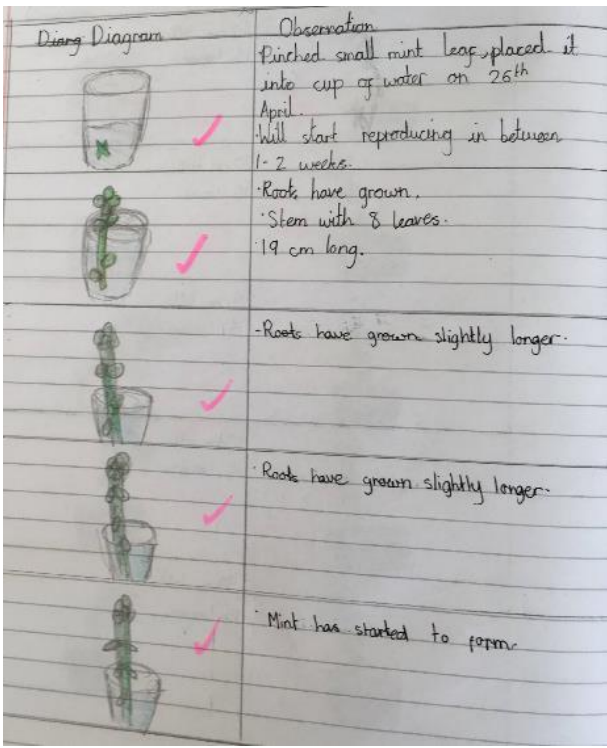
	Year	5	Topic	Living things and their habitats
	Focus of assessment (National Curriculum statements)			
	<ul style="list-style-type: none"><li>Describe the life process of reproduction in some plants and animals.</li></ul>			
	Description of activity			
	Groups of pupils planted sunflowers and mint cuttings and observed them over the course of the topic (see following pages). They also looked at images and real examples of bulbs (garlic and onions), ginger rhizomes, potato tubers, brambles and strawberries (runners), and bindweed, discussing the different ways these plants reproduce asexually.			

EVIDENCE OF LEARNING		ASSESSMENT
Oral evidence	Examples of work	Knowledge
<p>"Some plants like blackberries and onions can reproduce sexually and asexually. We are growing sunflowers from seeds and mint by cutting stems off the plants which will grow roots and make new plants. Potato tubers are different from seeds because they don't come from flowers."</p>		<p>Charlotte distinguishes between sexual and asexual reproduction in some plants.</p>
Teacher observations		Working scientifically
	 	<p>Charlotte sets up a simple observation over time to observe the growth of new plants propagated in different ways.</p>


	Year	5	Topic	Living things and their habitats
	Focus of assessment (National Curriculum statements)			
	<ul style="list-style-type: none"> <li>Describe the life process of reproduction in some plants and animals.</li> </ul>			
	Description of activity			
	The pupils made regular observations of their plant grown from a seed.			

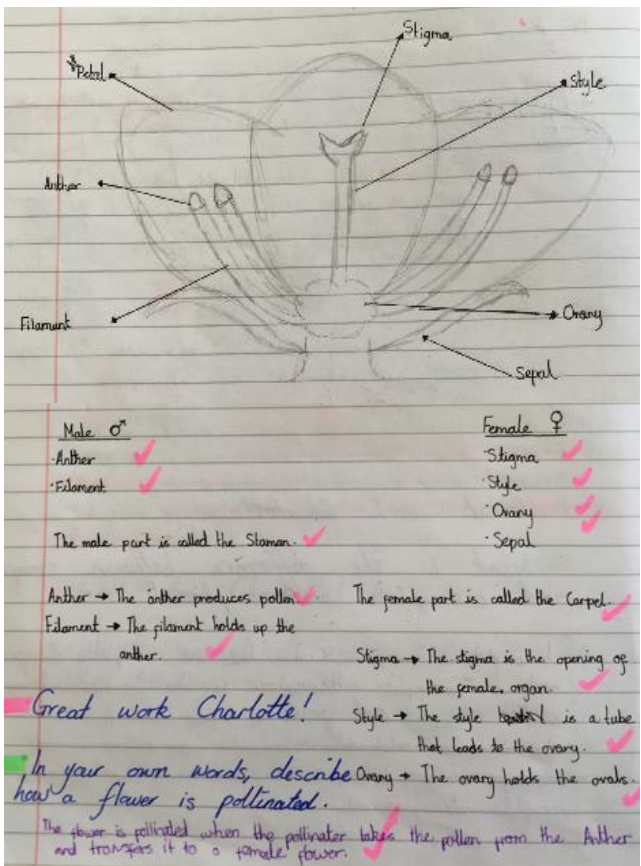
EVIDENCE OF LEARNING		ASSESSMENT
Oral evidence	Examples of work	Knowledge
Teacher observations		
		<p>Working scientifically</p> <p>Charlotte makes and records regular observations of the plant.</p>


	Year	5	Topic	Living things and their habitats
	Focus of assessment (National Curriculum statements)			
	<ul style="list-style-type: none"> <li>Describe the life process of reproduction in some plants and animals.</li> </ul>			
	Description of activity			
	The pupils make regular observations of their plant grown from a cutting.			

