Unit 3: Change the Environment

Unit 3 Change the Environment

Lesson 1: Fossils

Week 2: 8 – 12 January 2024

Day 1

Gr. 3

1

2

3

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6

Lesson Activities

7

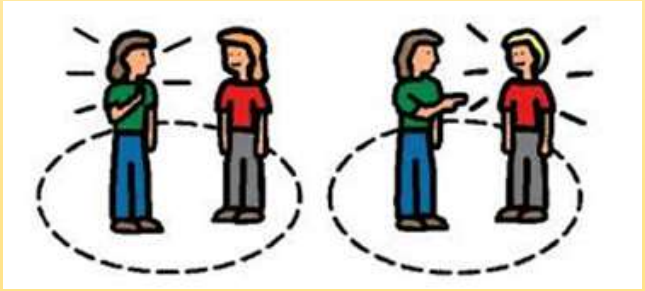
Grade 3 Science Classroom Rules

Keep your class clean.

Stay in your seat.

Listen to your teacher.

Raise your hand to ask or share.



Don't talk when others are talking.

Bathroom between periods or during break.

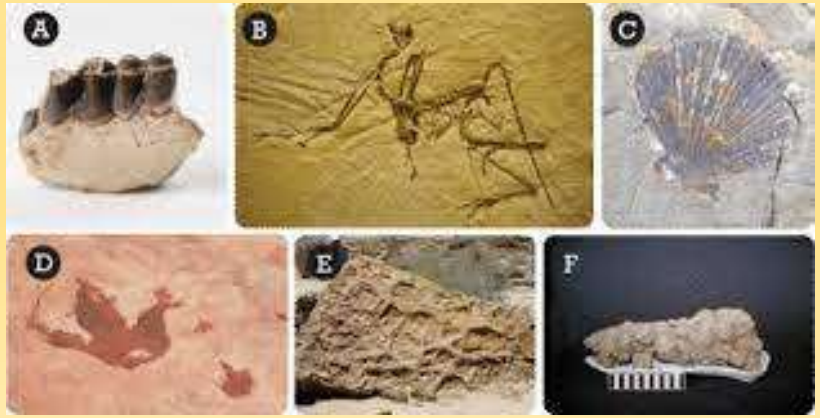
environment

extinct

exist

preserve

remains



layers

Writing

08-01-2024

Vocabulary: Lesson 1, Fossils

1. Environment
2. Fossils
3. Exist
4. Extinct
5. Preserve
6. Remains
7. Layers

Outcomes

By the end of the lesson, I will know how fossils tell us about changes that happened over many years on Earth.

Learning Question

How do we learn about Earth's History?

Explain and Describe


LEARNING
JUNCTION

What Fossils Tell Us

Earth is about 4.5 billion years old. People have lived on Earth only a small part of that time. Scientists learn about Earth's past by studying fossils.

We know about organisms that lived long ago because of the fossil record. Mammoths are examples of such animals. No one has ever seen a mammoth, but we know about them because people have studied their fossils.

This photo shows a fossil of a mammoth. From their fossils, scientists know they were large mammals.

Changes in Living Things

The fossil record shows that the kinds of things on Earth have changed over time. Early in Earth's history, many fish swam in the oceans. There were few animals on land. Later, many species of fish became extinct. **Extinction** is when there is no more of an organism's kind left on Earth.

Evidence of Earth's Changes

Looking at fossils also tells us about how Earth's environment has changed over time. Today, Antarctica is a cold place. It is covered in snow and ice. Scientists have found fossils of leaves and wood there. These fossils tell scientists that Antarctica was once a warm, wet area.

Scientists use details they find from fossils to piece together the story of Earth's past. From each new fossil found in Earth's surface, we learn a little more about our planet's history.

This coral once lived in a warm sea. Over millions of years, the area has changed to dry land in the center of the continent.

Closure

True or False

1. Earth is about 4.5 billion years old.
2. Camels are EXTINCT animals.
3. We know about animals that lived long ago because of fossil records.

