

# **FOSSIL DISCOVERY CENTER**

## **TEACHER POST-VISIT PACKET**

**The following material is not organized by grade. Please use  
whichever pages you determine are best for your class.**

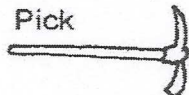
**Written and illustrated by Blake Bufford.**

What tools does a paleontologist use? Circle five of the tools that you think YOU would need most if YOU were a Paleontologist in the field.

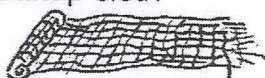
Shovel



Pick



Burlap cloth



Plaster of paris



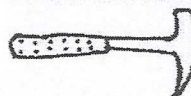
Marker flags



Map



Rock hammer



Paintbrush



Water



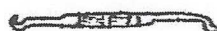
Lunch



Notebook



Dental pick



What four things do you need to make a "jacket" to protect a fossil? Circle the items below that you would need.

Burlap Cloth



Toilet paper



Map



Plaster of Paris



Trowel



Water



**Circle the correct answer:**

What is a plant eater called?

- A. Omnivore                      B. Carnivore                      C. Herbivore

What is a meat eater called?

- A. Omnivore                      B. Carnivore                      C. Herbivore

What is an animal called that eats BOTH plants and animals?

- A. Omnivore                      B. Carnivore                      C. Herbivore

Most of the animals you saw at the Fossil Discovery Center were:

- A. Mammals                      B. Reptiles                      C. Fish

Humans are basically:

- A. Carnivores                      B. Herbivores                      C. Omnivores

Name one carnivore that you saw at the Fossil Discovery Center:

Name one herbivore that you saw:

Name an omnivore that you saw:

**Circle T for true or F for false.**

A carnivore mostly has flat teeth.                      T or F

An herbivore mostly has sharp teeth.

T or F

An omnivore has both sharp and flat teeth.

T or F

What was your favorite animal at the Fossil Discovery Center?

If you could have one of these animals as a pet, which one would it be?

What would you feed it?

If you could BE one of these animals, which would it be?

Why would you want to be that animal?

What would you eat?

What type of environment would you live in?

Which animals may be a threat to you?

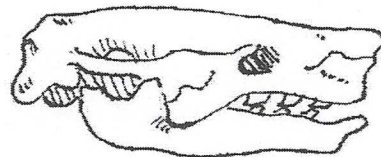
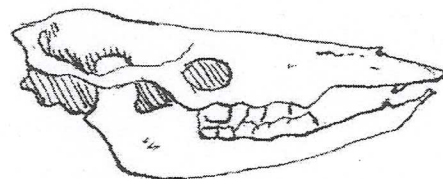
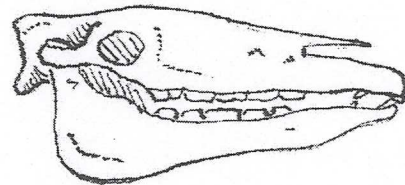
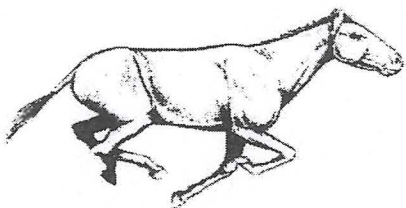
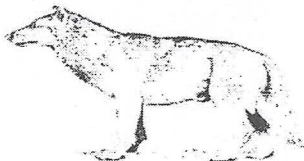
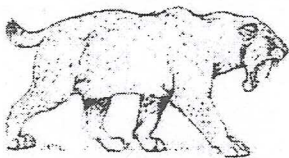
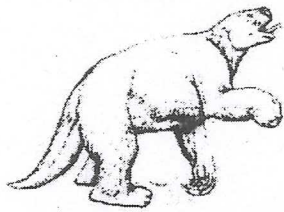
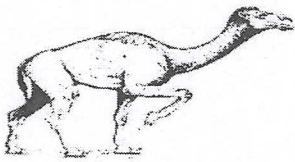
Draw a picture of yourself as a paleontologist.

What tools would you carry?

What environment would you work in? A forest? desert? landfill? or someplace else?

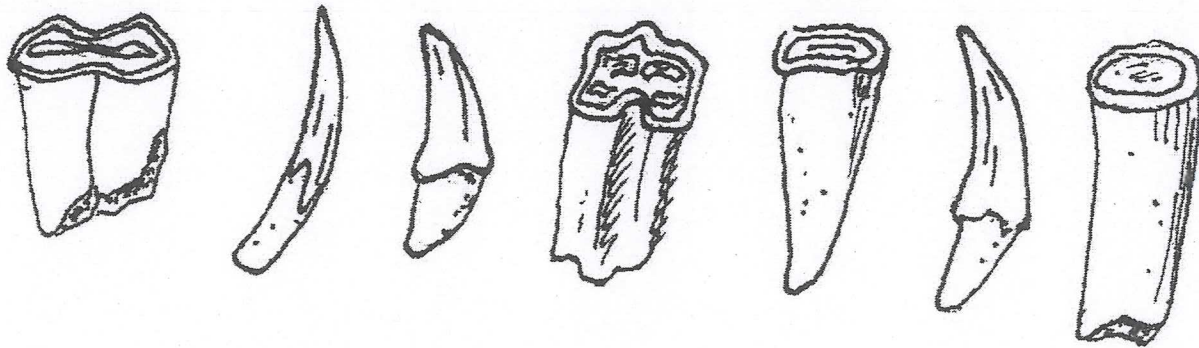
## MATCHING

Match the skulls on the right by drawing a line to the animal on the left.

