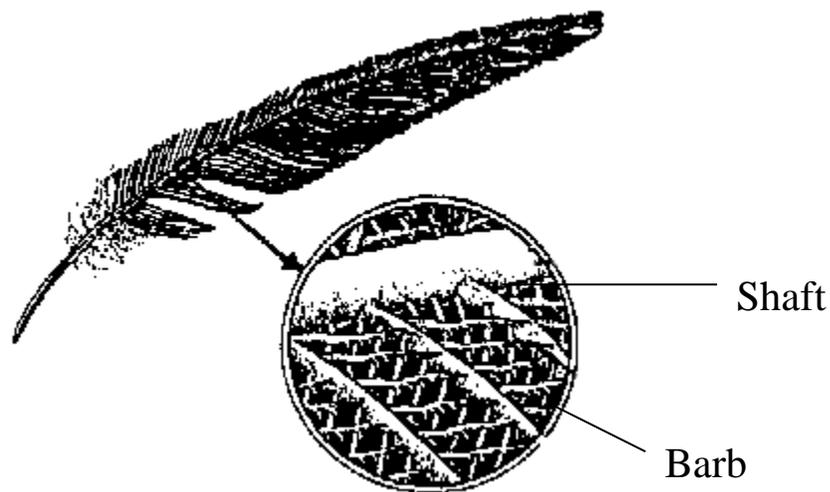


FEATHERS



Structure of a Feather

A bird's feathers consist of a central shaft with a series of parallel barbs coming from the shaft. The barbs and the hooks on the barbs allow the feather to stay in shape. They work like a zip.

What distinguishes birds from all other animals is that they have feathers. The main functions of feathers are:

- Flight
- Warmth (conserving heat)
- Water proofing
- Camouflage
- Display

Feathers come in many varieties but they can all be put into different groups. The four main groups of feathers are:



Down



Flight feather



Contour feather



Semiplume

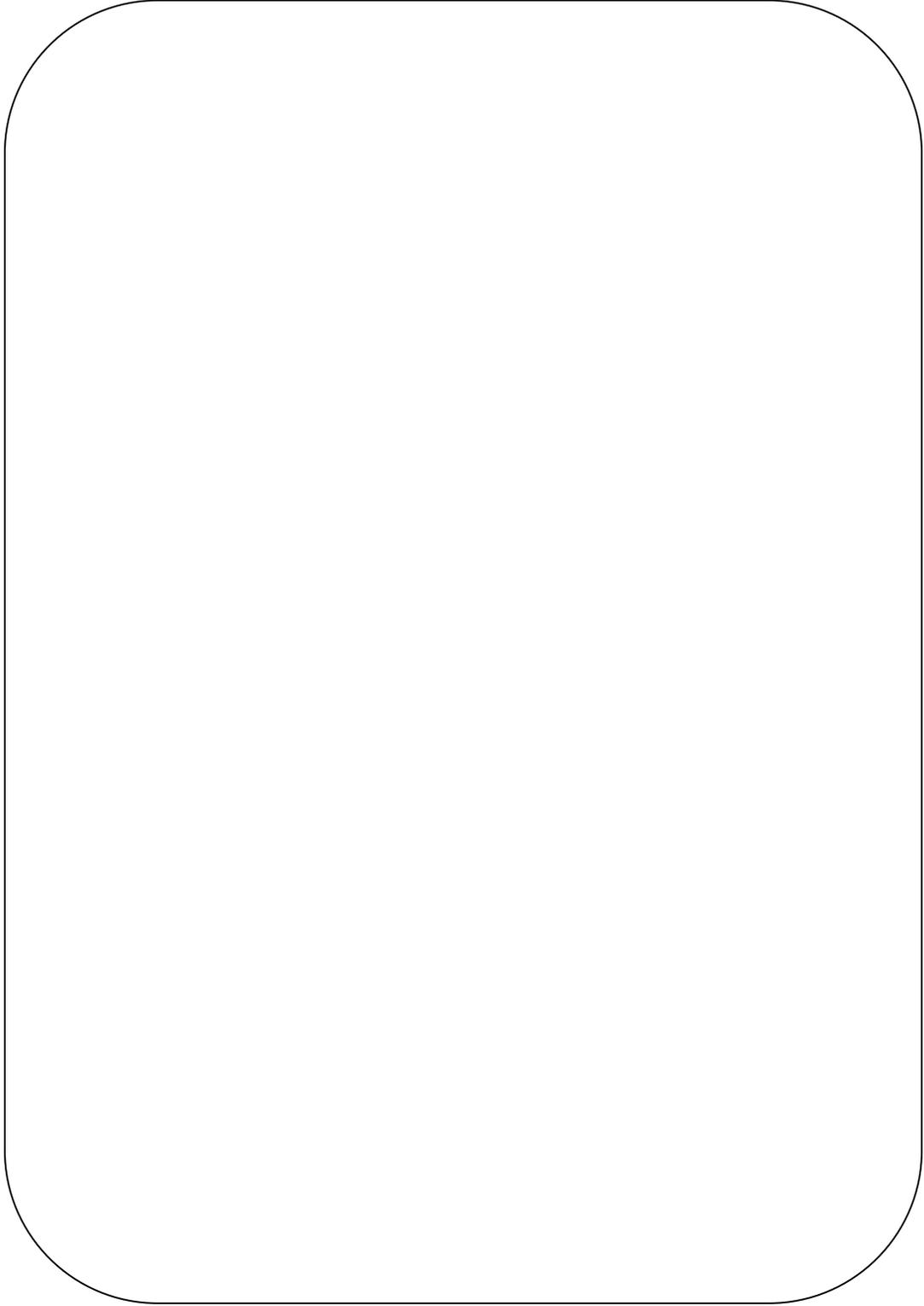
Find as many different kinds of feathers as you can on the ground at Nga Manu. Decide which groups your feathers belong to. Stick your feathers in the box and put the name of the group they belong to next to each feather.

Take a flight feather.

Feel the sleekness of it. Separate the barbs, zipper them together again by running them through your fingertips, This is what a bird does when it preens itself with its bill.

Look at your feather with a magnifying glass or microscope, see if you can see the hooks and barbs.

FEATHERS



To protect feathers from wearing or falling out, birds give them constant care. Most birds have oil glands at the bases of their tails and preen themselves by smearing the oil over their feathers with their beak.

Can you see any of the birds at the reserve preening?

Draw a picture of a bird preening in the box below.



Birds must renew their coats at least once a year. This is called moulting. This is usually done gradually so that the birds are still able to fly and are still protected from the cold.

Name: _____