Unit 3 Change the Environment

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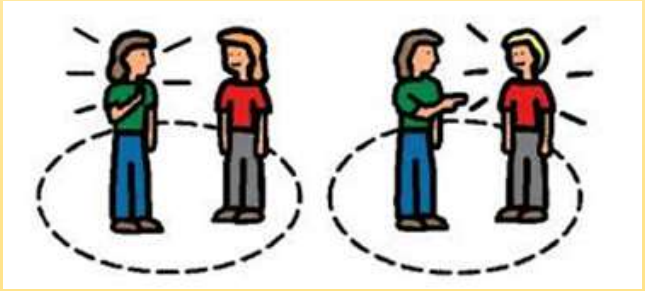

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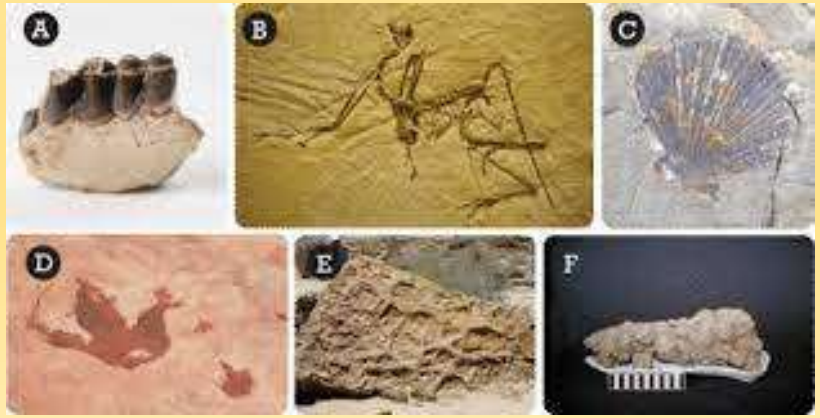


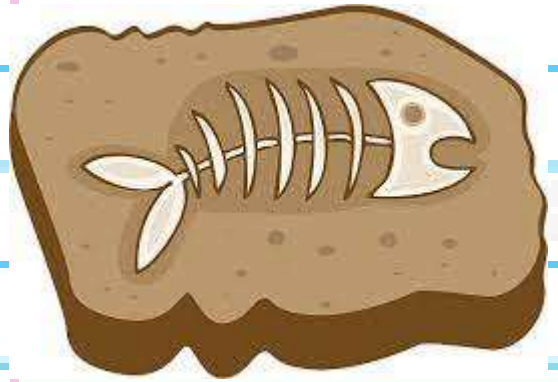
layers

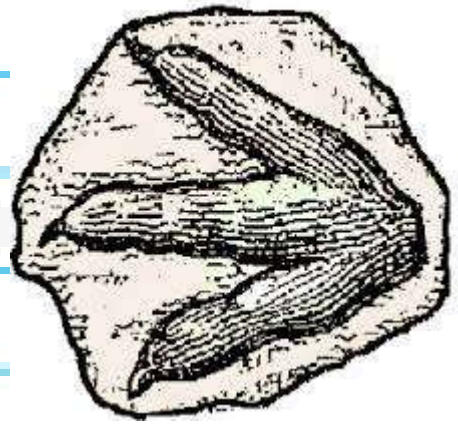
Writing

9-01-2024

Vocabulary: Lesson 1, Fossils

Remains
Left over parts of an organism.





By the end of the lesson, I will understand that older fossils are found in deeper layers of the Earth.

Learning Question

What information about an organism can you get from a fossil dig?

Analyze

Fossil Dig

Closure

Choose the correct answer.

How do you know which fossils are older?

A. Older fossils are in the top layer of Earth.

B. Older fossils are in the deepest layer of Earth.

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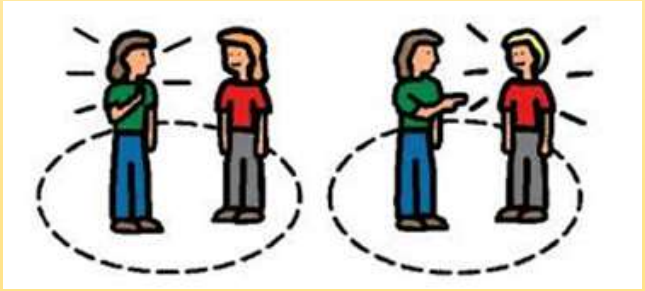

