

# Evolution and Inheritance

Science

Year 6

Lesson 2 of 6

Learning Objective		Resources	
To identify how animals and plants are adapted to suit their environment in different ways.		Slides Worksheets 2A/2B/2C Environment Posters	Advantageous Adaptations sheet (FSD? activity only)
Teaching Input			
<ul style="list-style-type: none"><li>• Show a picture of a duck. Can you describe its environment? What characteristics help it survive? Children to think, pair, share their ideas. The following slide explains which characteristics help the duck survive.</li><li>• Show a picture of a water lily. Again, children to describe its environment and the characteristics which help it survive. Explain which characteristics help the water lily to survive.</li><li>• Not all inherited characteristics are advantageous. Sometimes, offspring will inherit characteristics from their parents which make it harder for them to survive. Show a list of possible inherited characteristics for a duck; children are to decide which would be advantageous, giving reasons.</li><li>• Is the same variation advantageous for different species? Show a picture of a wading bird; why would the same variations be disadvantageous for this bird? Children to discuss.</li><li>• Show an explanation of reasons why a disadvantageous characteristic is less likely to be inherited.</li><li>• Explain that today we will be finding out more about the advantageous characteristics of plants and animals living in unusual environments.</li></ul>			
Main Activity			
<u>Lower ability:</u>  Provide groups of children with one of the Environment Posters. They are then to research an organism that lives in this type of environment using books, internet etc. On worksheet 2A children are to answer questions about the environment they chose, draw their chosen organism and label some of its characteristics, giving reasons why they are advantageous.	<u>Middle ability:</u>  Provide groups of children with one of the Environment Posters. They are then to research an organism that lives in this type of environment using books, internet etc. On worksheet 2B children are to describe the environment, draw their chosen organism and label some of its characteristics, giving reasons why they are advantageous.	<u>Higher ability:</u>  Provide groups of children with one of the Environment Posters. They are then to research an organism that lives in this type of environment using books, internet etc. On worksheet 2A children are to draw their chosen organism and label some of its characteristics, then write a paragraph describing how those characteristics are advantageous, with reference to the conditions of the organism's environment.	
Fancy something different...?			
<ul style="list-style-type: none"><li>• Children are to study and compare the two organisms shown on the Advantageous Adaptations sheet.</li><li>• In the three columns below, they are to make lists of characteristics which are similar and different for the two organisms.</li><li>• Finally, children are to write a paragraph that answers the questions about the reasons for the differences in characteristics between the two organisms.</li><li>• EXTEND - Children could write a poem in two verses: the first describes the environment, the second describes an organism living in it.</li></ul>			
Plenary		Assessment Questions	
Show the Plenary slide with a photograph of an entrance to an underwater sea cave. Children are to imagine what it would be like inside the cave; write some describing words around the photograph. What sort of characteristics do you think would be advantageous for an organism living in this environment? Children to think, pair, share their ideas.		<ul style="list-style-type: none"><li>• Can children describe the conditions of an environment?</li><li>• Can children identify characteristics which help an organism to be well suited to its environment?</li><li>• Do children understand why different organisms in the same environment may have different characteristics?</li></ul>	