

Activity Three:

The Mystery Fossil Bones Activity

This was one of my favorites. I often used this as a culminating activity for my *Geo. History Unit*. Students from 9th - 12th loved it. And I'm sure middle school students would, too! I've seen it all over the Internet and had a copy 20 years ago so I have no idea who the actual image of the bones belongs to. This is where I found the bone images this time:

<http://www.indiana.edu/~ensiweb/lessons/gff.outl.gif>

MATERIALS: A copy of the Labsheet for every student; one copy of the bones for each group, scissors, colored pencils, poster-sided paper, glue.

DIRECTIONS:

1. Hand out labsheet and bones to each group. Ask the groups to study the bones and start thinking about how it could be put together.
2. Pass out scissors. Have everyone in the group help cut out the bones. Some one can cut the bones into a few for each group member.
3. Once the bones are cut out, the group starts to assemble the bones on the table top. Encourage discussion of alternate ways to arrange the bones.
4. Once they have agreed on an arrangement, they should glue them onto a large piece of paper. They will be drawing around this so be sure there is extra room on the paper.
5. The next step is to draw around the bones and try to reconstruct the body of the animal.
6. They should also sketch the animal on their labsheet, adding fur or scales or skin, whatever they've decided as a group.
7. Then they can work on the Summary Questions.
8. Finally, have each group share with the whole class what they figured the creature to be, and see how many were the same, and how many different interpretations were made.

The Mystery Fossil Bones Activity

Name _____ Class _____

DIRECTIONS:

1. Every group member should help cut out the mystery fossil bones.
2. Work as a group to put together the skeleton of the animal.
3. Once you have agreed, glue the bones on a large piece of paper.
4. Work together to decide what the outside of the animal looked like. Was it covered with skin, fur, scales, something else? How large was it? What did it eat?
5. Draw your animal below. Draw a tree to show how big the animal in in relation to the tree.

SKETCH OF ANIMAL AND TREE TO SHOW PROPORTION:



SUMMARY QUESTIONS:

1. Did you make any assumptions at the beginning of the activity that slowed you down in putting the bones together? _____ Explain:

2. Did any of your group members resist the group's ideas? _____ Explain:

3. Did any information from another group influence your construction? _____
If so, what?

4. What did your group say about how and where this animal lived?

5. What did this animal eat?

6. How big was it?

7. Where did it live and when?

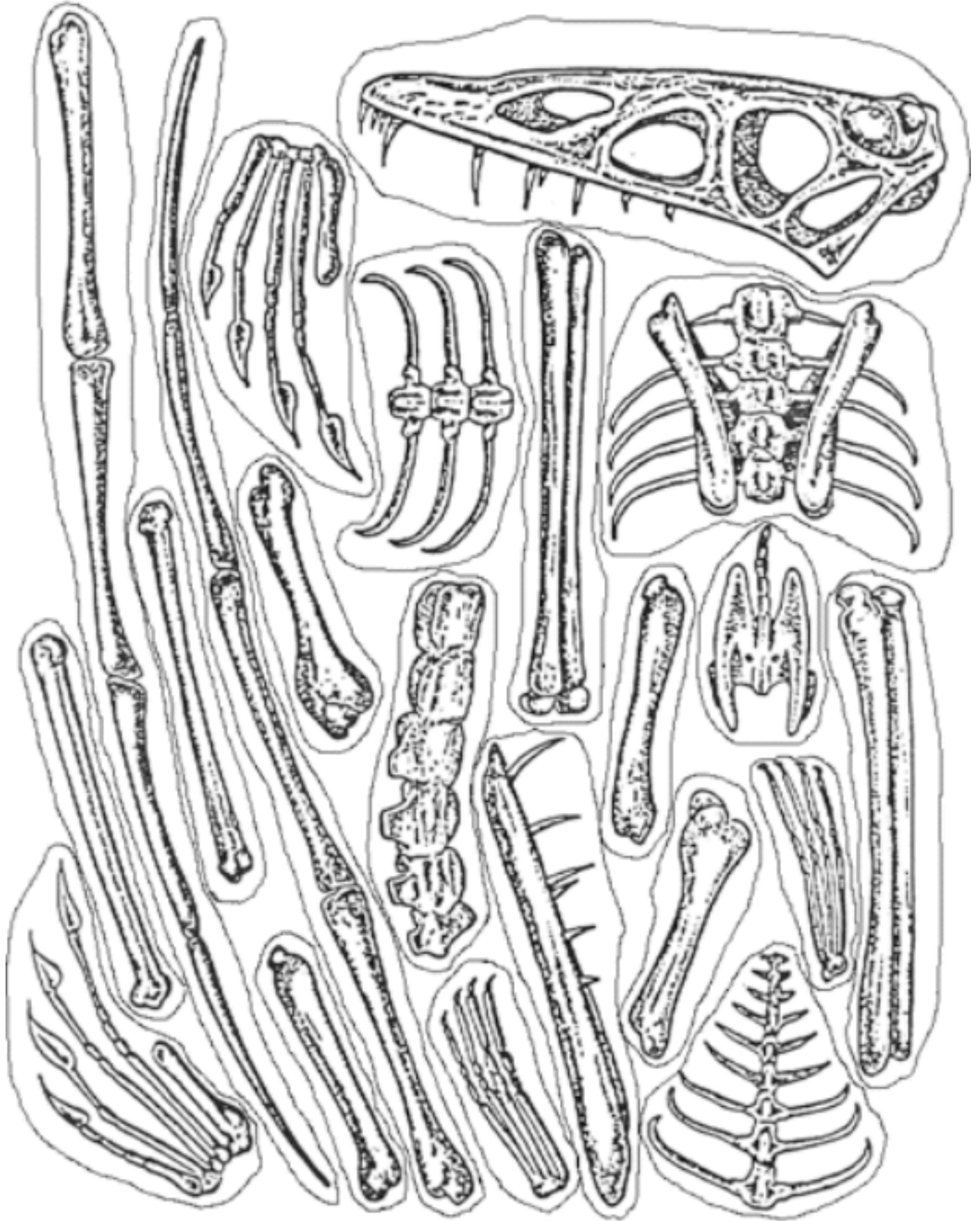
8. This animal was a(n) _____.

