Design a Species

Introduction

In order to survive, animals and plants show a range of different adaptations. Adaptation is a change in a species' biology, physiology or structure which makes it better suited to living in its environment. Depending on factors such as where it lives and whether it is a predator or prey, a species will require different adaptations to allow it to live successfully in its habitat.

What you need:

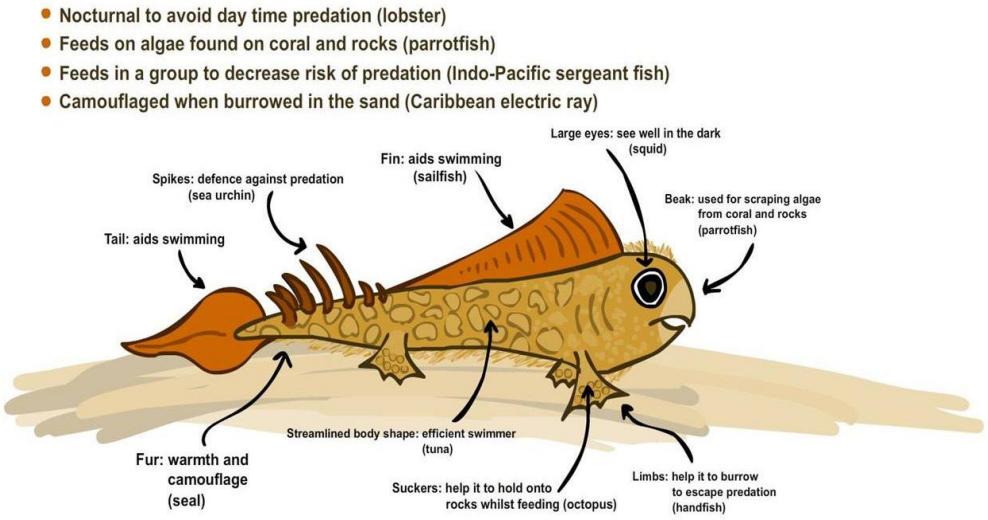
- Paper
- Pens and pencils
- ARKive website for inspiration!

What to do:

Thinking about different adaptations from the animal kingdom, get your child to design their own species and label the adaptations their species has. Here are a few things for your child to think about when designing their species:

- Is it going to be a predator or a prey species? Is it going to need to be able to hunt or hide?
- Is their species going to be camouflaged or brightly coloured?
- Where does their species live? Arctic? Desert? Ocean?
- How does it move? Does it swim, run or fly?
- Does it live with other members of the same species?
- How does it keep warm / cool? Does it have fur? Does it have large ears to help lose heat?
- Where does it live? Does it live in trees, underground or underwater?
- How big is it?

If you require some inspiration, here is an example of a prey species adapted to the marine environment, designed by the ARKive team:



Share your creations with us:

We would love to see the species you design. Tweet photos of your species to @**ARKive** or upload a photo to Facebook (https://www.facebook.com/ARKive.org) or Flickr (http://www.flickr.com/groups/arkive).

Happy drawing!

Still not sure where to begin? For some inspiration from the animal kingdom check out these real life adaptations!

Great white sharks are highly adapted predators. They have an excellent sense of smell to locate prey, are very efficient swimmers and have a mouth armed with sharp, serrated teeth.
http://www.arkive.org/great-white-shark/carcharodon-carcharias/image-G2550.html

As a prey species, the **pygmy seahorse** uses camouflage to hide from predators by blending in with the coral that it lives on.
http://www.arkive.org/pygmy-seahorse/hippocampus-bargibanti/image-G22469.html

The **camel** is well adapted to the desert environment in which it lives by being able to go for a week or more without water, having long eyelashes to keep sand out of its eyes and having wide feet to allow it to walk on sand without sinking in.
http://www.arkive.org/wild-bactrian-camel/camelus-ferus/image-G112951.html

Being the fastest land mammal, the **cheetah** has many adaptations which allow it to reach speeds of up to 65 miles per hour. These include large nostrils to allow greater amounts of air to enter the lungs when running, a long tail to provide extra balance when cornering and an extremely flexible spine so the cheetah can make long strides.
http://www.arkive.org/cheetah/acinonyx-jubatus/image-G113733.html

Adaptations can also be behavioural - the **Galapagos marine iguana** is cold blooded, and therefore relies on basking in the sun to generate enough heat to enable it to swim in the cold ocean and feed on algae. The Galapagos marine iguana basks on hot rocks in-between feeding bouts. http://www.arkive.org/galapagos-marine-iguana/amblyrhynchus-cristatus/

Having the densest coat of any mammal, as well as the ability to trap air bubbles between its fur and skin which acts as a good insulator, the **sea otter** is well adapted to keeping warm in the water.
http://www.arkive.org/sea-otter/enhydra-lutris/image-G113208.html