



*2017 Governor's Tourism Stewardship Award Winner*

## **PaleoTALES Activity Packet**

Thank you for bringing your group to Cave of the Mounds National Natural Landmark – Wisconsin's oldest classroom! We are proud to assist educators in reaching their goals with fun, hands-on activities.

Within this PDF, we have provided a fossil-related activity for you to incorporate into your classroom, or as a take-home activity for your students! This additional activity can help to enhance lesson plans. Also included is a quiz that you can issue to your students before and/or after your visit to Cave of the Mounds. Along with this, we have included a cross word puzzle and a word search. These can also be used as a before or after tool, or alternative activity. If you would like to extend the learning experience after your visit, you can find other lessons and ideas, or more information about our programs, by visiting our website at [www.caveofthemounds.com](http://www.caveofthemounds.com).

Our objective for your visit is to present the unique geology of our area in an effort to strengthen their learning about the world around them. Our hope is to inspire your students to become good stewards of all natural environments in the future.

Please contact us personally if you have questions or concerns about your visit. We can be reached at (608)437-3038 ext. 103 or you may contact us by e-mail at [groups@caveofthemounds.com](mailto:groups@caveofthemounds.com).

Sincerely,

Education Team



**CAVE OF THE MOUNDS®**  
National Natural Landmark

## Create-A-Fossil Investigation

YOU WILL NEED: **fine sand, 2 containers (one for the molds/casts, one to mix plaster), quick-set Plaster of Paris and various items to create molds/casts.**

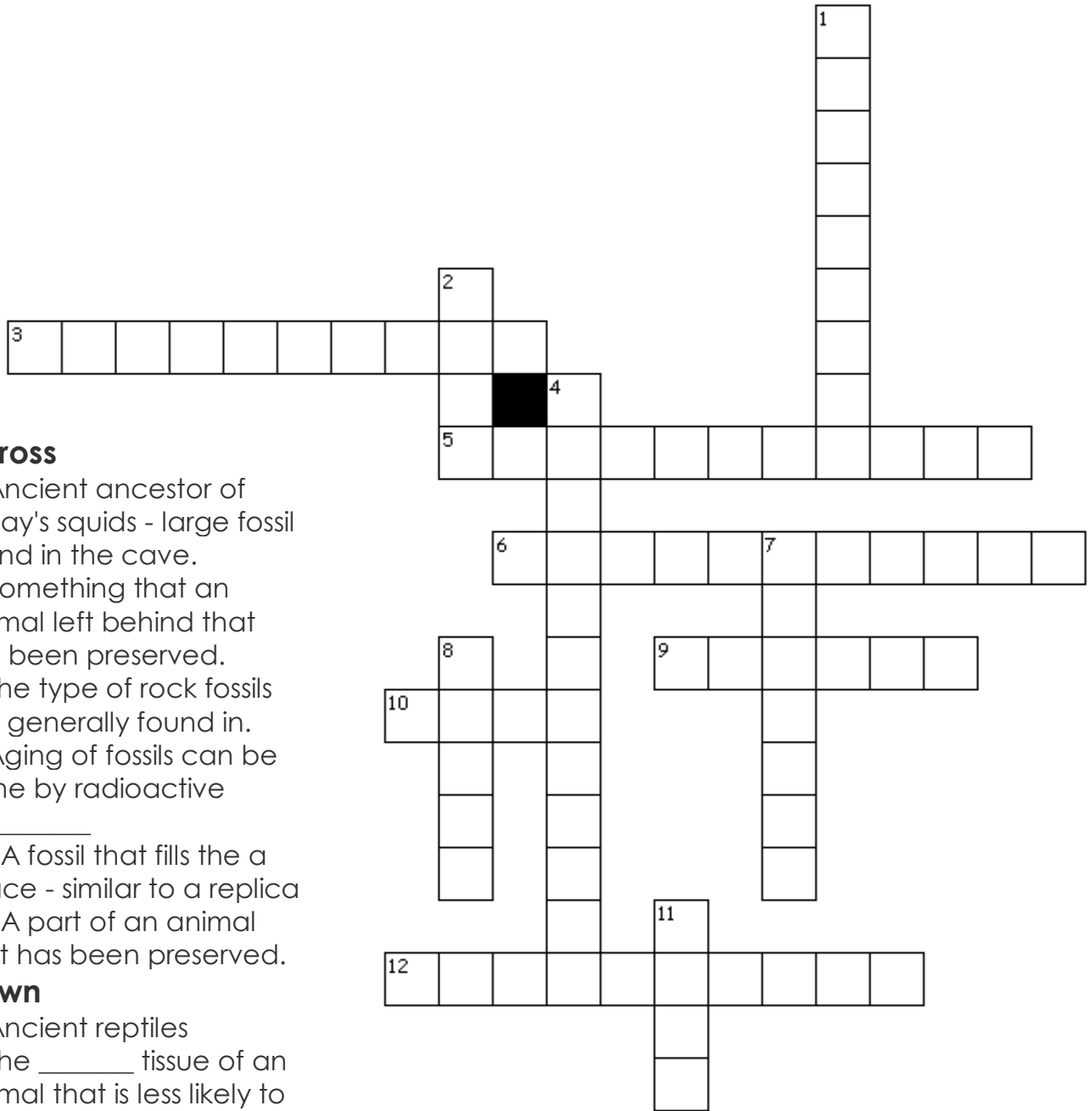
1. Fill 2/3 of your container with moistened sand.
2. Press objects into the moist sand—Leaves, plastic dinosaurs or bugs, shells and twigs; other items with interesting textures work well.
3. With the help of an adult, mix Plaster of Paris and carefully pour into the impressions in the sand.
4. Wait patiently for the plaster to dry to the touch, about 30-40 minutes. Then turn container out onto a flat work surface, remove the excess sand, and let the remaining plaster dry. Finally, whisk away dried sand using a small brush and uncover your creation!