We know this because:

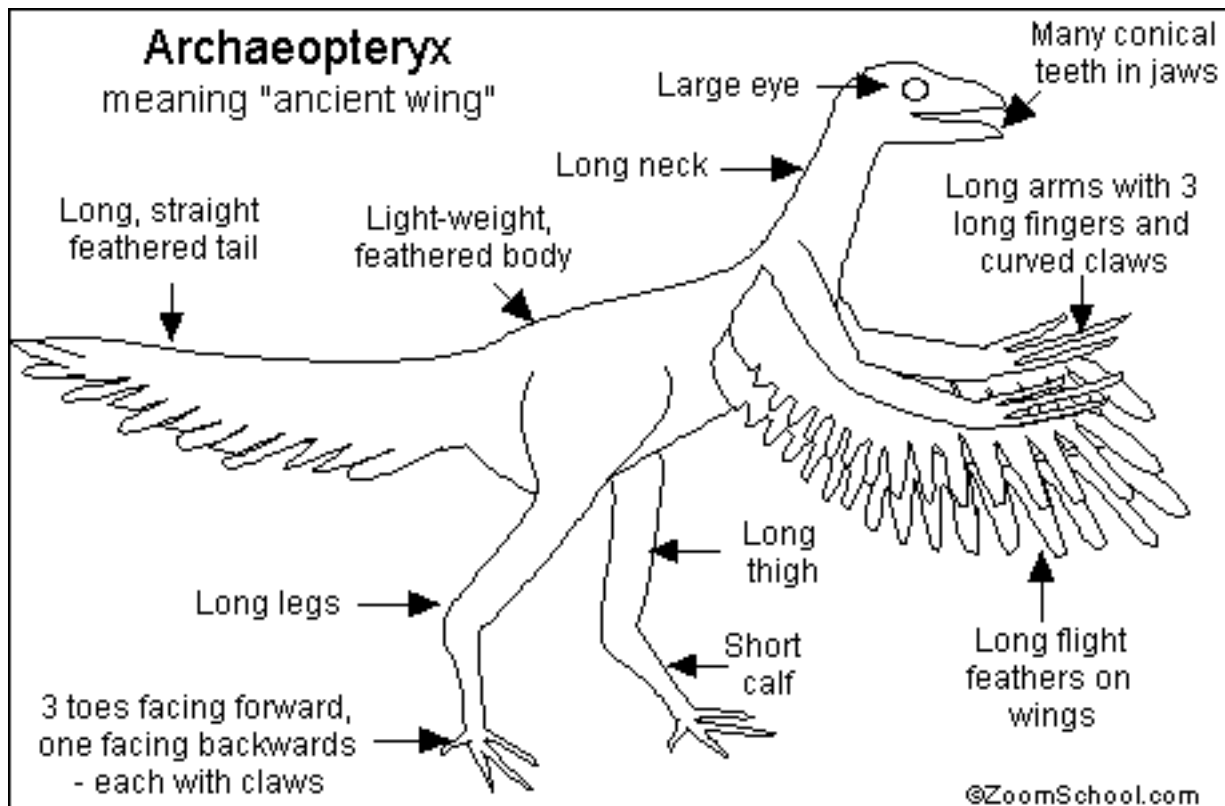
9. How close to reality was your construction?

