Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date:\_\_\_\_\_\_\_\_ Period: \_\_\_\_\_\_\_\_ NOTES

**Notes: Distribution of Water**

|  |  |
| --- | --- |
| **How does water flow and collect on Earth’s surface?** | * The force of \_\_\_\_\_\_\_\_\_\_\_\_\_\_ pulls water downhill in a series of streams and \_\_\_\_\_\_\_\_\_\_, collects in \_\_\_\_\_\_\_\_ and ponds, and eventually flows into the \_\_\_\_\_\_\_ * The water flows between \_\_\_\_\_\_\_\_\_ points that are called \_\_\_\_\_\_\_\_\_\_\_\_ in the \_\_\_\_\_\_\_ points that are called \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ (or \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ or river basins). |
| **What is the difference between a divide and a drainage basin?** | * Divides and drainage basins affect the way water \_\_\_\_\_\_\_\_\_\_\_\_ on land.   + A \_\_\_\_\_\_\_\_\_\_\_\_\_\_ is a ridge, or continuous line of \_\_\_\_\_\_\_\_\_\_\_ land, from which water flows in \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ directions.     - Ex: hills, \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_   + A drainage basin, or \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, is an area into which all of the water on one side of a \_\_\_\_\_\_\_\_\_\_\_\_\_\_ flows.     - In mountainous areas, hills and mountains form the \_\_\_\_\_\_\_\_\_\_\_\_, and \_\_\_\_\_\_\_\_\_\_\_\_\_ form low points.     - Flatter regions also have \_\_\_\_\_\_\_\_\_\_\_\_ (small hills/bumps in land)     - When it \_\_\_\_\_\_\_\_\_\_, the water forms streams and rivers or sinks into the \_\_\_\_\_\_\_\_\_\_\_\_\_\_. In most places, the water eventually flows to the \_\_\_\_\_\_, but in a basin, the water may \_\_\_\_\_\_\_\_\_\_\_\_ at the bottom of the basin or \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.   Draw a picture showing a divide and drainage basin. Be sure to **label** each one. |
| **What are ponds and lakes?** | * Ponds and \_\_\_\_\_\_\_\_\_\_ form where water \_\_\_\_\_\_\_\_\_\_\_\_\_ in \_\_\_\_\_\_\_ parts of land. * Water can fill a \_\_\_\_\_\_\_\_\_\_ in several ways.   + The land surface can dip \_\_\_\_\_\_\_\_\_\_\_\_ the level of \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ water.   + \_\_\_\_\_\_\_\_\_ and other precipitation can add to the lake.   + Water can flow from a stream or a \_\_\_\_\_\_\_\_\_\_\_\_\_ into a lake.   + Lakes maintain a steady level because the “in-flow” (water flowing \_\_\_\_\_) is approximately \_\_\_\_\_\_\_\_\_\_\_\_ to the “outflow” (water flowing \_\_\_\_\_\_\_\_). |
| **How much of Earth’s freshwater is frozen?** | * About \_\_\_\_\_\_\_ of fresh water on Earth is locked up in the \_\_\_\_\_\_\_ covering land near the \_\_\_\_\_\_\_\_\_\_\_\_. * In Earth’s coldest regions, more snow \_\_\_\_\_\_\_\_\_\_\_ each year than \_\_\_\_\_\_\_\_\_\_\_\_, and the snow builds up to form \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.   + A **\_\_\_\_\_\_\_\_\_\_\_\_\_** is a large mass of ice and snow that moves over \_\_\_\_\_\_\_.   + There are \_\_\_\_\_\_ types of glaciers:     - \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ glaciers: cover huge landmasses (Antarctica and Greenland).     - \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ glacier: builds up in \_\_\_\_\_\_\_\_\_\_\_ areas and moves slowly down between \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_. * An **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_** is a mass of ice \_\_\_\_\_\_\_\_\_\_\_\_\_ in the ocean. It starts out as part of a \_\_\_\_\_\_\_\_\_\_\_\_\_\_.   + Glaciers form ice shelves that extend out over the \_\_\_\_\_\_\_\_\_\_\_\_\_ and when a portion of a shelf breaks off and floats away, it becomes an \_\_\_\_\_\_\_\_\_\_\_.   + \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ of icebergs break off from ice sheets each year.     - Icebergs can vary in \_\_\_\_\_\_\_\_\_\_ from very small to very large ones.   + The water in an iceberg may have been frozen for \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ years. |