### What is a fossil?

**Fossils** are remains of life from the past preserved in rock. The most common types of fossils are molds and casts. A **mold** forms when something is pressed into soft mud and removed by decomposition or pulled out, leaving an impression of the object. A **cast** is a three-dimensional (3-D) example of an object of the past created when a mold fills up with sediment like mud, sand or volcanic ash.

# Paleontology – The Study of Ancient Life



**Across**

- 3. Ancient ancestor of today's squids - large fossil found in the cave.
- 5. Something that an animal left behind that has been preserved.
- 6. The type of rock fossils are generally found in.
- 9. Aging of fossils can be done by radioactive \_\_\_\_\_
- 10. A fossil that fills the a space - similar to a replica
- 12. A part of an animal that has been preserved.

**Down**

- 1. Ancient reptiles
- 2. The \_\_\_\_\_ tissue of an animal that is less likely to be preserved.
- 4. The study of ancient life and fossils.
- 7. Having died out.
- 8. A single bed of rock.
- 11. A fossilized impression made in a rock

# Fossil Quiz

Fill in the blanks using the given word bank:

1. \_\_\_\_\_ is the study of ancient life and fossils.
2. Rocks and \_\_\_\_\_ replacing an animal is a form of fossil creation.
3. \_\_\_\_\_ fossils are created from what an animal leaves behind.
4. Fossils are \_\_\_\_\_ remains which form from an animal.
5. An organism with \_\_\_\_\_ parts is more likely to fossilize.
6. A \_\_\_\_\_ is a fossilized impression made in a rock.
7. When a part of an animal fossilizes, it is known as a \_\_\_\_\_ fossil.
8. A \_\_\_\_\_ is a fossil that fills the space and is similar to a replica.

## Word Bank

Hard

Body

Paleontology

Cast

Trace

Minerals

Mold

Preserved

# Paleontology – The Study of Ancient Life

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

BODY FOSSIL  
CAST  
CENEZOIC  
CEPHALOPOD  
DIG SITE  
GASTROPOD  
GEOLOGIC TIME  
ICEAGE

LAYERS  
MESOZOIC  
MOLD  
PALEONTOLOGY  
PALEOZOIC  
REMAINS  
TRACE FOSSIL  
TRILOBITE

## Fossil Quiz Answers

- |                 |         |
|-----------------|---------|
| 1. Paleontology | 5. Hard |
| 2. Minerals     | 6. Mold |
| 3. Trace        | 7. Body |
| 4. Preserved    | 8. Cast |

## Crossword Puzzle Answers

### **Across**

3. Cephalopod
5. Trace Fossil
6. Sedimentary
9. Dating
10. Cast
12. Body Fossil

### **Down**

1. Dinosaurs
2. Soft
4. Paleontology
7. Extinct
8. Layer
11. Mold