

Fossil Formation



Step 1

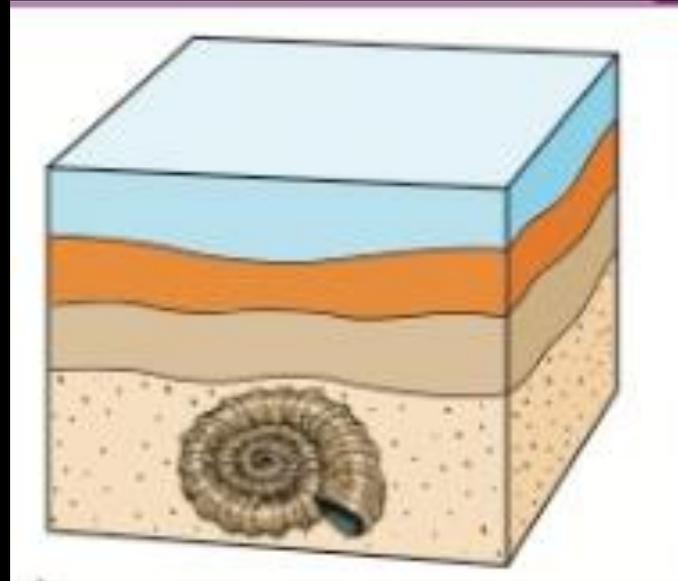
- An organism dies and is quickly buried (sinks into tar or mud, covered by a landslide, etc.)



- Soft parts might be eaten first, leaving only bone. **Hard parts are what make fossils.**
- **Quick burial** prevents further decomposition/decay due to lack of oxygen
- Bacteria need oxygen to decompose dead stuff! No oxygen = no decomposition

Step 2

- The buried organism gets covered with more and more sediment, until layers form and harden into rock.



- This takes **MANY** millions of years

Step 3

- Underground water seeps into the bones and other hard body parts.
- The bone is slowly replaced with minerals in the water. A fossil has formed!



- The process of replacing organic matter with mineral is called [perimineralization](#).

Check for Understanding

1. What types of organisms are best suited for making fossils?
2. What is the best type of place for form a fossil?
3. What type of rock are fossils found in?
4. Are dinosaur bones really “bones”?
5. Why are most fossils marine organisms and not land animals?

Check for Understanding

- Organisms with HARD parts (bones, shells, etc.) are best suited to make fossils.
- The best place for fossils to form is any location where an organism is quickly buried. Usually this is underwater.
- Fossils form in sedimentary rock, because they are covered in sediment layers. The rock forms around the fossil!
- Dinosaur “bones” are not really bones. They are rocks that are cast in the exact shape of the bones.
- Most fossils are marine organisms, because they are most likely to be quickly buried when they die (sink to bottom and buried by sand/mud)

Assignment: Comic Strip

- Make a 3-panel comic strip. Each panel represents one step in the fossilization process. Each panel should include a colored illustration of the process happening in that step. Use the slides in this presentation to help you with each step.
- Below each panel, explain what is happening in each step. Include any important vocabulary or details (type of rock, best location, etc.)