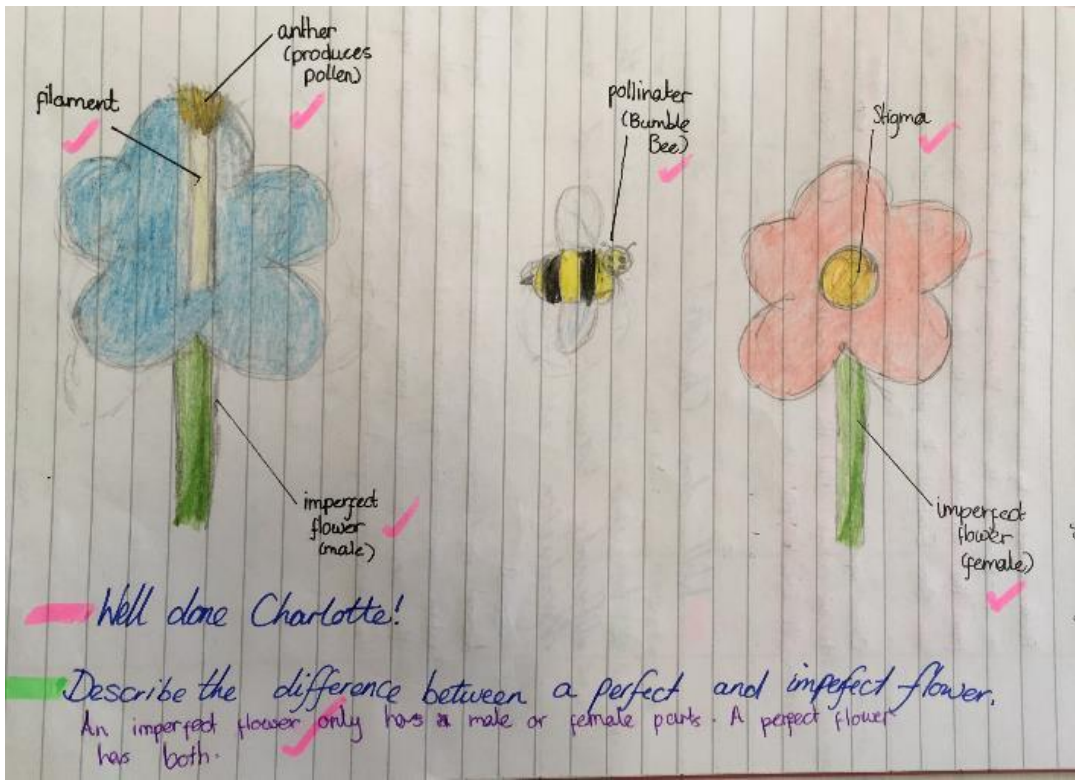
EVIDENCE OF LEARNING		ASSESSMENT
Oral evidence	Examples of work	Knowledge
<p>"The sunflower seed and the leaf cutting both grew into new plants. I don't think the mint died because it was a cutting. It needed to be planted into soil."</p>		<p>Charlotte describes growth from a seed and a leaf cutting.</p>
Teacher observations		Working scientifically
		<p>Charlotte makes and records regular observations of the plant.</p>




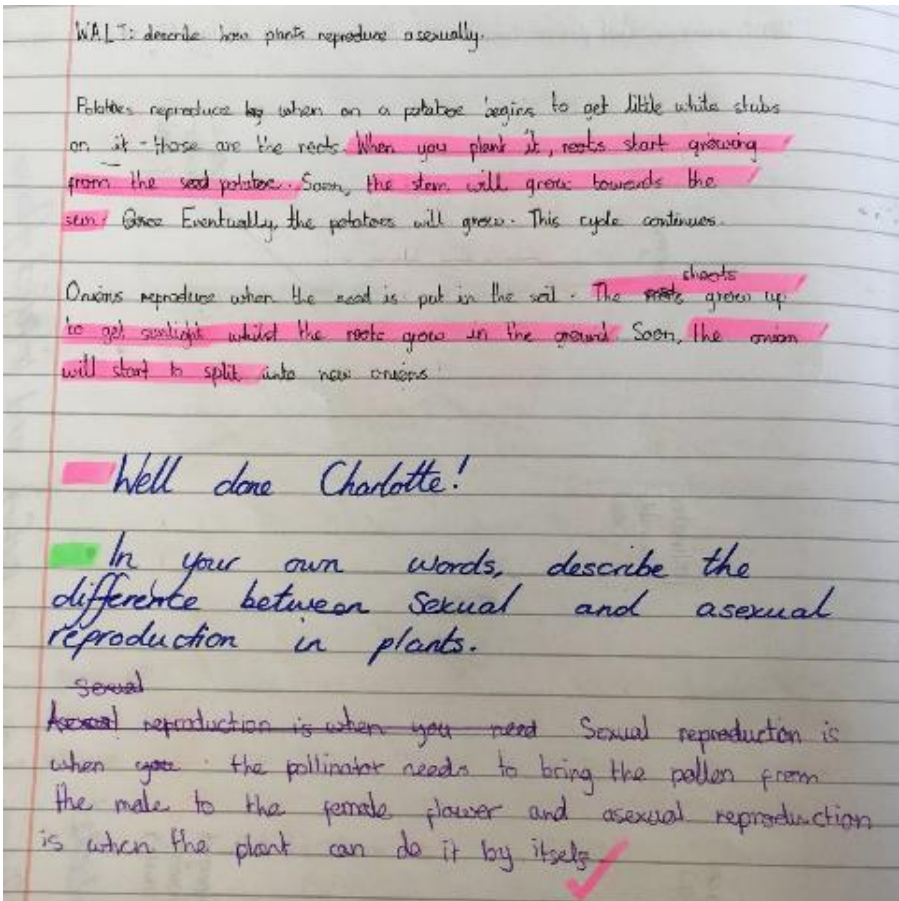
	Year	5	Topic	Living things and their habitats
	Focus of assessment (National Curriculum statements)			
	<ul style="list-style-type: none"> <li>Describe the life process of reproduction in some plants and animals.</li> </ul>			
	Description of activity			
	This lesson re-visited work on sexual reproduction in flowering plants from Year 3 through observation, comparison and discussion of various flowers.			


