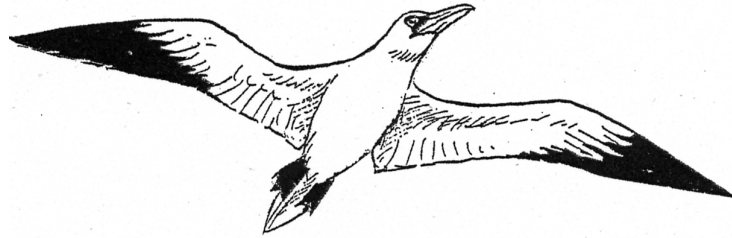


Gannet Adaptation

Although seabirds are similar in many ways they also show differences. These differences are called **adaptations**. They help the bird to live more successfully in its own particular environment. Adaptations may be to do with any aspect of a bird's lifestyle e.g. the way it feeds, moves, hunts or breeds.

Gannets provide a good example of this.



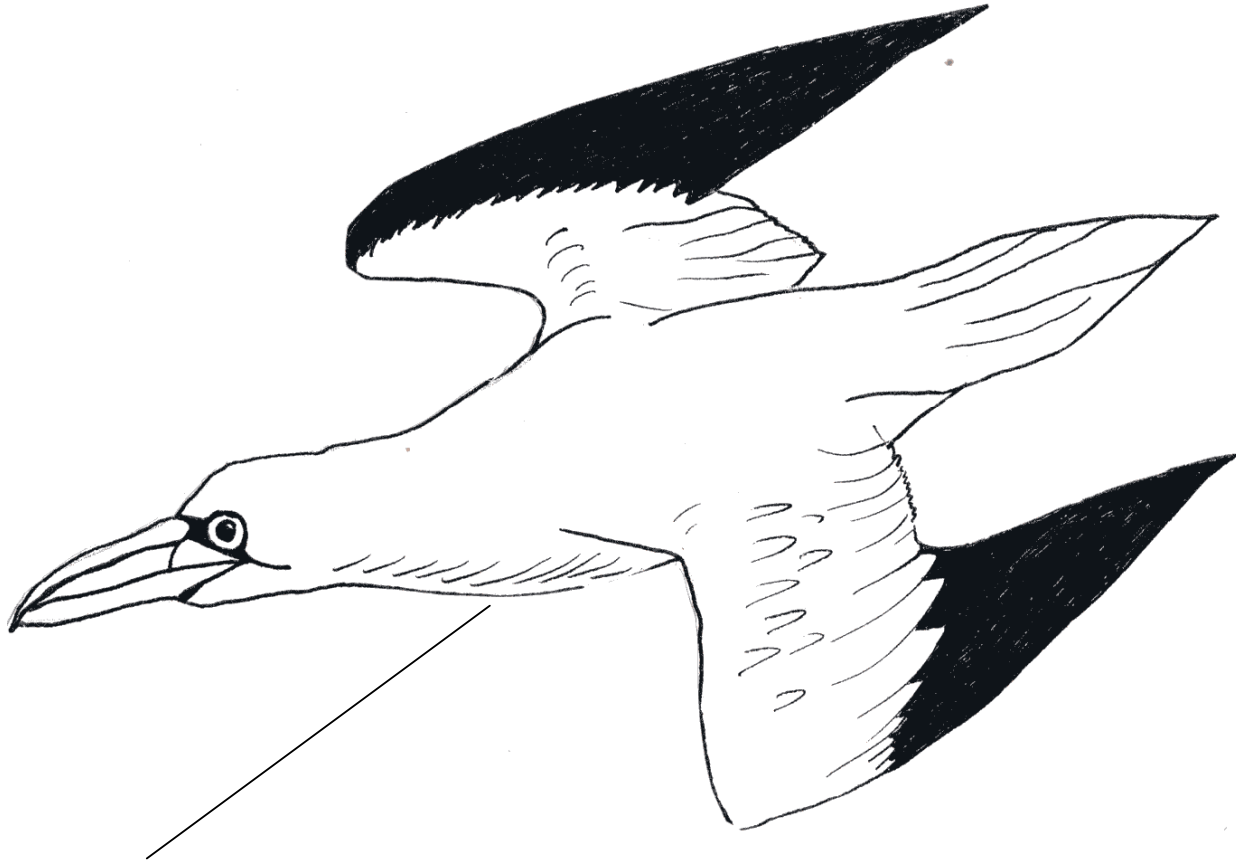
Read the information passage.

Underline the key words which tell you the ways in which the gannet has become adapted for its special way of life. Use these key words to **annotate** the picture. One has been done for you.