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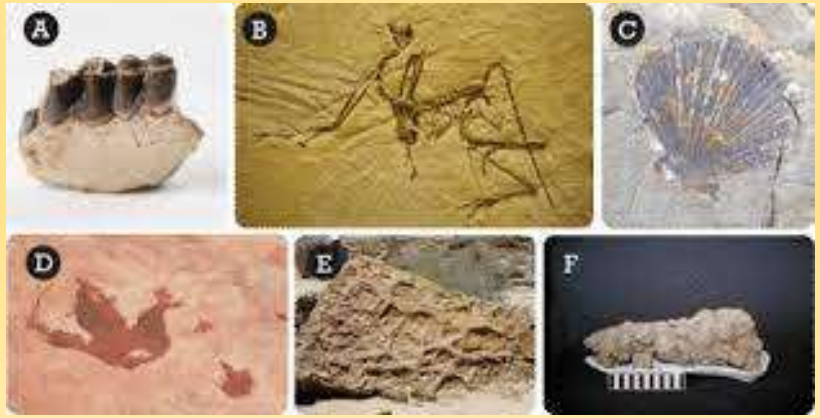


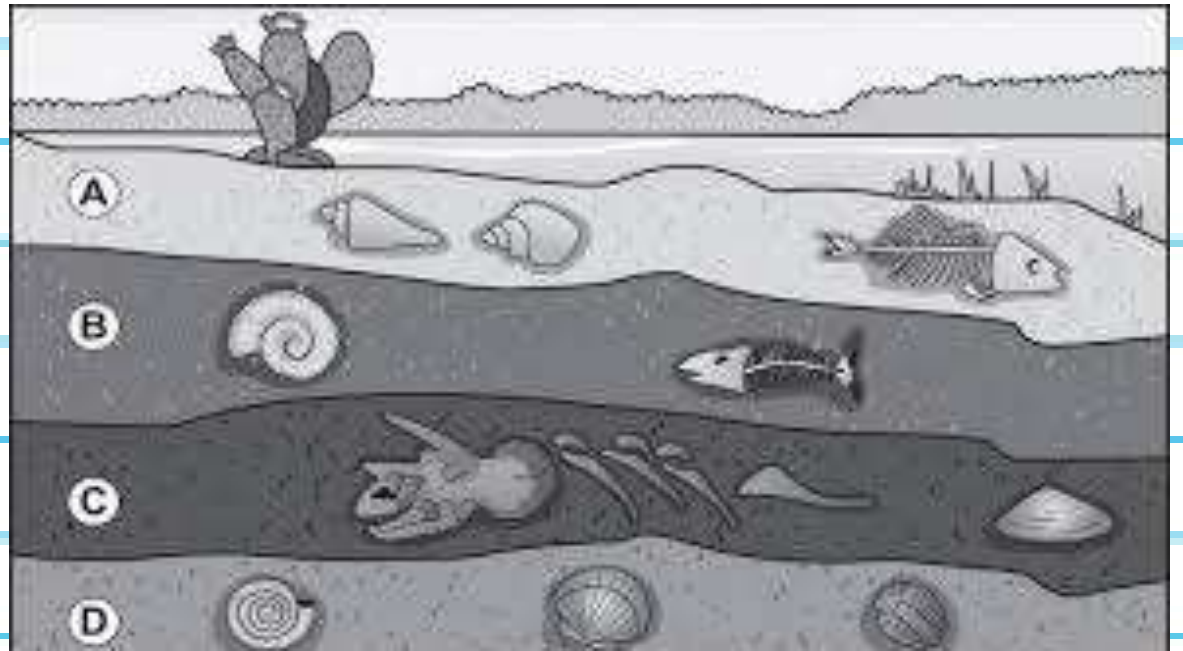
layers

Writing

10-01-2024

Vocabulary: Lesson 1, Fossils

Layers
Rock and soil that form on top of each other over a long time.



By the end of the lesson, I will understand that fossils can tell us about the history of Earth.

Learning Question

What do fossils tell us?