EVIDENCE OF LEARNING		ASSESSMENT
Oral evidence	Examples of work	Knowledge
	 <p><b>Male ♂</b></p> <ul style="list-style-type: none"> <li>Anther ✓</li> <li>Filament ✓</li> </ul> <p>The male part is called the Stamen. ✓</p> <p>Anther → The anther produces pollen. ✓</p> <p>Filament → The filament holds up the anther. ✓</p> <p><b>Female ♀</b></p> <ul style="list-style-type: none"> <li>Stigma ✓</li> <li>Style ✓</li> <li>Ovary ✓</li> <li>Sepal ✓</li> </ul> <p>The female part is called the Carpel. ✓</p> <p>Stigma → The stigma is the opening of the female organ. ✓</p> <p>Style → The style is a tube that leads to the ovary. ✓</p> <p>Ovary → The ovary holds the ovals. ✓</p> <p><b>Great work Charlotte!</b></p> <p><b>In your own words, describe how a flower is pollinated.</b></p> <p>The flower is pollinated when the pollinator takes the pollen from the Anther and transfers it to a female flower. ✓</p>	<p>Charlotte can remember the parts of a flowering plant and their functions, although her description of pollination omits the name of the female part.</p>
Teacher observations		Working scientifically

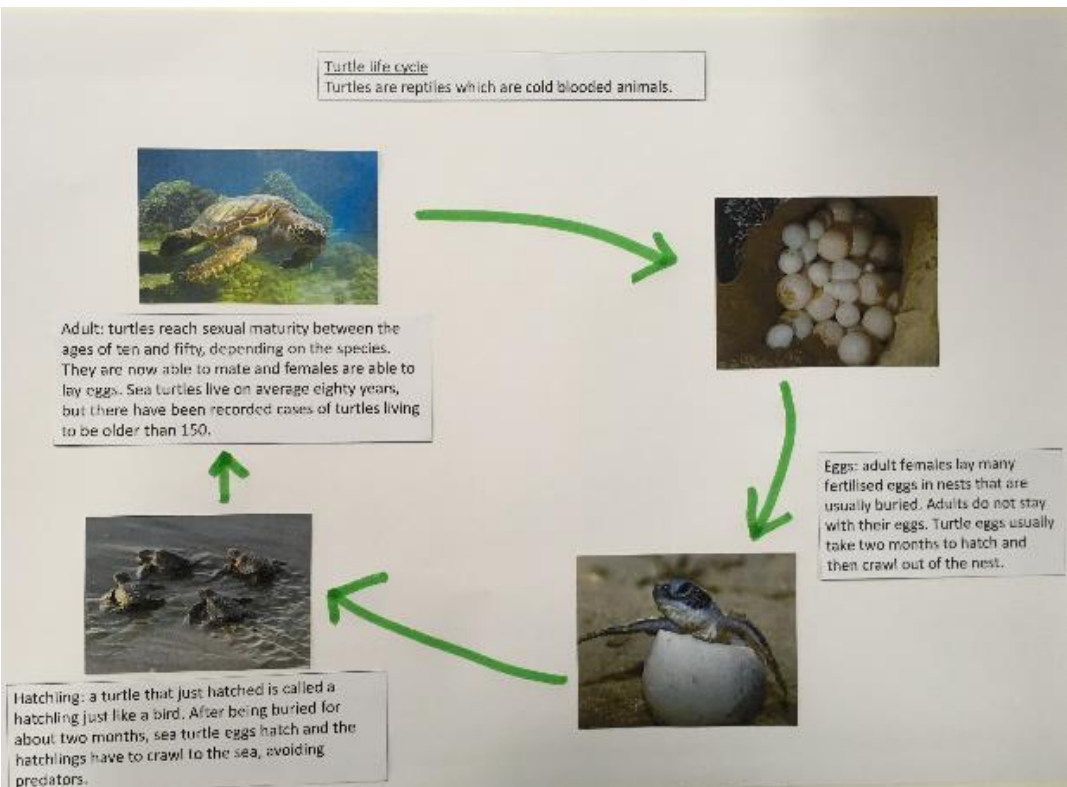
	Year	5	Topic	Living things and their habitats
	Focus of assessment (National Curriculum statements)			
	<ul style="list-style-type: none"> <li>Describe the life process of reproduction in some plants and animals.</li> </ul>			
	Description of activity			
	Outside, the pupils made close observations to see if all flowers had both male and female parts.			

EVIDENCE OF LEARNING		ASSESSMENT
Oral evidence	Examples of work	Knowledge
		Charlotte knows that not all flowers have both male and female parts.
Teacher observations		Working scientifically


	Year	5	Topic	Living things and their habitats
	Focus of assessment (National Curriculum statements)			
	<ul style="list-style-type: none"> <li>Describe the life process of reproduction in some plants and animals.</li> </ul>			
	Description of activity			
	In the last lesson on plant reproduction, the class revisited asexual reproduction, discussing the advantages and disadvantages.			

