

## Lesson 1



# WHAT HAPPENED TO DINOSAURS?

**Lesson objectives:** to acquaint pupils with one of the climate crisis in history that caused the extinction of dinosaurs 66 million years ago; to improve pupils' understanding of the conditions which are favourable to support life.

**Terms:** meteorite, fossil, palaeontologist.

**Materials required for the eco workshop:** toilet paper rolls or macaroni



## 2. Information (Audio/text)

2 min.



**Learning objective:** to provide information and enhance pupils' knowledge of dinosaurs.

### ACTIVITIES

**Teacher:** coordinates activity

**Pupils:** listen to the information about the dinosaurs.

**On the screen:** animations showing the life of dinosaurs.

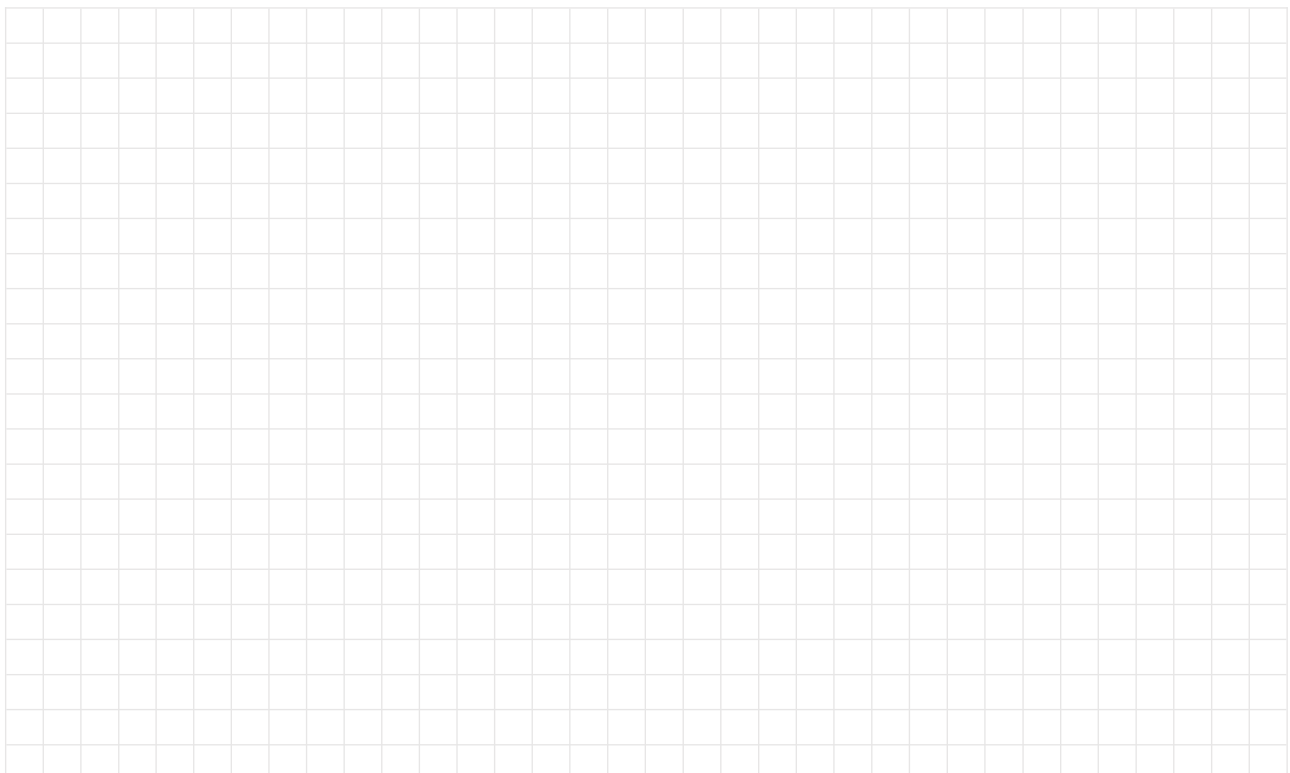
Millions of years ago dinosaurs ruled on planet Earth. Dinosaurs were similar to reptiles that live up to this day – snakes, lizards and crocodiles.

Little baby dinosaurs hatched from eggs. The eggs were different in shape and size, and all of them had a hard shell to keep the babies safe during growth until they hatch. Although people imagine dinosaurs as huge monsters, in reality not all of them were predators. Some, like the tyrannosaurus, were large and furious, while others were very small. Besides, the biggest dinosaurs were herbivores.

Dinosaurs perished long before man appeared on Earth. The extinction of dinosaurs is one of the world's greatest mysteries.

The animals, that managed to survive, are crocodiles, lizards, snakes and insects.

Notes: \_\_\_\_\_







## 6. Discussion

3 min.