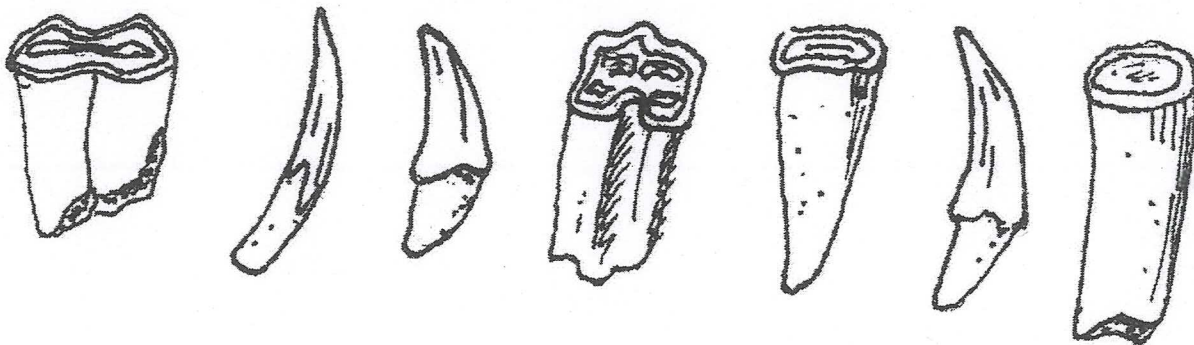




Which teeth belong to carnivores? Circle the correct teeth.



Which teeth belong to herbivores? Circle the correct teeth.



## FOSSIL TYPES

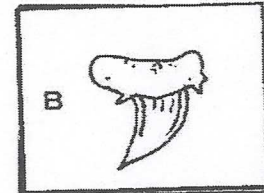
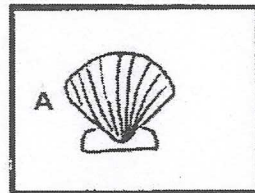
Did you know that footprints made by an ancient animal or the imprint of a leaf can be considered a fossil? Fossils are evidence of past life preserved in sedimentary rocks or deposits. Paleontologists study both the fossil and the rocks that they are preserved in to understand past life forms and the environment in which they lived.

Write the letter of each picture on the right under the description of the fossil type it represents on the left.

### Vertebrate fossils

Animals with backbones (vertebrae) are known as vertebrates. Mammal, fish, and dinosaur bones or teeth are all examples of vertebrate fossils.

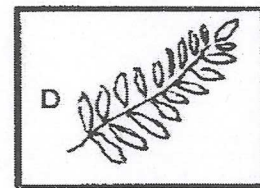
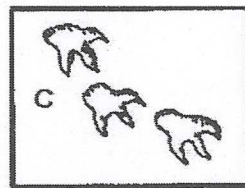
Fossils: \_\_\_\_\_



### Invertebrate fossils

Animals without backbones are known as invertebrates. Shells and exoskeletons help organisms like clams and corals to be preserved.

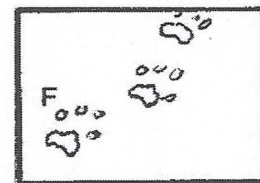
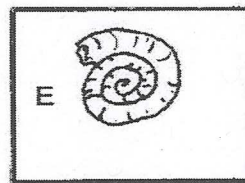
Fossils: \_\_\_\_\_



### Plant Fossils

Fossil plant remains include petrified wood, leaves, cones, seeds, pollen, and sometimes even flowers. Amber is tree sap and can preserve other organisms such as insects.

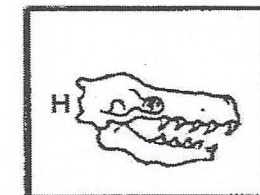
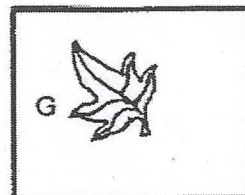
Fossils: \_\_\_\_\_



### Trace Fossils

Trace fossils – tracks, burrows, and coprolites (ancient poop!) – are evidence of organisms interacting with their environment.

Fossils: \_\_\_\_\_



### Paleontology vs. Archaeology

PALEONTOLOGISTS and ARCHAEOLOGISTS are scientists who dig and study old things from the ground. They both use the same tools and techniques to look for things in sedimentary rocks, but there are some big differences too.

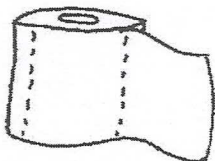
ARCHAEOLOGISTS study the remains of HUMAN history, culture and civilizations.

