

GEOGRAPHY: Land and Water forms

Puzzle and Pin maps

Science and Geography NYS Standards continued from the previous session.

A. Simple Land and Water forms

1. Use maps, a globe, PHOTOS and topographic maps of the United States of America to illustrate the many landforms and waterforms. In particular:
 - Hawaii is a part of the United States of America and consists of several hundred islands.
 - Lake Erie was critical to the Iroquois.
 - What peninsula was used frequently by Native Americans.
 - Why is the Gulf of Mexico important?
2. When possible use the ARS, the Outdoor Classroom or the Play Yard.
3. The vocabulary and definitions for the 8 main land and water forms that go along with this activity are as follows:
 - Island– A landform that is surrounded by water and that is much smaller than a continent.
 - Lake– A body of water that is surrounded by land and that is larger than a pond and smaller than an ocean or a sea.
 - Peninsula– A long sliver of land that is just into the ocean and is surrounded by water on three sides.
 - Gulf– Part of the ocean that is mostly surrounded by land.
 - Isthmus– A thin strip of land that connects two larger land masses.
 - Strait– A narrow passage of water between two masses of land.
 - Cape– A landform very similar to a peninsula, but smaller and shorter
 - Bay– A body of water that is partially enclosed by land with a wide opening to the ocean.

4. Introduction of Simple Land and Water Forms:

- For this activity, you will need some blue-colored water in a small pitcher, a drying cloth, and several small objects in a basket. (Land and Sea Animals, boats, people, etc.)
- You are going to present the Land and Water Forms in converse relation during a given lesson. So, if you are going to present an island, you will present a lake, as well.
- Have your child pour some blue water from the pitcher into the lake form.
- Explain to them, "This is called a lake." Give them a short explanation about how a lake is a body of water completely surrounded by land.
- Have your Learner pour some blue water into the island form.
- Tell them, "We call this an island." Then, explain how an island is a landmass totally surrounded by water.
- Ask your child to compare the forms, and talk about the differences with them.
- Have your Learner remove an item from the basket and ask them to place it where it belongs, on the land, water, or air. Discuss their choice with them and let them continue to place the items until the basket is empty.
- When the activity is over, have your child place the objects on a drying cloth, empty the forms in a sink, then dry the forms and small items with the cloth.

5. Advanced Land and Water Forms:

- a. Whenever possible, connect the Native American tribes to the landforms that supported their culture.

b. From time to time, bring it back into contemporary America. How do we use these land and water forms today to fulfill our Fundamental Needs?

c. Use a 35 PICTURE TOUR to illustrate the forms below.

- A plateau is an area of flat land that is higher than the land around it. Sometimes it is called a tableland. Plateaus are numerous in the American West... How were they formed there?
- A lagoon is a shallow area of water separated from a deeper sea by a sandbank or coral reef. It contains salty water. Where are lagoons in the United States?
- A plain is a large area of land that is flat. Plains may be covered with grass, woodlands, or sand (desert plains). Cheyenne and Cherokee were tribes that flourished on the plains. Why can a culture flourish there?
- An estuary is a partially enclosed body of water with several rivers or streams flowing into it. It also connects with the ocean.
- A reef is a geographic feature that lies beneath the surface of the water. It can be made of rock, sand, or coral
- A canal is a human-made body of water used for transportation. Canals are often used to connect existing rivers, lakes, or oceans.
- A crater is a large, wide depression left behind by a volcano or volcanic activity. Many times, a crater will fill with water and become a lake.
- A bight is a large, shallow bay formed by a bend in the coastline. Is there a bight in America?
- The source is the place where a river begins. It is often at the top of a mountain or glacier. The water always flows downhill from the source.
- A cliff is a vertical, or near vertical, face of rock. It usually overhangs a body of water or a section of flat land.