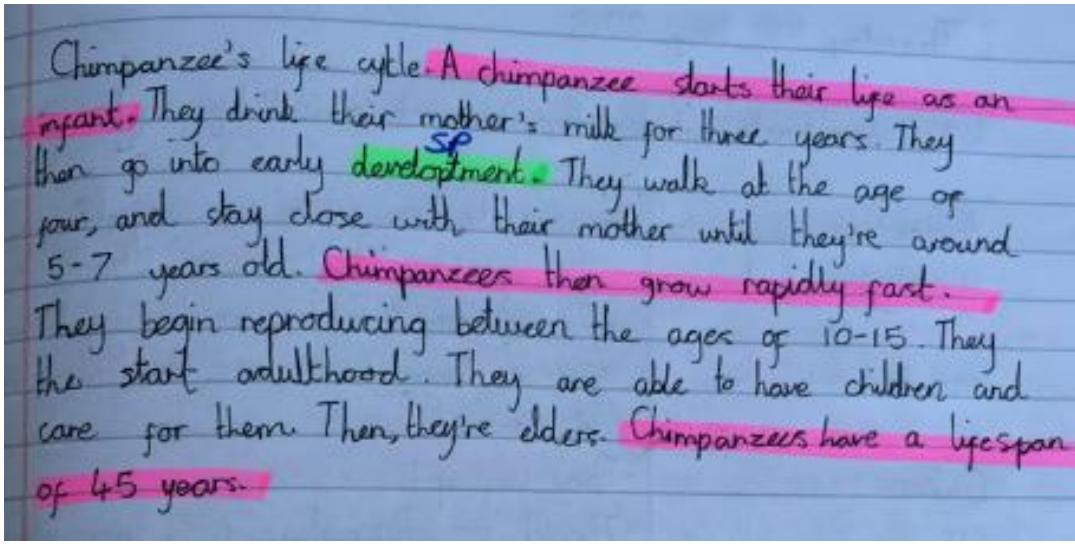
EVIDENCE OF LEARNING		ASSESSMENT
Oral evidence	Examples of work	Knowledge
<p>"When a plant reproduces asexually, the new plant is exactly the same. It uses less energy than sexual reproduction and doesn't need pollinators or another plant."</p>		<p>Charlotte can now describe and compare sexual and asexual reproduction in plants.</p>
Teacher observations		Working scientifically
<p>The teacher clarified that Charlotte knows onions can be grown from seeds or bulbs and that bulbs are an example of asexual reproduction.</p>		


	Year	5	Topic	Living things and their habitats
	Focus of assessment (National Curriculum statements)			
	<ul style="list-style-type: none"> <li>Describe the life process of reproduction in some plants and animals.</li> </ul>			
	Description of activity			
	The pupils were put into groups and given a different animal life cycle to sequence. They presented their life cycle to the rest of the class.			

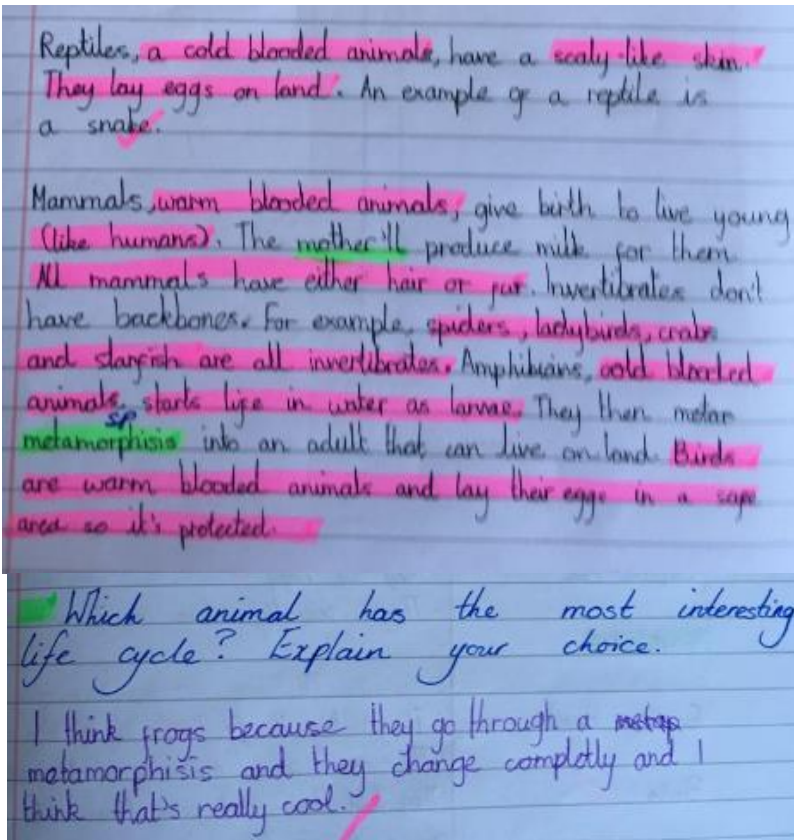
EVIDENCE OF LEARNING		ASSESSMENT
Oral evidence	Examples of work	Knowledge
	 <p><u>Turtle life cycle</u> Turtles are reptiles which are cold blooded animals.</p> <p>Adult: turtles reach sexual maturity between the ages of ten and fifty, depending on the species. They are now able to mate and females are able to lay eggs. Sea turtles live on average eighty years, but there have been recorded cases of turtles living to be older than 150.</p> <p>Eggs: adult females lay many fertilised eggs in nests that are usually buried. Adults do not stay with their eggs. Turtle eggs usually take two months to hatch and then crawl out of the nest.</p> <p>Hatchling: a turtle that just hatched is called a hatchling just like a bird. After being buried for about two months, sea turtle eggs hatch and the hatchlings have to crawl to the sea, avoiding predators.</p>	Charlotte knows the life cycle of a reptile.
Teacher observations		Working scientifically
Charlotte confidently worked in her group sequencing the life cycle of the turtle and described the stages of the life cycle without reading from the sheet when presenting to the class.		