PALEONTOLOGISTS study the remains of past ANIMALS and PLANTS and how they have changed.

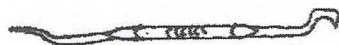


## THE RIGHT STUFF

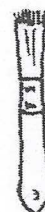
Paleontologists use many tools to find and clean fossils.  
Draw lines to match the images to what they are used for.



Toilet Paper



Dental Picks



Brush

Brush away sediment from fossils

Move large amounts of sediment

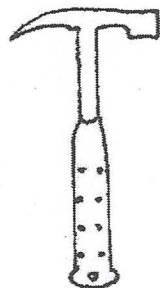
Wrap up fossil material before applying plaster

Pick grains of sediment out of cracks

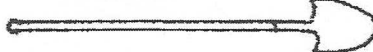
Break open fossil-bearing rocks

Take notes on fossil collection site

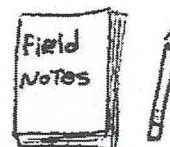
Rock Hammer



Shovel



Notebook



## FOSSIL HUNTERS

A paleontologist uses fossils to understand the story of Earth's history. This story includes the plants and animals that once lived on Earth. Evidence of this past life is found by paleontologists within **sedimentary** rocks. These rocks are made of the broken pieces of other rocks called sediment that have become compacted or cemented together over time.

Sediment can be clay, sand, or gravel. Rocks can form on land or in water. An ancient beach might leave behind sand which forms into sandstone. Ocean sediments could develop into marine shale made of clay, or limestone from broken down shells. If the remains of an animal or plant, like bones or leaves, are covered by sediments such as clay, a fossil may become preserved in the rock formed from these sediments.

Find the following words in this puzzle: CAMEL, GROUND SLOTH, MAMMAL, PALEONTOLOGIST, SHORT FACED BEAR, CARNIVORE, MAMMOTH, SABERTOOTH, HORSE, TEETH, METAMORPHIC, SANDSTONE, TROWEL, IGNEOUS, OMNIVORE, SEDIMENT, DIREWOLF, PLEISTOCENE, FOSSIL.

U V U F M S P A L E O N T O L O G I S T  
P F Y C C A M E L T J D R Y R N K K C H  
T R R T O N A W Y L Y Z M V W N D F P N  
Q I M R M Z N R F V V U O K N F Q N L I  
G E M M L Y S A B E R T O O T H F K E J  
O I Z X I S H O R T F A C E B E A R I P  
J G T K M O F H D I R E W O L F N Q S H  
H N R T U F R G R O U N D S L O T H T E  
O E A T O A G B B O O K G V H W S Y O R  
F O S S I L M O N X M T Z G S O J D C M  
O U G P H L E T R A N I J C E C S N E P  
Q S S G T X T E E F I O X A E P S R N I  
K C I F R H A E P L V W S R G B A J E B  
D A Z L O J M T O F O N F N W G N B J J  
D E M B W P O H S U R Y L I A F D A C O  
V F A C E G R M D X E D U V L W S B J Y  
I Y M Q L C P Y I M A M M O T H T A F A  
T M M Y M A H O R S E L G R N B O E G M  
N J A C Q D I E U L S J H E T H N F O F  
A K L X R A C O S E D I M E N T E Q M V

CAMEL  
GROUND SLOTH  
MAMMAL  
PALEONTOLOGIST  
SHORTFACE BEAR  
CARNIVORE  
MAMMOTH  
SABERTOOTH  
TEETH  
HORSE  
METAMORPHIC  
SANDSTONE  
TROWEL  
IGNEOUS  
OMNIVORE  
SEDIMENT  
DIREWOLF  
FOSSIL  
PLEISTOCENE

## **ANSWER PAGE**

### **TOOLS OF THE PALEONTOLOGIST**

Any of these items or combination of items is correct.

The 4 things to make a jacket are burlap, plaster, water, toilet paper.

### **HERBIVORE/CARNIVORE**

C Herbivore

B Carnivore

A Omnivore

A Mammal

C Omnivore

Name one Carnivore: Saber-tooth cat or Dire wolf. (There were also pictures of a Scimitar cat and American Cheetah.)

Name an Herbivore: Horse, Camel, Mammoth, Antelope, Peccary, or Sloth.

Name an Omnivore: Short faced bear.

**True or false:**

False

False

**True or false:**

True

### **MATCHING SKULLS**

Skulls from top to bottom are Saber-tooth cat, horse, Dire wolf, camel, sloth.

### **MATCHING TEETH**

Left to right: camel, Saber-tooth cat, bear, horse, horse, wolf, sloth.

## **FIND THE FOSSIL**

It is not always easy to see fossils.

Find the 11 fossils in the picture on the following page. There are:

Footprints (which are called "trace fossils")

A horse skull

A horse foot bone

A dire wolf skull

A mammoth tusk

Sea shells

A Saber-tooth cat tooth

A mammoth femur (or leg bone)

A camel jaw

Two mammoth teeth



