## Animal Classification

## A collaborative sorting activity for Key stages 2 \& 3



Teachers' notes

## Contents

- Animal Cards: 8 Pictures per card ( $54+2$ blanks)
- Alphabetical list of pictured animals
-Group cards: VERTEBRATE/INVERTEBRATE
Group cards: FISH, AMPHIBIA, REPTILES, BIRDS, MAMMALS
- Features.
- Instruction sheet - one per group
- Vertebrate Key.
- Classification table and sample paragraph
- Further paragraphs about each of the animal groups for pupils to complete and


## Preparation

## Sorting Exercise

For each aroup of students (3-5) copy:

- Pages10-16 (animal pictures)
- Page 3 (group headings)
- Page 4 (features)
- Page 1 (instruction sheet)
- Page 2 (vertebrate key sheet)
- Page 9 (alphabetical animal list)


## Classification table

- Page 5 One per pupil
- Pages 6,7, and 8. Further paragraphs to copy and complete - one for each pupil who needs structured support in writing.
This pack has been produced to provide a flexible approach to animal classification. By providing a wide range of animal pictures, students can try sorting according to their own criteria before engaging in more formal classification. This gives the opportunity to discuss dilemmas which arise in using criteria such as live in water/live on land or fly/do not fly. Teachers can decide whether to commence with students doing the sorting exercise in groups and then deducing the features for each of the major groups of vertebrates, or to start with a more formal consideration of the features of each animal group, filling out the tick-table and then proceeding to the sorting exercise. The written paragraphs are considered consolidation exercises. The group and individual projects are suggested to provide a variety of activities for both class and homework.
This pack has been designed to be used as a free-standing pack or to support activities in the Oxford Science Programme.


## Animal Groups - sorting exercise

## What you have to do*

- Work in groups of 3, 4, or 5 .
- Share the animal cards out.
- Place the VERTEBRATE/INVERTEBRATE cards at the top of the table.
- Under the VERTEBRATE heading place the 5 vertebrate groups: FISH, AMPHIBIA, REPTILES, BIRDS, and MAMMALS.
- Take turns to place a card in a group. Make sure that everyone in your group agrees. If there is any disagreement about a card, put the card on a 'Dispute' pile.
- Continue placing the cards in the groups until all the known cards are placed.
- Now place all the 'FEATURES' cards for each group. (Some features are correct for more than one group). Make sure that all the cards in the group fit in with the features.
- Go through the 'Dispute' pile again, checking each animal against the Features of each group.
Use the key on the following page to help you decide which group to put the animal into.
* [Note for teachers - it is useful to print the various cards in different coloured card e.g.

Vertebrate/Invertebrate - red, Vertebrate group headings - yellow, Features - beige] Group Project
As a group find a way to show information about the features of the five different vertebrate groups to some children who have not yet learned about animal classification. You could choose an example of an animal from each group and find out all about that animal.
You can make a poster or a large book. Be prepared to show and talk about your finished work to other groups.

## Individual Project

Choose an animal card and find out all about that animal: where it lives, which country does it come from, what kind of environment it prefers, what it eats, life cycle, how it lives - on its own, in pairs, or in packs. Write as much as you can.

Use the key below to help you decide which group to put the animal into.

Does it have a backbone at any stage in its life cycle?


Try making your own key by asking different questions.

## Vertebrate

## Invertebrates

## Mammals Fish

## Reptiles <br> Birds

## Amphibians

Features (some features have been repeated because they apply to more than one animal group). lays eggs in water have babies
lay eggs in water hair or fur
lay eggs on land or in a nest damp skin
lay eggs on land or in a nest gills fins
feeds babies with milk lungs lungs
steady body temperature lungs lungs steady body temperature scales scales

## Groups of Animals - Classification

## Animals without backbones - Invertebrates

Animals with backbones - Vertebrates
Vertebrate Groups

| FEATURE | FISH | AMPHIBIANS | REPTILES | BIRDS | MAMMALS |
| :--- | :--- | :--- | :--- | :--- | :--- |
| backbone |  |  |  |  |  |
| fins |  |  |  |  |  |
| scales |  |  |  |  |  |
| lay eggs in water |  |  |  |  |  |
| lay eggs on land or in a nest |  |  |  |  |  |
| have live babies |  |  |  |  |  |
| hair/fur |  |  |  |  |  |
| damp skin |  |  |  |  |  |
| feathers |  |  |  |  |  |
| mammary glands - feed young with milk |  |  |  |  |  |
| gills |  |  |  |  |  |
| lungs |  |  |  |  |  |
| have steady body temperature, "warm blood" |  |  |  |  |  |

Use the table above to help you write paragraphs in your books about each group of vertebrate animals. e.g. FISH

Fish have a backbone, $\qquad$ and

They $\qquad$ eggs in $\qquad$
They live in $\qquad$ and use $\qquad$ to get oxygen from the water.

They do not have a $\qquad$
$\qquad$ temperature.

Examples of fish: $\qquad$ ,

Now write paragraphs about Amphibians, Reptiles, Birds and Mammals. Include as much information as you can.

Copy these sentences into your book and fill the gaps from the information in the table


## AMPHIBIANS

Amphibians have a $\qquad$ .

They $\qquad$ eggs in $\qquad$ . During their life cycle they change from a stage when they live entirely in water to a stage when they can live in
$\qquad$ . They do not have a $\qquad$
$\ldots$ temperature.
Examples: $\qquad$ ,
$\qquad$

Copy these sentences into your book and fill the gaps from the information in the table


## Reptiles

Reptiles have a $\qquad$ They have a
skin. They lay eggs $\qquad$ .

They have $\qquad$ to breathe but they do not have a
$\qquad$
Examples: $\qquad$
$\qquad$ ,

Copy these sentences into your book and fill the gaps from the information in the table


## Birds

Birds have a $\qquad$ They have

They $\qquad$ eggs in a $\qquad$ .

The eggs have a * shell.

They have a $\qquad$ —_
temperature.
*hard / sof $\dagger$
Examples: $\qquad$
$\qquad$

## Copy these sentences into your book and fill the gaps from the information in the table <br> 

.Mammals
Mammals have a $\qquad$ .

They have $\qquad$ or fur on their bodies.

They have live $\qquad$ and feed their babies with

They use $\qquad$ to breathe.

They have 'warm blood' which means they have a
temperature.
Examples: $\qquad$

## Animal Cards

| alligator |
| :--- |
| ant |
| bat |
| bear |
| beetle |
| butterfly |
| camel |
| caterpillar |
| centipede |
| chameleon |
| chicken |
| cow |
| deer |
| duck |
| eagle |
| eel |
| fly |
| frog |
| giraffe |
| gorilla |
| hedgehog |


| herring |
| :---: |
| jellyfish |
| kangaroo |
| koala bear |
| lion |
| lobster |
| locust |
| monkey |
| new $\dagger$ |
| ostrich |
| owl |
| pelican |
| penguin |
| plaice |
| prawn |
| rabbit |
| rat |
| rhinoceros |
| robin |
| sea anemone |
| seal |


| snail |
| :--- |
| snake |
| spider |
| spiny fish |
| squirrel |
| starfish |
| tadpoles |
| tiger |
| turtle |
| whale |
| wolf |
| worm |









