

Handout (Teacher Copy)

Computational Thinking Mind-Map

In pairs, create a mind-map reviewing the concept of computational thinking.

Computational Thinking

Climate Change Terminology

Use a variety of resources, such as textbooks and the internet, to research, define the following terms, and relate the terms to climate change.

Water Table: The level below the earth's surface at which the ground becomes saturated with water. The water table is set where hydrostatic pressure equals atmospheric pressure.

Aquifer: Underground geologic formation(s) that are water bearing. A geological formation or structure that stores and/or transmits water, such as to wells and springs. Use of the term is usually restricted to those water-bearing formations capable of yielding water in sufficient quantity to constitute a usable supply for people's uses.

Polar Ice-Cap: A Polar Ice-Cap is a thick layer of ice and snow that covers large areas of land. Polar ice caps are in the North and South Poles of the Earth. An ice cap is a glacier, a thick layer of ice and snow, that covers fewer than 50,000 square kilometers (19,000 square miles). Glacial ice covering more than 50,000 square kilometers (19,000 square miles) is called an ice sheet.

Ice caps form like other glaciers. Snow accumulates year after year, then melts. The slightly melted snow gets harder and compresses. It slowly changes texture from fluffy powder to a block of hard, round ice pellets. The marine ecosystem beneath Arctic ice caps can be rich in biodiversity. Seaweeds, krill, fish, and marine mammals such as whales and seals are indigenous to ice caps around the Arctic Circle.

Salinity: The term salinity refers to the amount of dissolved salts that are present in water. Sodium and chloride are the predominant ions in seawater, and the concentrations of magnesium, calcium, and sulfate ions are also substantial. Naturally occurring waters vary in salinity from the almost pure water, devoid of salts, in snowmelt to the saturated solutions in salt lakes such as the Dead Sea. Salinity in the oceans is constant but is more variable along the coast where seawater is diluted with freshwater from runoff or from the emptying of rivers.

Scratch Brainstorming

Your task is to create an efficient code (the shortest code possible) in the *Water Systems Water Table Terminology Example* Scratch program that will continue the current pattern with the remaining Water Systems terminology.