Record data

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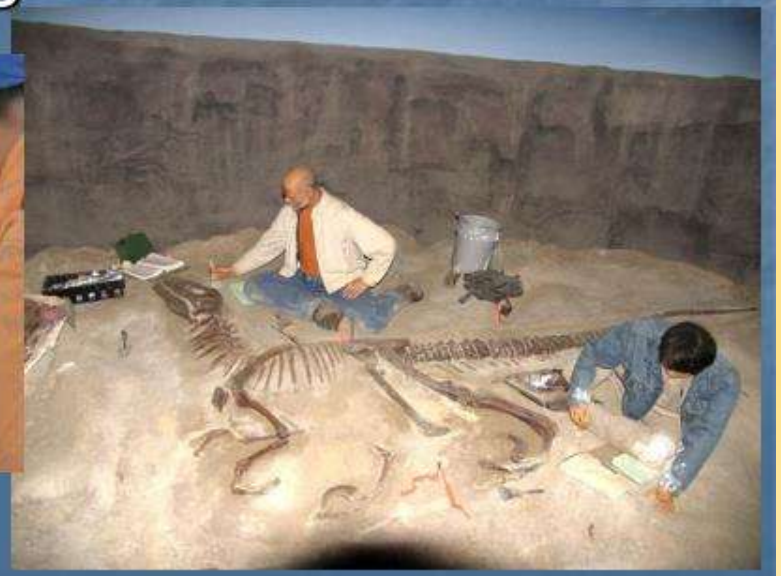
What Can Fossils Tell Us?

- Fossils can show scientists 3 main things:
  1) The kind of organism that lived in the past
  2) How the environment has changed (ex: forest fossils found in Antarctica show the climate was much warmer in the past)
  3) How organisms have changed



1. The kind of organism

Plants

1. The kind of organism

Animals

Insects

Fish or other animals that lived in water.

How do we know they lived in water?

They have fins and gills

Birds

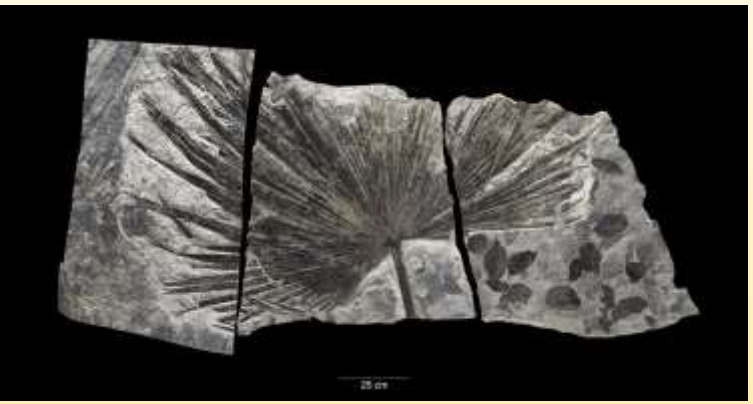
Animals that eat plants only.

Animals that eat meat or other animals.

Which parts of the body tells us this fossil is a bird?

What can we look at to see if the animal ate mostly plants or meat?

2. How the environment changed



Many types of warm-climate plants, including palms and ferns, grew in places too cold for them now.

Scientists found evidence of very old plant fossils that used to grow in places like Alaska and the Arctic.

These fossils tell them how the climate on Earth might have changed over millions of years.

Millions of years ago

Now

3. How organisms have changed.

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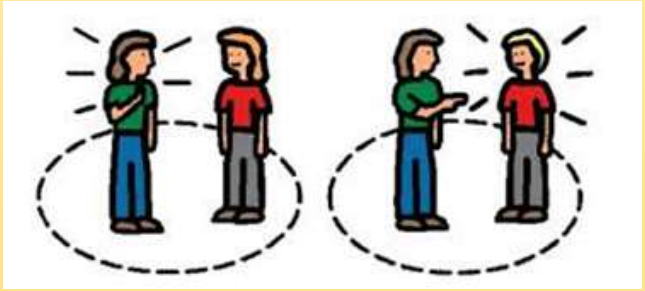

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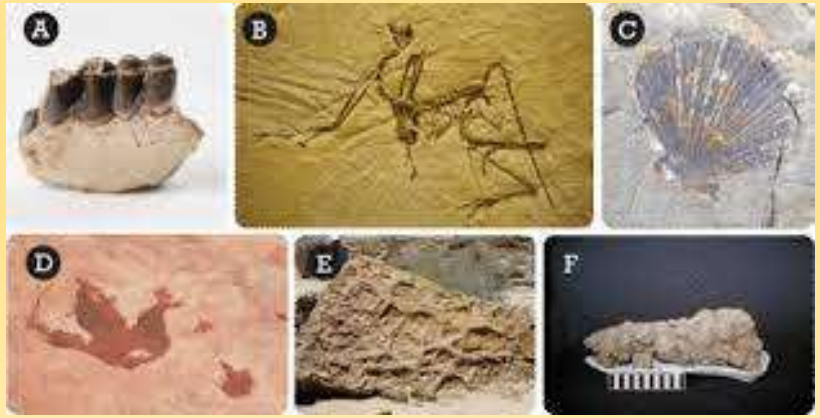