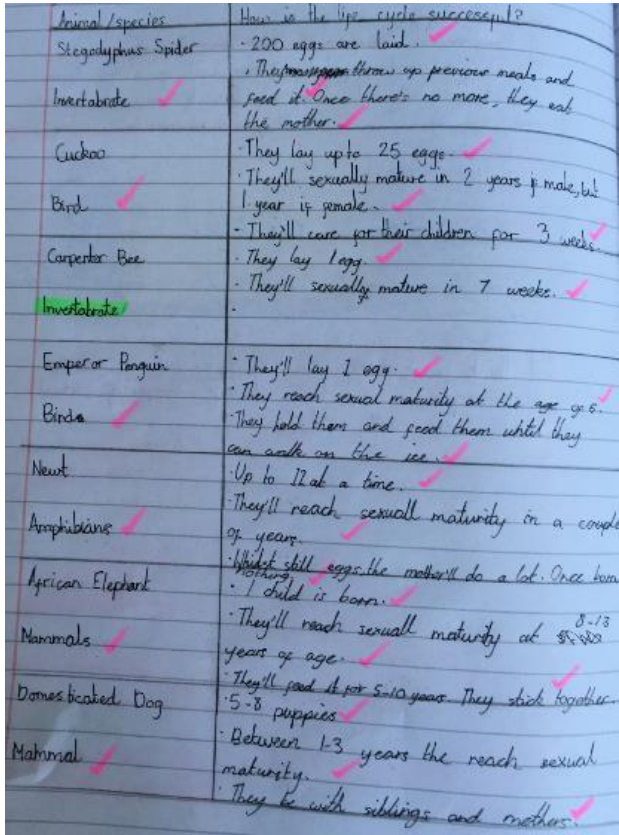
	Year	5	Topic	Living things and their habitats
	Focus of assessment (National Curriculum statements)			
	<ul style="list-style-type: none"> <li>Describe the life process of reproduction in some plants and animals.</li> <li>Describe the difference in the life cycles of a mammal, an amphibian, an insect and a bird.</li> </ul>			
	Description of activity			
	The pupils then wrote about the different life cycles from the presentations, choosing one specific animal from another group's presentation to describe in more detail.			


EVIDENCE OF LEARNING		ASSESSMENT
Oral evidence	Examples of work	Knowledge
		Charlotte knows the life cycle of a mammal.
Teacher observations		Working scientifically
		Charlotte presents detailed information from another group's presentation.

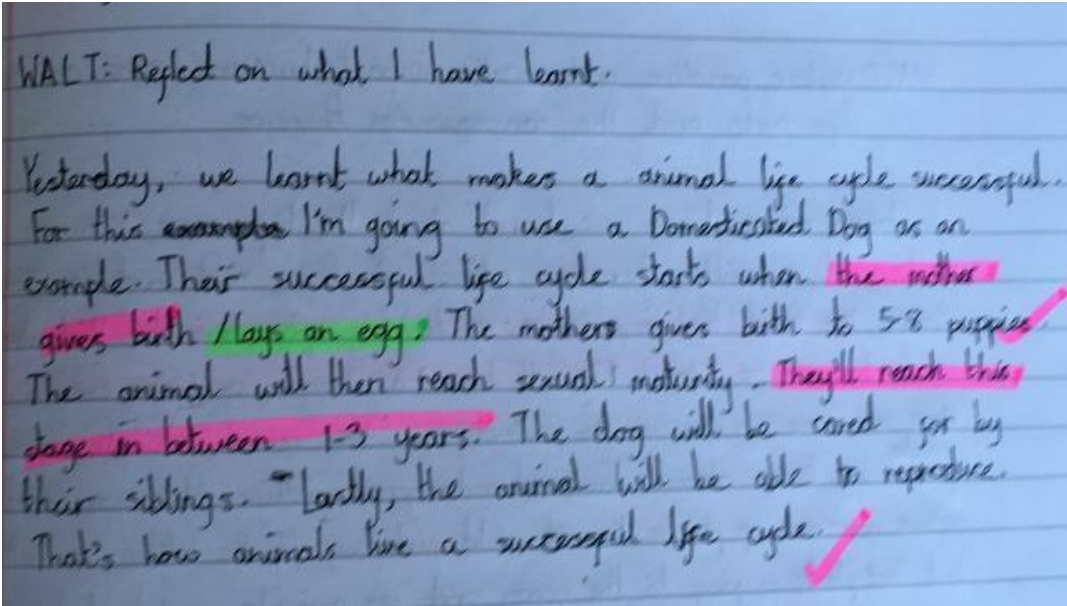
	Year	5	Topic	Living things and their habitats
	Focus of assessment (National Curriculum statements)			
	<ul style="list-style-type: none"> <li>Describe the life process of reproduction in some plants and animals.</li> <li>Describe the difference in the life cycles of a mammal, an amphibian, an insect and a bird.</li> </ul>			
	Description of activity			
	The pupils then wrote about the different life cycles of the different groups of animals from the presentations.			