**Learning objective:** to create new ideas, to express and justify opinion, to hear out the opinions of others.

### ACTIVITIES

**Teacher:** leads discussion.

**Pupils:** express opinions.

**On the screen:** questions and an image.

- How did people find out that dinosaurs had lived?
- What told people about dinosaurs?

## 7. Interactive task

2 min.



**Learning objective:** to develop an understanding of fossil formation and the work of a palaeontologist.

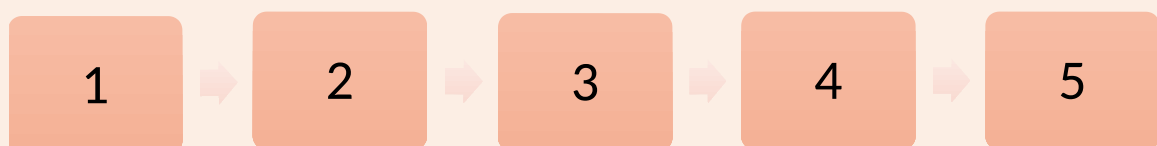
### ACTIVITIES

**Teacher:** coordinates activity.

**Pupils:** arrange the time zone in the correct order and explain, in conclusion listen to the audio information.

**On the screen:** a time zone with 5 blank windows and 5 images (dinosaur / dinosaur skeleton / dinosaur fossil / researcher digs up a fossil / fossil). **Each of the 5 images has to be dragged into the correct window.**

1. Fossils form over many thousands of years. The process begins when an animal dies.
2. The flesh and skin gradually decay and the bones remain. The remains are covered by sand or mud.
3. Years go by and the sand or mud turns into stone. It leaves an imprint of the animal. That is a fossil.
4. The researchers of dinosaur fossils are called palaeontologists. They carefully remove the layer of stone and sand from the fossil.
5. The fossil is taken to the museum after digging it out. It is sometimes possible to assemble the whole skeleton of a dinosaur.



## 8. Interactive task – puzzle

5 min.



**Learning objective:** to strengthen the knowledge of fossils and the work of a palaeontologist.

### ACTIVITIES

**Teacher:** coordinates activity.

**Pupils:** assemble a skeleton from several parts.

**On the screen:** three options (levels of difficulty) where a whole skeleton has to be assembled from various amounts of dinosaur bones.

## 9. Interactive task – test

5 min.



**Learning objective:** to test the pupils' knowledge and understanding.

### ACTIVITIES

**Teacher:** coordinates activity, gives feedback to pupils.

**Pupils:** carry out a test individually or in a group.

**On the screen:**

1. Why did dinosaurs disappear?
  - Other animals ate all dinosaur eggs.
  - Weather conditions changed, it became too cold.**
  - Other animals prevailed over dinosaurs.
  - Weather conditions changed, it became too hot..
2. How did people find out that dinosaurs had lived?
  - Ancient people drew dinosaurs on cave walls.
  - Scientists found dinosaur imprints in stone – fossils.**
  - There is no believable evidence of dinosaurs.
  - Ancient photos showing dinosaurs were found.
3. What animals have been able to survive to this day?
  - Crocodiles, lizards, spiders.**
  - Small dinosaurs.
  - Aquatic dinosaurs.
  - Some little dinosaurs–herbivores.
4. What is mainly required for the life of humans and animals? Choose 4 most important things!  
Computer, sunlight, air, toys, water, transport, food, mobile phone.

## 10. Eco workshop

10 min.



**Learning objectives:** to get to know the principle of a green lifestyle – give things a second life; to develop co-operation skills by working in a group.

### ACTIVITIES

**Teacher:** coordinates activity.

**Pupils:** divide into groups and work according to the given example.

**On the screen:** assemble dinosaur skeleton models out of toilet paper rolls (or macaroni)!

The first group creates the skeleton of a diplodocus.

The second group creates the skeleton of a parasaurolophus.

The third group creates the skeleton of a tyrannasaurus.

**Materials required for the activity:** toilet paper rolls or macaroni

## 11. Discussion with an interactive task – 5-10 min. bridging task



**Learning objective:** to improve pupils' knowledge about what kinds of natural environment are favourable to life.

### ACTIVITIES

**Teacher:** coordinates activity.

**Pupils:** listen to the audio information, answer the questions and do the interactive task.

Dinosaurs died out millions of years ago, because the climate became too cold due to rapid weather condition changes. However, the lizards living nowadays can be considered the relatives of dinosaurs. The sand lizard lives in our area. Have you seen one?

**On the screen:**

- 1) An image of the sand lizard.
- 2) What habitats are suitable for the sand lizard?
- 3) Images and two emoticons – smiley and sad. The smiley face ☺ has to be put in the images that show a favourable environment for the sand lizard, the sad face ☹ has to be put in the images that show an unfavourable environment for the sand lizard.  
Favourable environment for the sand lizard – forest, rock garden, sea dunes.  
Unfavourable environment for the sand lizard – ocean, glaciers, rainforest.



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