



TAKE CARE OF TEXAS: EDUCATOR MATERIALS

HANDOUT

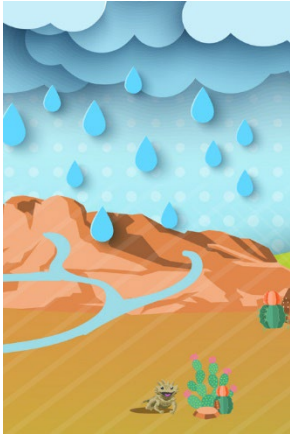
Watershed Divide



TEKS: 112.19.7.B | 112.19.8.B-C | 112.32.C.7.A-C

Watershed Divide: An In-Depth Look

A watershed divide, also known as a drainage divide, is a geographically significant feature that demarcates the boundaries between different drainage basins. It serves as a topographical separation between distinct areas where water flows into separate river systems. This division is dependent upon the natural landscape, including hills, mountains, and ridges.

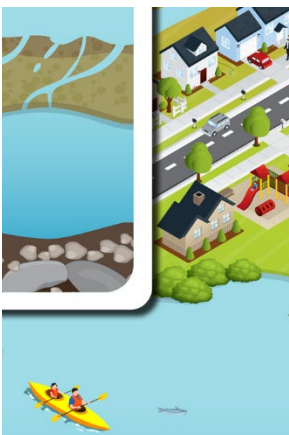
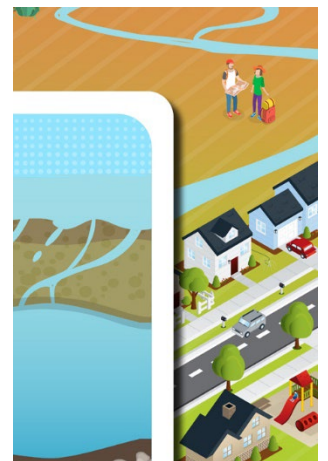


Precipitation & Tributaries

Precipitation, in the form of rain or snow, is a primary source of water that replenishes the earth's water cycle. When precipitation falls upon the land, it follows gravity-driven pathways to the lowest points or lowest bodies of water. These pathways are formed by a network of smaller rivers and streams called tributaries, which merge to form larger rivers. These rivers discharge into major bodies of water such as lakes, seas, or oceans.

Surface Water, Percolation, & Groundwater

The surface water within a watershed comprises the visible water bodies like lakes, rivers, and wetlands. In addition to surface water, a significant portion of the water cycle occurs underground. When precipitation infiltrates the soil, it undergoes percolation – the process by which water moves through soil and porous rock layers. Groundwater is an essential component of the water cycle, sustaining springs, wells, and streams. Depending on the depth and underlying geology, groundwater can be accessed through wells drilled into aquifers.