- The tree line is the line past which trees can't grow due to unfavorable conditions, including cold temperatures, insufficient air pressure, and lack of moisture.
- A swamp is a wetland that consists of land and shallow bodies of water. A swamp usually contains woody vegetation (trees).
- A harbor is a place where ships can be sheltered from the weather or stored safely. Harbors can be human-made or natural.
- A hill is a landform that is raised higher than the surrounding land. It is not as high as a mountain.
- A mountain range is a chain of mountains. It is often bordered by lowlands or rivers. Often, mountains in a range are the same type of rock, but not always.
- An oasis is an area of plants in the desert, usually surrounding a natural water source like a spring or a human-made one like a well.
- The savannah is a type of grassland that has scattered trees. They usually only receive rainfall in one season of the year.
- A stream is a small body of water with a current that is bordered by banks. Smaller than a river, a stream can also be called a brook or creek.
- A mesa (Spanish for "table") is a flat-topped elevation with steep sides. A mesa consists of horizontally-layered sides, and is common in arid (dry) areas of the world.
- A beach is a geological formation along a coastline. It consists of loose particles like sand and gravel, and is used for recreation.
- A cave is a natural opening in the Earth that is large enough for a human to enter. Most caves are formed in limestone that is eroded by water, chemicals, or pressure.
- A pass is an opening between two mountains. Passes can occur naturally or be made by humans. They allow for travel between mountains when necessary.

- A reservoir is a holding place for water, usually in the form of an artificial (human- made) or natural lake.
- A waterfall is created when water, often in the form of a stream or river, flows over a rocky formation that doesn't erode.
- A valley is a depression in the land, often between mountains. A deep river valley may be called a canyon or gorge.
- A delta is a landform that occurs at the mouth of a river, where it flows into another body of water. A delta is usually triangular in shape. Pictured: Nile River delta.
- A fiord (or fjord) is a long, narrow bay with steep sides. Fjords are carved by glaciers as they move from mountaintops to the sea.
- A bluff is a steep and broad hill, or a small cliff, near a body of water.
- A dam is a structure built to divide or hold back water. They are often used to keep water from flowing onto inhabited land. Types of dams include levees and dikes.
- A channel is the human-made or naturally occurring course through a reef, bay, or any shallow body of water.
- A sand dune is a hill of sand built and shaped by the forces of the wind. Dunes occur near beaches, and often protect the land from ocean waves.
- A coast is the area where the land and ocean meet. The word coastline refers to the line on a map indicating the coast, although they are often used interchangeably.
- A meadow is a field of grass and other non- woody plants. It can be cut for hay or used for grazing by cattle.
- A marsh is a type of wetland that includes grass, rushes, reeds, and other plants growing in shallow water.
- A geyser is a hot spring that sprays water and steam out of the ground. A volcanic heat source under the ground heats the water, which contains many minerals.

- A cove is a small, circular bay along the shore of a sea, lake, or river. They are formed by layers of rock, clay, and sand.
- Woodlands are temperate areas with hot, dry summers and mild, rainy winters. They are home to a tremendous variety of plants and animals.
- A canyon is a deep valley, carved into rock by a river. Canyons are formed over many years by constant erosion.
- A desert is a geographic area that receives very little precipitation. Deserts make up 1/5 of the Earth's surface. In spite of the lack of rain, many animals and plants live in deserts.
- A creek is a small stream of water larger than a brook but smaller than a river. Creeks often run through wooded areas.
- A tundra is a cold area where trees do not grow. Tundra occurs far up in the northern hemisphere. The soil is in a semi-frozen or frozen state for most of the year.
- A grassland is an area where the vegetation is primarily grass or small plants and flowers. These areas receive a moderate amount of rain and are home to many animals.
- Rain forests are forests that receive a large amount of rainfall. Rain forests are home to 2/3 of all the plants and animals on Earth, with many species still to be discovered.
- An ocean is a large, salty body of water. Oceans cover about two-thirds of the Earth's surface. All the oceans of the world are connected, but have different names.
- A river is a natural stream of fresh water. Rivers generally flow towards oceans, lakes, or other rivers. The water in a river usually comes from rain or melted glacial ice.
- A mountain is a landform that is steep, has a peak, and extends high above the land around it. Many mountains are shaped by the collision of the Earth's tectonic plates.
- A volcano is an opening of the Earth's crust that allows hot, melted rock to flow through it. Volcanoes are found where the earth's plates are pulled apart or pushed together.