



Name: \_\_\_\_\_

Date: \_\_\_\_\_

# Earth Lesson 1

oceans  
layer  
through

vents  
down  
minerals

volcanoes  
salt  
rivers

runoff  
land

dissolved  
removed

Oceans cover the Earth. In fact, \_\_\_\_\_ cover 70% of the Earth's surface and make up 97% of all the water on Earth. About 3.5% of the ocean is \_\_\_\_\_. That's about 120 million tons of salt per cubic mile of seawater. This means there are roughly 38.5 quadrillion tons of salt in the oceans. If the salt in the ocean could be \_\_\_\_\_ and spread evenly over the Earth's \_\_\_\_\_ surface, it would form a \_\_\_\_\_ more than 500 feet (166 meters) thick, about the height of a 40-story office building.

When the rain pours \_\_\_\_\_ the air, it collects carbon dioxide from the atmosphere on its way \_\_\_\_\_, turning the water slightly acidic. The rain erodes the rock, and the acids chemically break down the rocks and carry salts and minerals along in a dissolved state as ions. When water washes these ions into streams and \_\_\_\_\_, it's called runoff. The streams and rivers carry the salts and \_\_\_\_\_ into our oceans. Many of the ions are removed from the water by organisms, but most of the salt is left and has built up over time.

Rivers and surface \_\_\_\_\_ are not the only sources of \_\_\_\_\_ salts. Vents in the ocean floor also add salt to the ocean waters. Ocean water seeps down into the Earth's crust through cracks. This water is heated by the magma deep under the surface and dissolves salts and minerals from the rocks. The heated water builds up pressure and is released through the \_\_\_\_\_ in the ocean floor, delivering the salts and minerals into the ocean waters. The final source of salt in the ocean is underwater \_\_\_\_\_ erupting.