## Lesson 1:

# **Animal Kingdom**

Scientists divided animals into two large groups:

- 1) Vertebrates:-
  - Animals with backbone (vertebral column)
- 2) Invertebrates:-
  - Animals without backbone.

## Vertebrate animals:

Scientists divide this group into smaller groups with different characters:

- 1)Mammals. 2)Birds.
- 3) Amphibians. 4) Fish.
- 5) Reptiles.

## 1) Mammals:

- a- body covered with hair.
- b- they give birth to live offspring.
- c- they feed their young on milk.
- Examples :- man rat giraffe whale bat

#### 2) Birds:

- a- have feathers.
- b- lay hard shelled eggs.
- Example: owl penguin ostrich swan.

## 3) Amphibians:

- a- have moist skin.
- b- lay jelly-coated eggs in water.
- c- they live part of their lives in water and part on land.

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Examples:- frogs – toads – newts
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#### 4) Fish:

- a- have wet scales.
- b- lay eggs in water.
- c- they breathe by gills.
- Examples:- all kinds of fish{ salmon trout }

## 5) Reptiles:

- a- have dry scales.
- b- lay leathery shelled eggs.

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Examples:- snakes – turtles – lizards – crocodiles
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#### **Questions:**

- 1- What have vertebrates in common?
- 2- Which group or groups of vertebrates don't lay eggs?
- 3- Which features are the same in birds and reptiles, and which are different?
- 4- What are the main differences between mammals and reptiles?
- 5- How amphibians are different from reptiles and fish?

## Lesson 2

## **Invertebrate animals:**

- Invertebrate animals have no backbone
- They are divided into small groups:

## 1) Molluscs:-

- Have soft bodies.
- Most of them have shells.
- Crawl on a large fleshy pad and feed with it.
- Examples:- snails slugs octopuses oysters

## 2) Worms:-

- Animals with a tube –like body.
- They are divided into:-
- a) flat worms :-
- Have flat thin body .
- No segments.
- Examples:- tape worm planaria.
- b) round worms:-
- Round body.
- No segments.
- Examples:- pin worm.
- c) annelids:-
- Have round bodies.
- With segments.
- Examples:- earthworm leeches

#### 3) Echinoderms:-

- The body is divided into 5 parts(arms).
- Outer hard spiny covering.

Examples:- star fish – brittle star – sea urchin.

# 4) Cnidarians:-

- Have thin sac-like bodies.
- Have tentacles with stinging cells.

Examples:- jelly fish – hydra