### Upper Key Stage 2: Adaptations

| Key Vocabulary  |   |
|-----------------|---|
| offspring       | An animal's young or a person's child.  |
| reproduction    | The production of offspring by a sexual or asexual process.   |
| vary            | To differ in size, amount, degree, or nature from something else of the same general class.                               |
| characteristics | A feature or quality belonging typically to a person, place, or thing and serving to identify them.                       |
| suited          | When something is right or appropriate for a particular purpose, or situation.  |
| adapted         | To alter or modify something to make it suitable for a new use or purpose   |
| environment     | The surroundings or conditions in which a person, animal, or plant lives.   |
| inherited       | A quality, characteristic, or predisposition that comes genetically from parents or ancestors.                            |
| Species         | A set of animals or plants in which the members have similar characteristics to each other and can breed with each other. |
| Fossils         | The shape of a bone, a shell, or a plant or animal that has been preserved in rock for a very long time.                  |
| habitat         | The natural environment in which an animal or plant usually lives.  |
| evolve          | To change or develop gradually.   |
| Behaviour       | The way in which an animal or person behaves in response to a particular situation.                                       |
| structure       | The way a person or animals body is made up, for example bone structure.  |

### What are adaptations?

- Adaptation is the process which enables organisms to adjust to their environment in order to ensure their survival.
- This process is sometimes referred to as the evolution of species.
- Adaptations often occur because of a genetic mutation.



#### **Mary Anning**

Mary Anning was a famous fossil hunter and collector. She found and identified many pre-historic fossils from the time of the dinosaurs and sold them to make money for her family.

Anning was not a trained scientist, but taught herself to read and write then read all about anatomy – her parents were too poor to send her to school. It was very unusual for women at this time to become 'proper' scientists.

She was one of the earliest fossil hunters to identify these prehistoric fossils, and she shared her specimens and impressive

knowledge about them with scientists at the time. She also recognised that the animals in her fossils were closly related to current animals.

Anning was born and grew up in Lyme Regis, on the south coast of England. This is an area with lots of fossils.



## The three types of adaptation

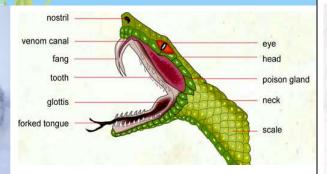
# Structural Physiological Adaptations Adaptations

Physical features of an organism tha Internal and/or cellular features of an organism that enable them to survive enable them to survive in their in their environment (e.g. snakes environment (e.g. a penguin has blubber to protect itself from freezin produce poisonous venom to ward off predators and to capture prey). temperatures).

· They have overlapped feathers that trap warm air to survive freezing conditions.



- · They are blubbery and low to ground so little air can circulate around them.
- Nasal passages minimize heat loss.



# Behavioural Adaptations

Actions of an organism that enable them to survive in their environment (e.g. bears hibernate in winter to escape the cold temperatures and preserve energy).

Winters are long and cold in Canada. This makes it very difficult for bears to find food.



If bears did not hibernate, they would starve.