Vertebrate Fossil Webquest

Name ______________________________

6th Grade PSI

Score: _____________ / 11 points

Objective: This activity will have you learning about the process behind uncovering fossils, using them for scientific research, and displaying them in museums for people to enjoy.

Procedure:

1) Go to www.google.com and search “Follow a Fossil”

2) Click on the following link:

   [DMNS: Follow a Fossil](www.dmns.org/main/minisites/fossil/index.html)

   Follow a fossil from the outcrop to the museum display case and see paleontologists at work.

3) Read the contents of this page, and then click “Vertebrates” on the left side.

4) Answer the questions below completely.

Questions:

Prospecting

1) What makes an animal a “vertebrate”?

   _____________________________________________________________________________

   _____________________________________________________________________________

2) What are three types of organisms that meet this criteria?

   a. _________________________________________________________________________

   b. _________________________________________________________________________

   c. _________________________________________________________________________
3) **True or false:** Vertebrates are the most common fossils found.

________________________________________

4) Where is it difficult to find vertebrate fossils? Where is it easy to find vertebrate fossils?

________________________________________________________________

________________________________________________________________

________________________________________________________________

________________________________________________________________

5) Almost all fossils are found in ___________ rock.

6) When do paleontologists normally go to collect fossils?

________________________________________________________________

Excavation

1) What should paleontologists do before beginning their dig?

________________________________________________________________

________________________________________________________________

2) What are two ways scientists can determine a fossil’s age?

   a. 

   b. 

3) If scientists don’t already know what the fossil looks like, what do they do to uncover the object from the rock?

________________________________________________________________

________________________________________________________________

________________________________________________________________
4) Two characteristics of vertebrate fossils that make them tough to transport:

   a.

   b.

*Preparation*

1) What is the first thing that needs to happen in the lab when a new fossil is brought in?

   ____________________________________________________________

   ____________________________________________________________

   ____________________________________________________________

2) What has to happen next? How is this done?

   ____________________________________________________________

   ____________________________________________________________

   ____________________________________________________________

3) With the jacket out of the way, what is the next step?

   ____________________________________________________________

4) Why would scientists sometimes choose to leave rock attached to the fossil?

   ____________________________________________________________

   ____________________________________________________________

   ____________________________________________________________

5) What are the four most commonly used tools for removing sediment?

   a. 

   b. 

   c. 

   d.
6) What can happen to bones that are exposed to air for the first time in millions of years? What can be done to prevent this from happening to the fossil?

________________________________________________________________

________________________________________________________________

7) What is often true of the “fossils” that you see on display at the museum? Are they the original fossil?

________________________________________________________________

________________________________________________________________

Curation

1) What is a museum’s main job?

________________________________________________________________

________________________________________________________________

________________________________________________________________

2) Why would a museum sometimes choose not to accept a fossil?

________________________________________________________________

________________________________________________________________
Research

1) What are two areas of research when it comes to vertebrate fossils?
   a. 
   b. 

2) Volunteers don’t only excavate and prepare fossils. What else do they do?
   __________________________________________________________
   __________________________________________________________
   __________________________________________________________

Exhibiting

1) Many museums create dioramas to display their fossils. What is a diorama?
   __________________________________________________________
   __________________________________________________________
   __________________________________________________________
   __________________________________________________________

2) Using fossils, the museum can “recreate” the creatures. What is the frame of the animals covered in?
   __________________________________________________________
   __________________________________________________________