**Geology 12**
**Unit 1 – Fossils**
Day 1 – Fossils

Name: _____

Date: _____

Block: _____

**Fossil**: _____

the preserved remains
of ancient organisms normally found within sedimentary rocks

**Background**: _____

Organisms
~~appear at varying times in geologic history and go extinct at different times. These~~ organisms also change in appearance through time. This pattern of the appearance, change, and extinction of thousands of fossil organisms creates a recognizable pattern of organisms preserved through geologic time

**Types of Fossils:** A FOSSILis the remains or evidence of a living thing
–bone of an organism or the print of a shell in a rock rock
–burrow or tunnel left by an ancient worm
~~–most common fossils: bones, shells, pollen grains, seeds~~

**Examples of Different Kinds of Fossils:**

**Petrification:** _____

the process by which plant or animal remains are turned into stone over time. The remains are buried, partially dissolved, and filled in with stone or other mineral deposits.


**Mold:**/Cast

A MOLDis an empty space that has the shape of the organism that was once there.
A CAST Examples of different kinds of fossils of the organism that was once there.
A CAST can be thought of as a filled in mold. Mineral deposits can often form casts

**Imprints:** Thin objects, such as leaves and feathers, leave IMPRINTS, ~~or impressions, in soft sediments such as mud.~~
When the sediments harden into rock, the imprints are preserved as fossils.

**Dating using fossils**: rocks of the same age likely contain similar fossils and we can use these fossils to date sedimentary rocks.

this is know as the **Law of Faunal Succession**:

**Index Fossils**: organisms that we are likely to find because they were abundant when they were alive and were likely to become fossils (for example, having a robust skeleton). These organisms often have a large geographic range so they can be ~~used as an index fossil in many different areas.~~

~~they should also have a~~ short geologic time span (the amount of time an organism is alive on Earth), so we can be more precise in the age of the rock if we find the fossil. Index fossils are often the quickest and easiest way to date sedimentary rocks precisely and accurately

**Paleontologist**: Scientist who studies fossils (classifies fossils).