

The Case of the Counterfeit Dinosaur Bones

The Coca-Cola Space Science Center obtained their first dinosaur bones and they were so excited! Unfortunately, some sneaky thieves came to the museum in the middle of the night and now museum workers are not sure if the bones are the real ones or just counterfeit casts of the bones. We need you to figure out if the carbonate bones are on display or if they were stolen!

We know that carbonate rocks, including dinosaur bones, react and start to bubble when you put acid, like vinegar, on them. Use your vinegar to test one of the bones you have and determine whether these are the carbonate bones or if they are fake counterfeit copies!

Draw your dinosaur bone

_____ + *Vinegar* =



Bubbles or No Bubbles



Were the bones stolen? How do you know? Report your findings to the museum security (the grown-up helping you).

The next day, museum workers arrived to see an interesting site: a giant pile of dinosaur bones, it looked like there were enough for two dinosaurs! It turns out the casts and the bones have made it back to the museum but now there is a new problem: we need to make complete sets of the bones and casts without doing too much damage to the bones. Use your knowledge of carbonate rocks to help test and sort each of the "bones" and make complete dinosaur skeletons.

What are you going to do to sort the bones? What materials have you used before to figure out which bones are the "real" carbonate bones?

Were you successful? What were some problems you encountered?
