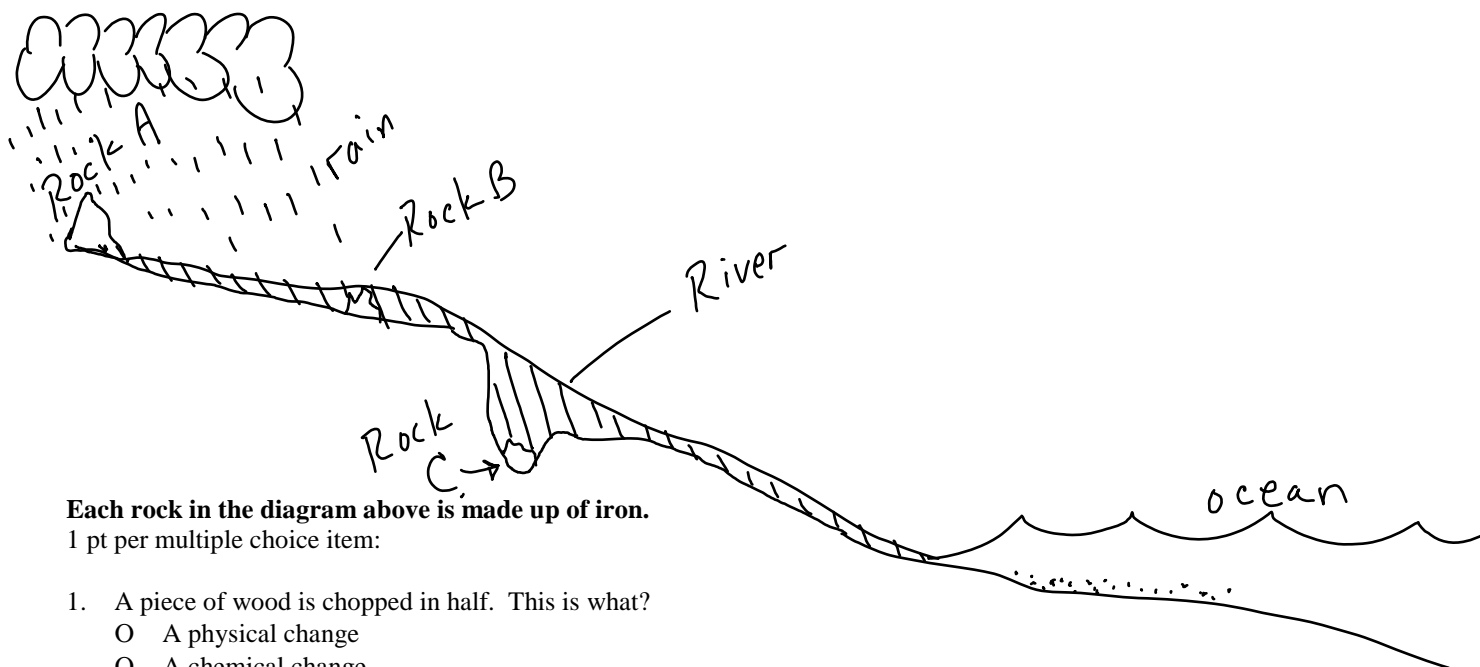


WEATHERING & EROSION

A **PHYSICAL CHANGE** occurs when something starts and finishes as the same object, it's appearance only changes. For example, if a piece of paper is crumpled it has gone through a physical change. It started as paper and finishes as paper. The paper just looks physically different.

A **CHEMICAL CHANGE** occurs when something starts and finishes as a DIFFERENT object. For example, if a piece of paper is burned it has gone through a CHEMICAL CHANGE. The paper started as paper before it was burned, but has changed into something totally different (Ash & smoke) after it has been burned.

Physical weathering is when a boulder or rock is broken down into smaller pieces of rock, but the smaller pieces of rock are exactly the same as the larger rock or boulder. It simply a smaller version of the larger rock. **Chemical weathering** is when a boulder or rock is broken down into smaller pieces, but it changes what the rock is. For example, a rock can rust from water if it has iron in it. The rock afterward is not only weathered smaller, but it is different than the original rock. Another form of chemical weathering occurs when a rock is hit by acid rain. The acid rain will make the rock different than the original rock.



Each rock in the diagram above is made up of iron.

1 pt per multiple choice item:

- A piece of wood is chopped in half. This is what?
 - A physical change
 - A chemical change
- Look at Rock A from the diagram. What is occurring to rock A if the pH of the rain is acidic?
 - Rock A is being hit by rain
 - Rock A is being physically weathered
 - Rock A is being chemically weathered
- Look at Rock A from the diagram. What is occurring to rock A if the pH of the rain is neutral?
 - Rock A is being hit by rain
 - Rock A is being physically weathered
 - Rock A is being chemically weathered
- Rock B is physically weathered. This means what?
 - Rock B is being carried away
 - Rock B is starting and finishing as a rock that is smaller and different than what it started as.
 - Rock B is starting and finishing as a rock. It is only smaller.
- Rock C is chemically weathered. This means what?
 - Rock C is being carried away
 - Rock C is starting and finishing as a rock that is smaller and different than what it started as.
 - Rock C is starting and finishing as a rock. It is only smaller.