layers

Outcomes

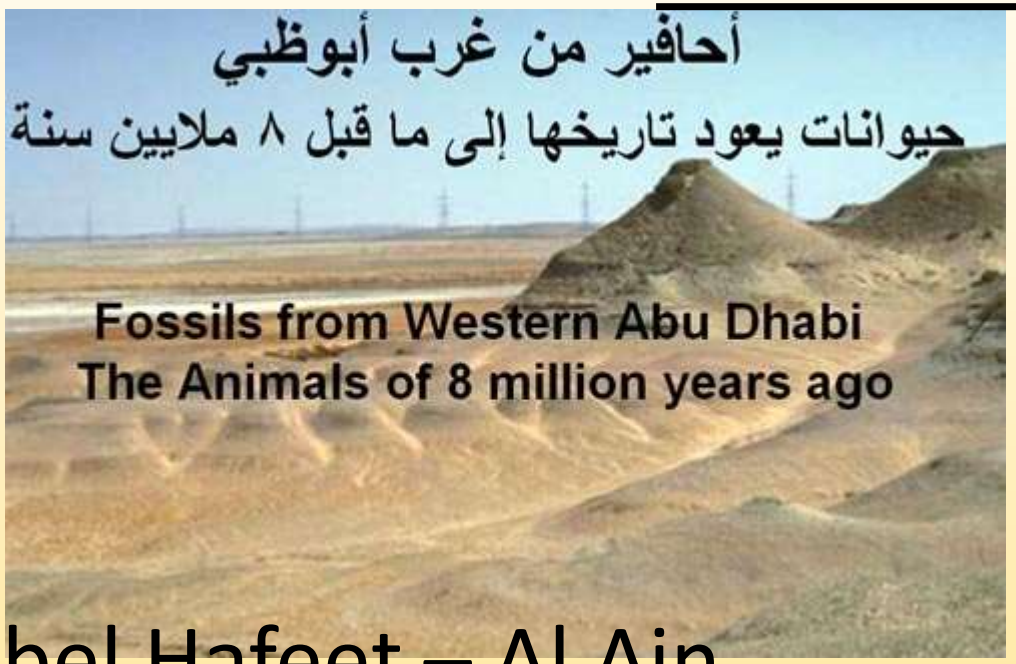
By the end of the lesson, I will know how fossils are found, what they tell us about Earth and how organisms lived many years ago.

Learning Questions

Review Lesson 1

Fossils of mammoths tell us what they used to _____ and where they used to _____.

Fossils in the UAE



What does finding fossils of shells tell us about Jebel Hafeet, millions of years ago?

Jebel Hafeet – Al Ain

Fossilized shells and imprints in rock of organisms that lived millions of years ago.

Three-Dimensional Thinking

1. A type of organism that has no living population is said to be _____

A. Fossil
B. Remains
C. An organism
D. extinct

Use the table below to answer question 2.

Animal	Feature
Saber-tooth cat	Long, sharp teeth
Woolly mammoth	Flat teeth
Pterodactyl	Long wingspan
triceratops	Leathery skin

2. Which animal was most likely a meat-eater?
   A. Saber-toothed cat
   B. Woolly mammoth
   C. Pterodactyl
   D. triceratops

3. The fossil of a fish was found at the top of a mountain.
Which statement is MOST likely **true**?

A. The mountain was once a hill.
B. Fish used to live on the mountain.
C. The mountain was once under water.
D. Someone moved the fossil to the mountain.

Grade 3 Science, Miss Linda

Week 2: 8 – 12 January 2024

Dear parents and students, this week we are learning about:

Unit 3: Change of Environments
Lesson 1 Fossils

How do we learn about Earth's History?

What information about an organism can you get from a fossil dig?

What do fossils tell us?

Working on casts and molds to include in our class Dinosaur World display.

*Lesson PPT's in LMS.