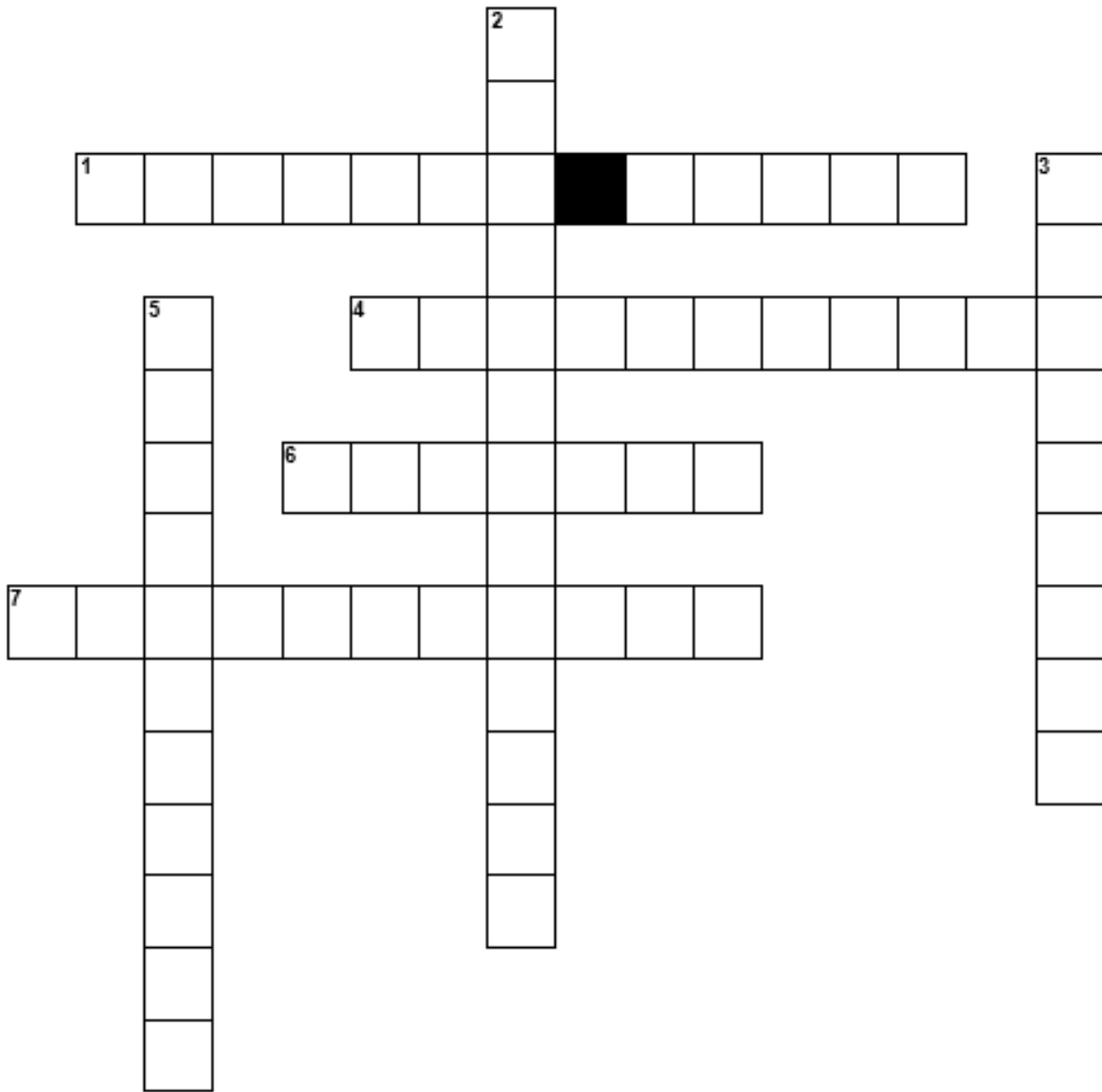


Aquifer & Reservoirs

The infiltrated water from percolation accumulates in underground, permeable layers called aquifers. Aquifers function as natural underground reservoirs, holding vast amounts of groundwater. Additionally, humans may construct reservoirs to store water for various purposes, including drinking water supply, irrigation, and hydropower generation. Reservoirs serve as repositories of water, which can be released when needed or controlled to meet specific requirements.

Crossword Puzzle

Find the answers to this puzzle at



ACROSS

1. The water that you can see, like a lake or a river
4. The waters that flow down from the hills and mountains into the rivers
6. Tiny spaces in the soil, rocks, and underground layers of sand and gravel
7. Another type of water in a watershed hidden beneath the surface

DOWN

2. The water that falls to the ground from the sky
3. Man made lakes that store water for drinking or to generate electricity
5. When water soaks into the ground

Watershed Cloze Test

Use the Watershed Poster and its labels to help fill out the missing words below. Find the answer to this puzzle on

A _____ is like a line on a map that separates different areas where water flows. When it rains or snows, the water falls to the ground, and this is called _____. The water that falls on one side of the _____ goes into one set of rivers, lakes, and creeks. The water that falls on the other side of the divide goes into a different set of rivers, lakes, and creeks.

The waters that flow down from the hills and mountains into the rivers are called _____. These _____ join to create bigger rivers that eventually flow into the ocean or a big lake. This whole system of rivers, lakes, and creeks is known as a _____.

Now, let's talk about the different types of water in a _____. _____ is the water that you can see, similar to a lake or a river. Sometimes, people build big lakes called _____ to store water for drinking or to generate electricity.

_____ is another type of water in a _____, but it is hidden beneath the surface. When it rains, some of the water soaks into the ground. This is called _____. The water goes into tiny spaces in the soil, rocks, and even underground layers of sand and gravel called _____. It is from these _____ that people can drill wells to get water for drinking or other purposes.

Crossword Puzzle Answer Key

1 SURFACE WATER

2 PERCENT

3 RESERVATION

4 TRIBUTARIES

5 PERSISTENT

6 AQUIFER

7 GROUNDWATER

Watershed Cloze Test Answer Key

A watershed divide is like a line on a map that separates different areas where water flows. When it rains or snows, the water falls to the ground, and this is called precipitation. The water that falls on one side of the watershed divide goes into one set of rivers, lakes, and creeks. The water that falls on the other side of the divide goes into a different set of rivers, lakes, and creeks.

The waters that flow down from the hills and mountains into the rivers are called tributaries. These tributaries join to create bigger rivers that eventually flow into the ocean or a big lake. This whole system of rivers, lakes, and creeks is known as a watershed.

Now, let's talk about the different types of water in a watershed. Surface water is the water that you can see, like a lake or a river. Sometimes, people build big lakes called reservoirs to store water for drinking or to generate electricity.

Groundwater is another type of water in a watershed, but it is hidden beneath the surface. When it rains, some of the water soaks into the ground. This is called percolation. The water goes into tiny spaces in the soil, rocks, and even underground layers of sand and gravel called aquifers. It is from these aquifers that people can drill wells to get water for drinking or other purposes.