

Primary 4-5 Level B

Vertebrates



Aim

The aim of this topic is to give students the knowledge and skills to differentiate between members of the same vertebrate group

Attainment Targets

Variety and Characteristics features:

To be able to give some of the more obvious distinguishing external features of the five vertebrate groups.

To be able to give named examples of members of the same vertebrate group.

Teachers Notes

This topic may also serve to introduce the fact that the word animal not only applies to members of the mammal vertebrate group but to all members of the vertebrate subphylum and the invertebrates.

Vertebrates are grouped into 5 classes based on features of their body structure, mode of reproduction and internal physiology. Young students should be able to sort vertebrates into the 5 classes based on easily observable features like skin covering, type of limb and habitat. As the park only contains Mammals and Birds at present, the tasks will focus on distinguishing between and within these two groups.

A useful mnemonic to remember these groups and their evolutionary order is

FARM Birds.

Fish

- live in water
- breathe with gills
- have skin covered with scales
- have fins
- lay soft eggs
- Are cold-blooded.

Amphibians

- the young live in water, adults live on land
- the young breathe with gills, adults breathe with lungs
- have moist, scale-less skin
- have 4 legs
- lay soft eggs
- Are cold-blooded.

Reptiles

- mainly live on the land
- breathe with lungs
- have scaly skin
- have 4 limbs or no limbs (snakes)
- lay eggs with leathery shells
- Are cold-blooded.

Mammals

- mainly live on land
- breathe with lungs
- have fur or hair covering their body
- most have 4 legs, or 2 legs and 2 arms
- give birth to live young (monotremes are an exception)
- Feed their young on milk produced by mammary glands
- Are warm-blooded.

Birds

- live on the land
- breathe with lungs
- have feathers covering their body
- have 2 legs and 2 wings
- most can fly
- lay eggs with hard shells
- Are warm-blooded.



Vertebrates

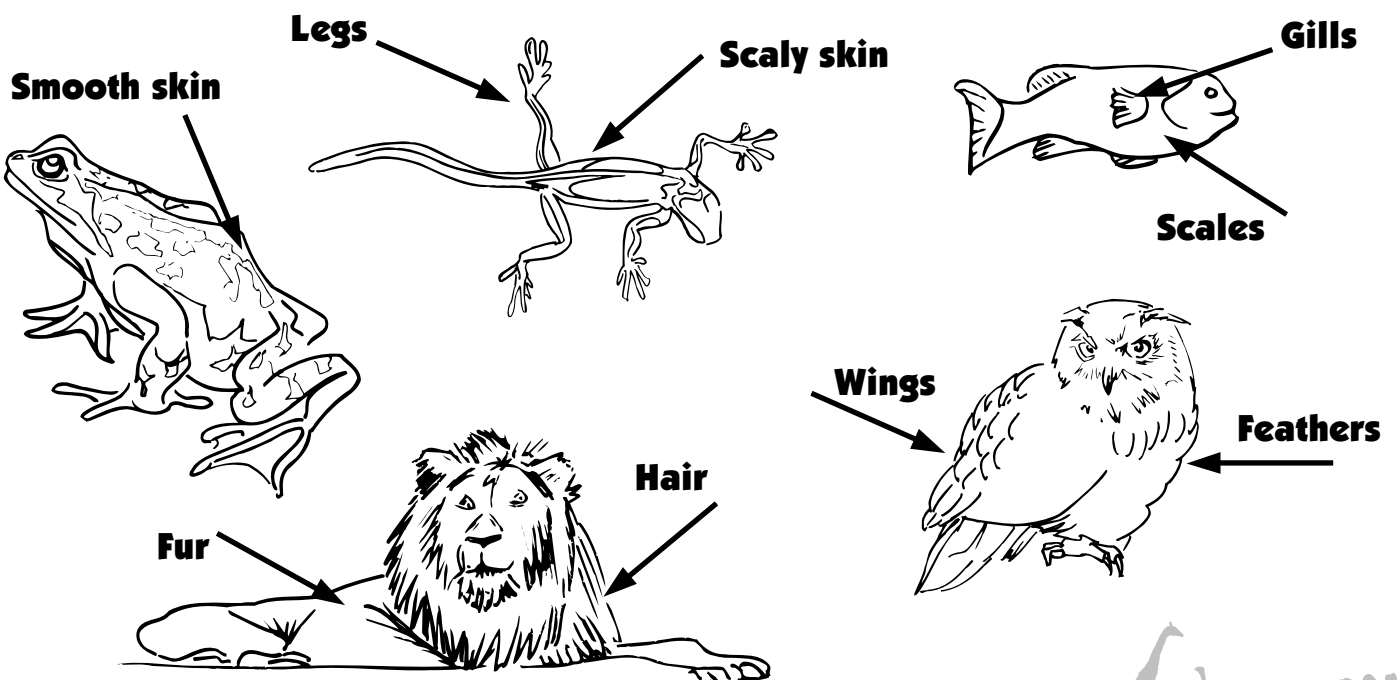


Task 1 - Word search

The five vertebrate groups are Fish, Amphibians, Reptiles, Mammals and Birds. On the pictures below there are arrows pointing out things on the animals that make them different.

See how many of the words you can find in the word search.

T F U R B N S P G I L L S O H L P W
 S D W L I G D P L S D D M V D E M I
 C B F F N T M Y T F Y D A M P G V D
 A L N I R D P T C M Y O Z C T S A P
 C L W B B S C A L Y S K I N C T Z F
 E N P S O B R T H A G D M T M K H D
 S F G F E A T H E R S Z G Z Y C A C
 L A F P D P R K Y L O D F D Z R I K
 S V M S R K S M O O T H S K I N R R



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Task 2 - Is it a Bird or a Mammal

Below is a list of animals that are either a member of the Bird group or Mammal group. When you are in the Safari park and you see the animal put a tick in the box for which group you think it might belong to. Remember that some mammals might have short or long hair and some birds can be very large.

Animal	Bird Group	Mammal Group
Camel		
Rhea		
Lion		
Tiger		
Snowy Owl		
Ostrich		
Ferret		
Bison		
Kestrel		
Sheep		
Bear		
Penguin		
Barn Owl		
Otter		
Cimpanzee		
Lemur		
Common Buzzard		