Colour the diagram on the Activity Sheet.

Gannets are our largest ocean-going birds. They are mainly dazzling white which makes it difficult for fish to see them against the sky. Gannets have long narrow wings for gliding and soaring at sea. Their torpedo shaped bodies and long tails make a streamlined shape for efficient movement. Their eyes point forwards and downwards to give them binocular vision for underwater fishing. They catch fish in their powerful saw-edged dagger like bills. Their nostrils are on the inside to allow them to plunge dive headfirst into the sea. Their heads are “cushioned” by air sacs to protect them as they hit the water.

Gannet adaptation



dazzling white belly for camouflage

Grey Seal Adaptation

Adaptations are changes which help an animal to live successfully in its own particular habitat. In a grey seal these adaptations are to do with the way that it moves, hunts, dives and keeps warm. Read the information in the passage below. Underline the key words that tell you how the grey seal has become adapted for its special way of life. Use the key words to annotate the picture. One has been done for you.



Seals are fin footed (pinnipeds). Their limbs have evolved into fins. The limb bones have become shortened so that the hands and feet project. Their toes have joined together with a membrane like a fin.

Seals have a thick layer of fat called blubber, which keeps them warm and also helps to give them their streamlined shape.

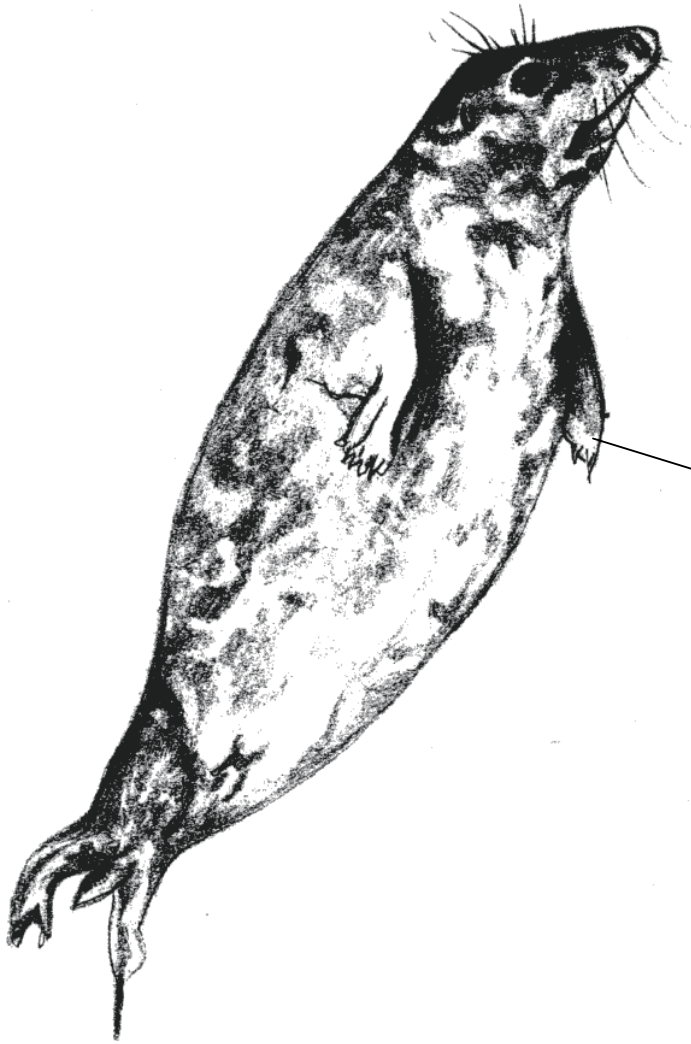
Although seals have a good sense of smell, this does not work well for them in water. Their nostrils are on top of the head for easy breathing and they can sleep with their noses sticking out of the water. This is called bottling. When seals dive the nostrils are closed. They have special muscles which allow them to do this.

Unlike sea-lions, grey seals do not have ear flaps. Their ears just look like holes on the side of the head.

Grey seals have sensitive whiskers called “vibrissae” on either side of their nose, above their nose, and above their eyes. These are thought to detect movements of fish in the water.

The eyes of grey seals are especially adapted to a watery lifestyle. They are large and have a flat front surface, which helps them to focus well under water. The pupils are particularly large when under water to allow as much light as possible into the eyes. This helps them to see better. The salty seawater does not irritate the eyes because these are protected by a third eyelid, which wipes sand away. Seals also continually make tears. It is thought that grey seals may use echo location to find fish when the water is too dark or murky for them to see properly.

Grey Seal Adaptation



**limbs have evolved
into flippers**