Teaching Guide: Fossil Finders

Join our team as we use evidence from fossils to understand what environments were like long ago. Students will be sent out in groups to uncover fossils. The excavators dig, fossil experts will identify the fossils, and ecologists will identify the environment the organism once lived in. The group will use this fossil evidence to infer what the dig location was like in the past.

Pre Activities:

- Vocabulary Review- paleontologist, ecologist, fossil, evidence, habitat, ecosystem, marine, sedimentary rock, minerals, characteristics, organisms
- Review regions of South Carolina

Before the Program Instructions:

- Print out fossil packet and assemble (staple each corner and then cut out)
- Print 8 Habitat Expert sheets and 8 Carolina Fossils Sheets (2 for each group)

Instructions for Day of the Program:

- Arrange students in 4 groups
- Each group and student will ideally be visible from the webcam.
- Distribute pages face down to each group
- Assign group roles- Reporter (1 per group), Ecology Experts (1-3 per group), Fossil Experts (1-3 per group), Excavators (1-3 per group)

Post Activity

- Trilobite Mold and Cast Lesson- This PowerPoint with videos will provide an opportunity for students to apply their knowledge to fossils found in Morocco.
- Press Release- Have groups create a press release on the findings from the lesson
- Fossil Expert Sheet- Allow students to explore the additional fossils found in the Carolinas to gather evidence about what the habitat of the Carolinas was like long ago.

- Career Connection
  - Paleontologist
  - Ecologist
10 million years

10 million years

10 million years

10 million years
20 million years

FOSSIL

20 million years

20 million years
25 million years 25 million years

25 million years

Fossil
<table>
<thead>
<tr>
<th>Habitats</th>
<th>Description</th>
<th>Water</th>
<th>Plant Life (examples)</th>
<th>Animal Life (examples)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oceans</td>
<td>Large bodies of salt water that surround a continent</td>
<td>Salty</td>
<td>Salty and plankton (tiny, floating plants and animals)</td>
<td>Large whales, Megalodon sharks, turtles, other sharks, jelly fish (sea jellies), crabs, coral, dolphin</td>
</tr>
<tr>
<td>Forest</td>
<td>Area covered with different kinds of trees</td>
<td>Medium amount of rainfall</td>
<td>Trees with leaves or needles, shrubs, grasses, ferns</td>
<td>Birds, foxes, rabbits, bears, snakes, deer</td>
</tr>
<tr>
<td>Grasslands</td>
<td>Area of fertile (healthy) soil covered in tall grasses</td>
<td>Medium amount of rainfall</td>
<td>Grasses</td>
<td>Prairie dogs, grasshoppers, bison (large, cow-like animals)</td>
</tr>
<tr>
<td>Desert</td>
<td>Dry areas, with lots of sand, very hot during the day and very cold at night.</td>
<td>Small amount of rainfall</td>
<td>Cactus</td>
<td>Lizards, scorpions, rabbits</td>
</tr>
</tbody>
</table>
Fossil Expert

- **Megalodon Tooth**
- **Dolphin Vertebrae (backbone)**
- **Urchin Exoskeleton**
- **Hadrosaur Dinosaur Tooth**
- **Scallop Shell Fossil**
- **Right Whale Inner Ear Bone**
- **Branching Coral Skeleton**
- **Mammoth Tooth**