10. How is it possible for scientists to do studies about things that happened millions of years ago?

Mystery Fossil Bones:

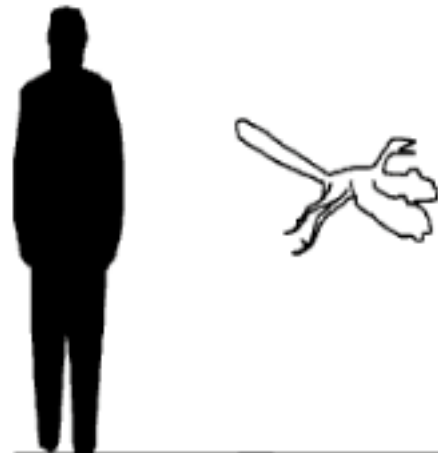


The Mystery Revealed: The Animal is an Archaeopteryx.



FACTS:

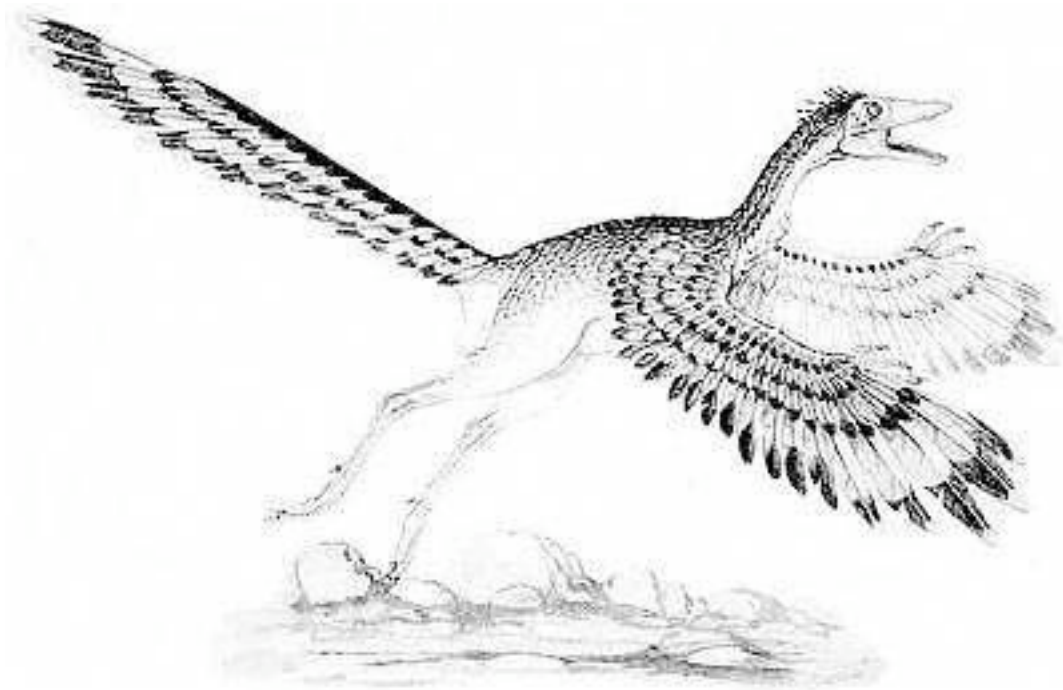
1. The Archaeopteryx may have eaten insects and small animals. It lived during the Jurassic Period, about 150 million years ago.
2. Its name means "Ancient Wing." It's pronounced: ark-ee-OP-ter-iks
3. The Archaeopteryx seemed to be part-bird and part-dinosaur. Unlike modern-day birds, it had teeth, three claws on each wing, and a long, bony tail. Like modern-day birds, it had feathers and a very light body with hollow bones.
4. Length - 1 foot long from beak to tail
Wingspan - 1.5 feet
Weight - 11 to 18 ounces
5. This is the size of the Archaeopteryx next to an adult male:
6. Archaeopteryx is one of the oldest-known birds.



All pictures and information on this page was taken from Enchanted Learning's ZoomDinosaurs.com.



<http://members.aol.com/Dinoplanet/joe.html>



http://www.nhm.ac.uk/education/online/dinosaur_data_files.html



<http://www.hmnh.org/images/archaeopteryx.jpg>

There have been 8 fossils of the Archaeopteryx found. Here are sketches of six of them. Which one is the image above?

