

Name \_\_\_\_\_

## PRELAB EXERCISE ON FOSSILS

Use one of the following sources to learn about fossils and how they form.

(#3 has animations, good photos, and is the most interactive)

1) lecture textbook- if it has a section on fossils.

2) <http://bcs.wiley.com/he-bcs/Books?action=chapter&bcsid=2757&itemid=0471697435&chapterId=21546>

This address will take you to chapter 6 (Life on Earth). Open the **Chapter Tutorial**.

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3) <http://www.ucmp.berkeley.edu/education/explorations/tours/fossil/index.html> - interactive (do level 1)

### Answer these questions:

1. What is a fossil? \_\_\_\_\_

2. What is a trace fossil? \_\_\_\_\_

3. What 3 conditions usually cause an organism to become a fossil?

\_\_\_\_\_  
\_\_\_\_\_

4. Methods of fossilization:

Unaltered: \_\_\_\_\_

Permineralization ("petrified"): \_\_\_\_\_

Carbonization: \_\_\_\_\_

Replacement: \_\_\_\_\_

Impressions: \_\_\_\_\_

## FOSSIL CLASSIFICATION - Taxonomy

Fossils are classified using the same system as is used for living organisms, the Linnean system.

**Kingdom:** animals, plants, fungi, protists, and monera (bacteria)

**Phylum:** example: Chordata (vertebrata)

**Class:** Mammalia

**Order:** primates

**Family:** Hominids

**Genus:** *Homo*

**Species:** sapiens

We will be looking at fossils of the major **PHYLA** of marine Animals.

**Phyla:** arthropods

brachiopods

mollusks

**classes:** bivalves, cephalopods, gastropods (marine snails)

echinoderms

cnidaria (corals)

**Genus:** Genus names are *italicized*.

**Table B:** This table indicates the **geologic time range** of the major groups of marine organisms. It also shows how widespread they were geographically: local, regional, or worldwide.