| **How does freshwater flow underground?** | * Water fills \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ spaces.   + After a rainstorm, water flowing along Earth’s surface \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ or sinks into the \_\_\_\_\_\_\_\_\_.   + Water held underground is called **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.** * A **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_** substance is a substance that liquids \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ through.   + Ex: soil, \_\_\_\_\_\_\_\_\_\_\_\_, and gravel   + In a permeable substance, water (or any liquid) flows \_\_\_\_\_\_\_\_\_\_\_\_\_\_ the particles. * An **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_** substance is a substance that liquids \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ through.   + Ex: glass and \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ * Groundwater collects because gravity causes rainwater to sink into the \_\_\_\_\_\_\_\_\_\_ until it reaches \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ rock.   + Huge amounts of \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ may be stored in the soil.   + The **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_** is the top of the region that is saturated, or completely \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ with water.     - The area below the water table is known as the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ zone. * \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ rock prevents groundwater from sinking farther down. |
| **What is an aquifer?** | * An **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_** is an underground layer of permeable rock or sediment that contains \_\_\_\_\_\_\_\_\_\_\_\_\_\_.   + Aquifers are found all over the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.   + For an aquifer to form, \_\_\_\_\_\_\_\_\_\_\_\_\_\_ things are needed:     - A layer of \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ material holds the water.     - A neighboring area of \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ rock that keeps the water from \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ away.     - A source of water that replenishes or \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ the aquifer.   + Water in an aquifer moves \_\_\_\_\_\_\_\_\_\_ because it is under \_\_\_\_\_\_\_\_\_\_\_ from all sides.   + Water in an aquifer may have been there for \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ of years. * The Importance of Aquifers   + The ground acts like a giant \_\_\_\_\_\_\_\_\_\_\_\_\_\_ for the groundwater.   + Stones and sand filter out \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ and other living organisms as well as some harmful \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ and minerals.   + Many big \_\_\_\_\_\_\_\_\_\_\_\_ collect water from rivers and store it in \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ above the ground.   + About \_\_\_\_\_\_\_\_\_\_ of the people in the US get their freshwater from underground |
| **How does groundwater get to the surface?** | * Springs and Wells   + \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ can be collected from springs and wells.   + A **\_\_\_\_\_\_\_\_\_\_\_\_\_** is a flow of water from the ground at a place where the surface of the land dips \_\_\_\_\_\_\_\_\_\_\_\_\_ the water table.   + A **\_\_\_\_\_\_\_\_** is a hole in the ground that reaches down to the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ zone.     - A \_\_\_\_\_\_\_\_\_\_ is used to draw the water out, and a screen is used to filter out particles of sand and gravel.   + An \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ well is a well in which water flows to the surface naturally because it is under \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.     - An artesian well does not need a \_\_\_\_\_\_\_\_\_\_\_\_ because the water in that area is under pressure. |
| **How deep is the water table?** | * The \_\_\_\_\_\_\_\_\_\_\_ of a water table can vary from season to season depending on how much rain \_\_\_\_\_\_\_\_\_\_\_\_ and how much water is \_\_\_\_\_\_\_\_\_\_.   + Things that can drop the water table: watering \_\_\_\_\_\_\_\_\_, \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, used \_\_\_\_\_\_\_\_\_\_\_\_\_\_ than replaced   + Things that can raise the water table: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |

**Draw: Groundwater: Label: Draw: the difference between wells and springs:**

|  |  |  |
| --- | --- | --- |
|  |  |  |