EVIDENCE OF LEARNING		ASSESSMENT
Oral evidence	Examples of work	Knowledge
		<p>Charlotte describes features of the life cycle of reptiles, mammals, amphibians, and birds. She describes a feature of invertebrates but not how they reproduce.</p> <p>She is not yet making comparisons that show the key ways in which the animal life cycles in the presentations are different from each other.</p>
Teacher observations		Working scientifically

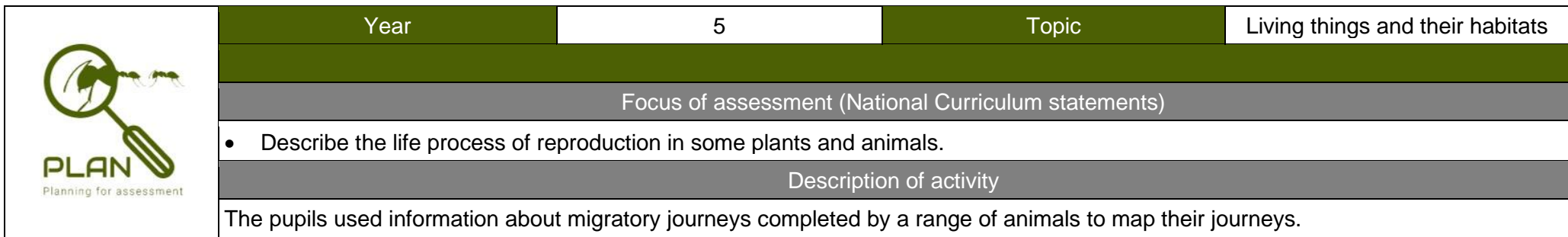
	Year	5	Topic	Living things and their habitats
	Focus of assessment (National Curriculum statements)			
	<ul style="list-style-type: none"> <li>Describe the life process of reproduction in some plants and animals.</li> <li>Describe the difference in the life cycles of a mammal, an amphibian, an insect and a bird.</li> </ul>			
	Description of activity			
	The pupils independently researched the life cycles of a range of other animals to answer the question, 'What makes different animal life cycles successful?'			

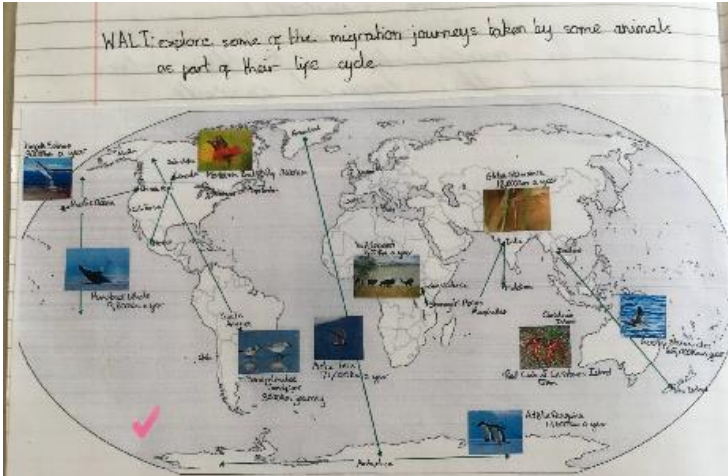
EVIDENCE OF LEARNING		ASSESSMENT
Oral evidence	Examples of work	Knowledge
		
Teacher observations		Working scientifically
		Charlotte makes notes from secondary sources which includes information relevant to the success of the life cycle.


	Year	5	Topic	Living things and their habitats
	Focus of assessment (National Curriculum statements)			
	<ul style="list-style-type: none"> <li>Describe the life process of reproduction in some plants and animals.</li> <li>Describe the difference in the life cycles of a mammal, an amphibian, an insect and a bird.</li> </ul>			
	Description of activity			
	The following day the pupils wrote a learning reflection.			

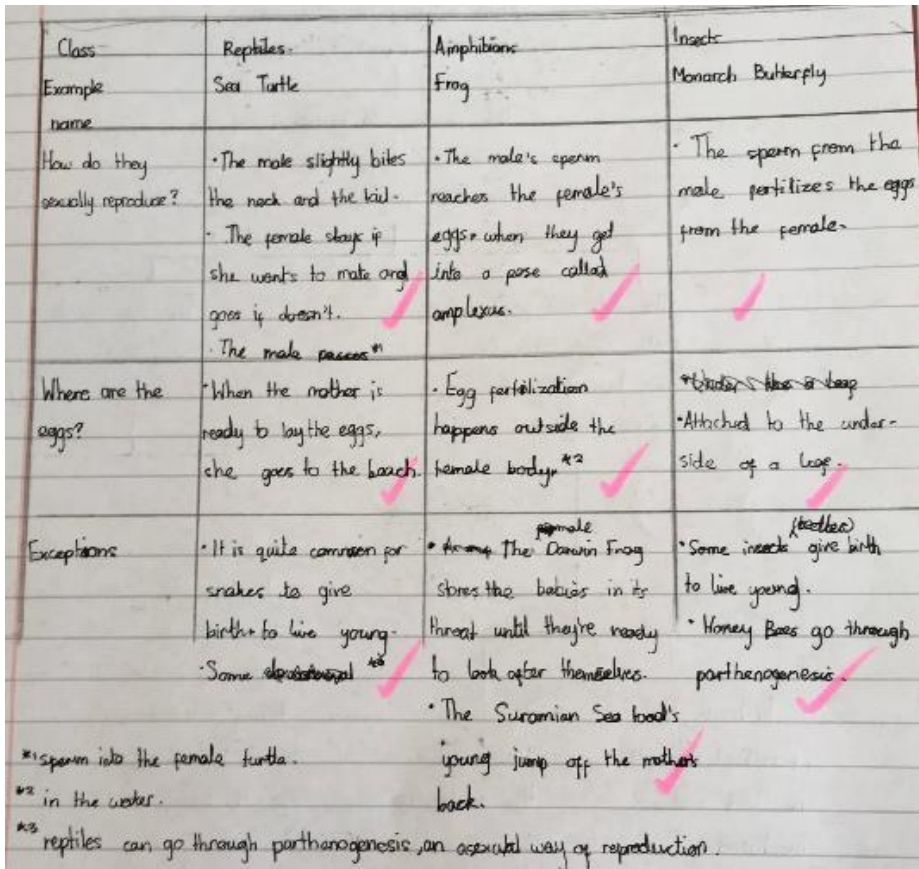
EVIDENCE OF LEARNING		ASSESSMENT
Oral evidence	Examples of work	Knowledge
		Charlotte describes one of the life cycles in more detail but is possibly unsure of a key feature of the mammalian life cycle.
Teacher observations		Working scientifically
Charlotte moves from specifics of a dog life cycle to a more general statement, showing a possible confusion.		Charlotte does not draw information into a conclusion which fully answers the scientific enquiry question.




