

Read the following accounts and indicate whether fossilization has occurred and what type of fossilization would happen.

1. A spider crawls up the trunk of a tree and gets stuck and engulfed in sticky tree sap. *Original preservation*
2. A trilobite crawls along the ocean floor and gets trapped under an underwater debris slide *Replacement / permineralization / mold / cast*
3. A wooly mammoth is killed by a saber toothed tiger in a tropical forest *No*
4. A shark dies and drifts to the ocean floor *No*
5. A dinosaur dies and is buried by swamp mud, over time the water deposits silica into the bones *Permineralization*
6. An ammonite is buried in sediment and calcite is deposited into its shell *Permineralization*
7. A clam is buried leaving and dissolves leaving an imprint in silt which lithifies into shale *mold*
8. The imprint fills with sediment which also lithifies and the rock splits open *cast*
9. A baby dinosaur falls off a cliff and dies *No*
10. A fern decays and leaves a film on rock *Carbonization*
11. A small group of dinosaurs walk across a mud flat, which is covered by sediment and lithified *trace fossils (tracks)*
12. A small mammal is killed by a landslide of boulders and gravel which later forms a conglomerate rock *No*
13. A tree is rapidly buried in silt by a river and over time decays and minerals replace it *Replacement*
14. A shark bites a swimming dinosaur and loses a tooth which sinks to the ocean floor and is buried by sediment *replacement / permineralization / mold / cast*
15. A tree is hit by lightning and falls to the forest floor *No*
16. A coral reef is buried by a slide of silt and over time minerals fill the pore spaces *replacement*
17. A worm burrows into a tree stump which becomes buried *trace fossils*
18. A small mammal falls into a crevasse (crack in glacier) and is frozen *Original preservation*
19. A dinosaur fleeing a volcanic eruption is caught and buried in a lava flow *No*
20. A bird flies into a tree is killed and is buried by leaves on the forest floor *No*