

Activity 10: World of Water

The Earth's surface is over 2/3rd oceans. All of this water affects Earth's weather in many ways – especially the temperature.

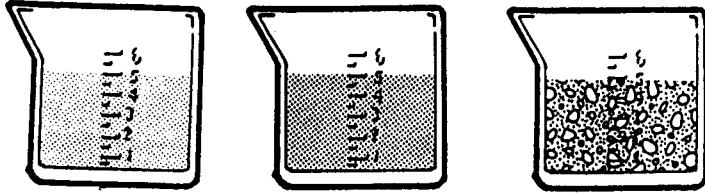
Materials

Three clear beakers of the same size

Water, loose sand, and topsoil

Thermometer

Access to a freezer



Activity

In three beakers of the same size, place equal volumes of water, loose sand and moist topsoil.

Allow the three beakers to sit in a warm room until all three substances are at the same temperature. Place all three beakers in a freezer for five minutes. Record the temperature of the contents of each beaker while still in the freezer. Leave the beakers in the freezer until they are at the same temperature. Then return them to room temperature and record their temperatures after five minutes. List your data below.

Beaker	Temperature in room	Temperature after 5 min. in freezer	Temperature after 5 min. in room
Water-filled	_____	_____	_____
Sand-filled	_____	_____	_____
Soil-filled	_____	_____	_____

Which substance cools off the most quickly? _____

Which substance cools off the most slowly? _____

Which substance warms up the most quickly? _____

Which substance warms up the most slowly? _____

Which parts of the Earth have very rapid changes in temperature? _____

Why do you predict this?

Which parts of the Earth experience less daily temperature change? _____

How do you know this?