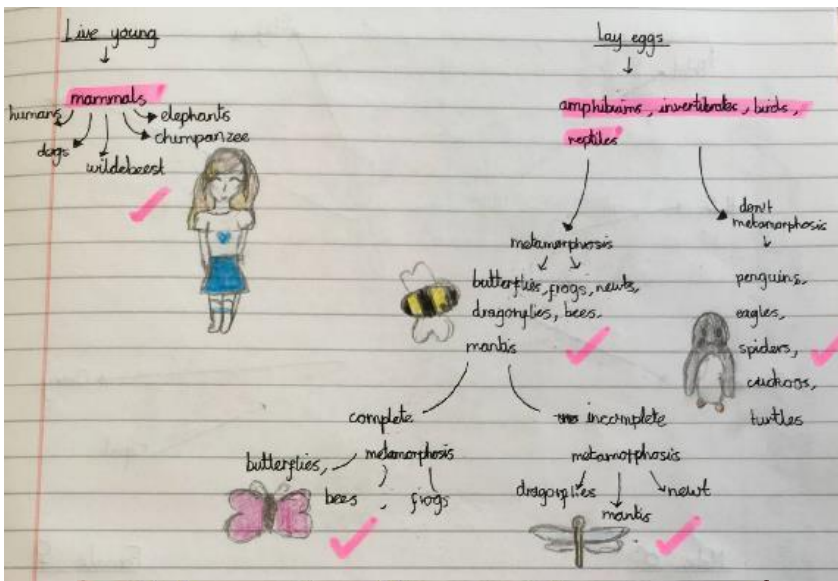
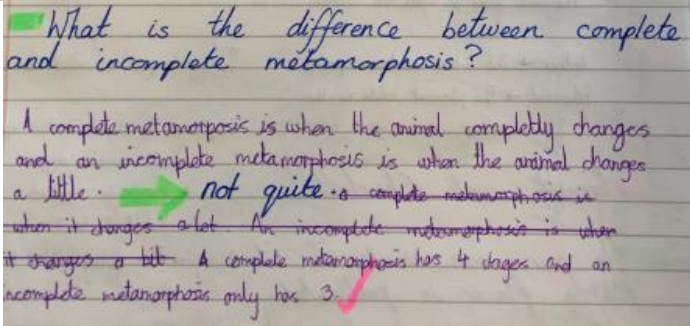



EVIDENCE OF LEARNING		ASSESSMENT
Oral evidence	Examples of work	Knowledge
	 <p>WALT: explore some of the migration journeys taken by some animals as part of their life cycle</p> <p>I found the Dragonfly the most interesting because I didn't know that they migrate so much! Animals can migrate because of food, breeding or because of the temperature. The Dragonfly begins their migration in India then fly flies around 14,000-15,000 km to Seychelles, Uganda and many more.</p> <p>Well done Charlotte!</p> <p>Which animal do you think has the hardest journey?</p> <p>I think the Adelia Penguin has the Salomon because it has to travel 3000 km a year and there's a risk that it could be eaten by other fish and/or birds.</p>	<p>Charlotte recognises that migration is a feature of some life cycles and that it can be hazardous.</p>
Teacher observations		<p>Working scientifically</p> <p>Charlotte transfers information from one format to another.</p>

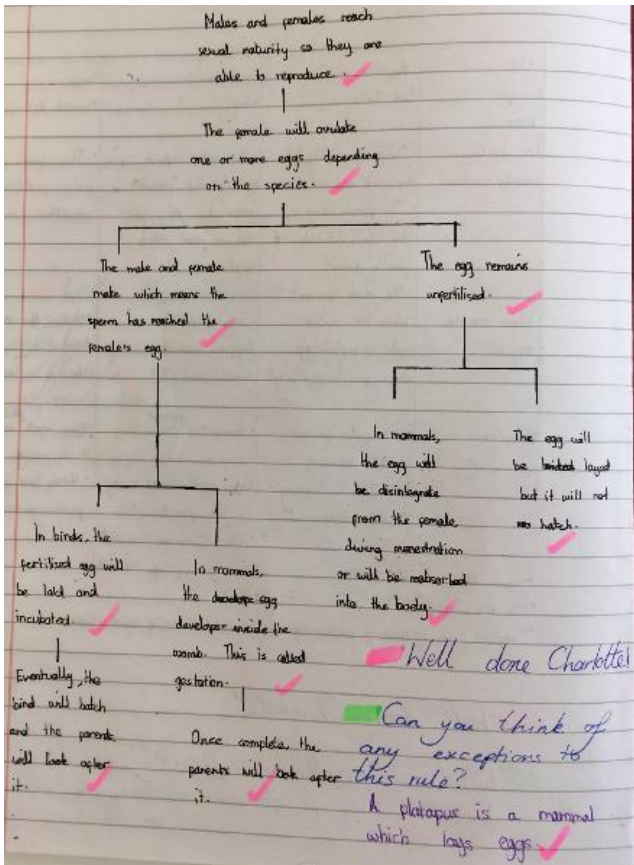
	Year	5	Topic	Living things and their habitats
	Focus of assessment (National Curriculum statements)			
	<ul style="list-style-type: none"> <li>Describe the difference in the life cycles of a mammal, an amphibian, an insect and a bird.</li> </ul>			
	Description of activity			
	The pupils highlighted key facts about reproduction on animal information cards and completed a table with a typical example from the group and any exceptions they found.			

EVIDENCE OF LEARNING		ASSESSMENT
Oral evidence	Examples of work	Knowledge
		Charlotte describes features of a typical life cycle of each animal group and identifies exceptions. There is still no specific comparison between groups, but she is identifying differences in the life cycles of the typical and exceptional animals. She is using correct scientific vocabulary.
Teacher observations		Working scientifically


	Year	5	Topic	Living things and their habitats
	Focus of assessment (National Curriculum statements)			
	<ul style="list-style-type: none"> <li>Describe the difference in the life cycles of a mammal, an amphibian, an insect and a bird.</li> </ul>			
	Description of activity			
	The pupils classified animals according to features of their life cycle.			

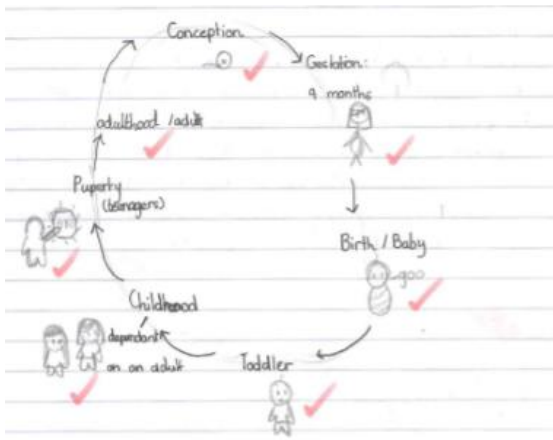
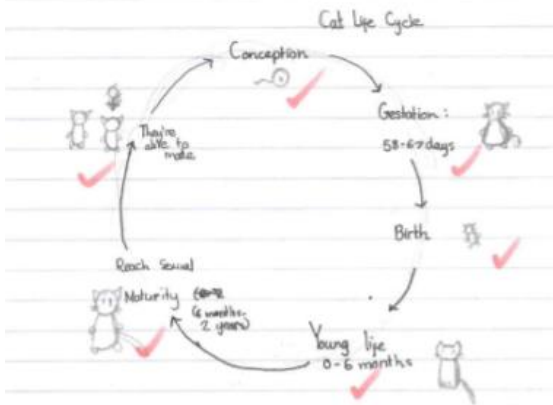
EVIDENCE OF LEARNING		ASSESSMENT
Oral evidence	Examples of work	Knowledge
		Charlotte uses the differences between the life cycles of different animal groups to classify them, using scientific terms on her key.
Teacher observations		Working scientifically
		


	Year	5	Topic	Living things and their habitats
	Focus of assessment (National Curriculum statements)			
	<ul style="list-style-type: none"> <li>Describe the difference in the life cycles of a mammal, an amphibian, an insect and a bird.</li> </ul>			
	Description of activity			
	The teacher showed a PowerPoint with information about how mammals and birds reproduce. The pupils made notes about what they already knew then created their diagrams to show similarities and differences.			

EVIDENCE OF LEARNING		ASSESSMENT
Oral evidence	Examples of work	Knowledge
		Charlotte compares the life cycles of a bird and a mammal, identifying key features and using correct scientific language.
Teacher observations		Working scientifically



	Year	5	Topic	Living things and their habitats
	Focus of assessment (National Curriculum statements)			
	<ul style="list-style-type: none"> <li>Describe the life process of reproduction in some plants and animals.</li> </ul>			
	Description of activity			
	The pupils researched a mammalian life cycle and presented this with their existing knowledge of the human life cycle (from their learning in the 'Animals, including humans' topic).			

EVIDENCE OF LEARNING		ASSESSMENT
Oral evidence	Examples of work	Knowledge
		
Teacher observations		<p><b>Working scientifically</b></p> <p>Charlotte presents her research findings as a diagram.</p>

	Year	5	Topic	Living things and their habitats
	Focus of assessment (National Curriculum statements)			
	<ul style="list-style-type: none"> <li>Describe the difference in the life cycles of a mammal, an amphibian, an insect and a bird.</li> </ul>			
	Description of activity			
	The pupils made comparisons between the life cycles they had learnt about.			

EVIDENCE OF LEARNING		ASSESSMENT
Oral evidence	Examples of work	Knowledge
	<p><u>Compare the human life cycle to the cat life cycle.</u></p> <p>Different: In the human life cycle, gestation is 9 months long, for cats it's shorter. ✓</p> <p>Similar: Cats and humans give birth. ✓</p> <p><u>What did I find most interesting and why?</u></p> <p>I found that in the cat life cycle, gestation is 57-68 days long. I found this interesting because I thought it'd be longer. ✓</p> <p><u>Comparing the human life cycle to a bird's life cycle.</u></p> <p>Different: Birds lay eggs, humans don't. Birds can lay up to twenty-five eggs. They take care of the baby bird for 3 weeks. ✓</p> <p>Similar: To reproduce, birds and humans need a male and a female. They both go through conception and gestation. ✓</p>	Charlotte compares the human life cycle with that of another mammal and a bird.
Teacher observations		Working scientifically



## Overall summary

Secure

Charlotte can name several ways that plants reproduce asexually and knows about the process of sexual reproduction in flowering plants. She can describe growth from a seed and a cutting, and can compare the features, advantages and disadvantages of sexual and asexual reproduction.

She has researched the life cycles of mammals, birds, amphibians and insects (and also some fish and reptiles), recognising what is typical for each group, describing them using correct scientific terms and using diagrams and tables to compare them.