

# **WATER – Terms and Definitions**

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## **FRESH WATER**

### **Water On the Ground** (AW – Chpt. 7 Section 1)

|   |   |
|---|---|
| condense  | To change from a gas to a liquid.   |
| divide = Br watershed   | The highest land that separates the direction in which water will run off the earth's surface.  |
| evaporate   | To change from a liquid to a gas.   |
| freeze  | To change from a liquid to a solid.   |
| glacier   | A moving mass of ice and snow.  |
| lake  | A body of water that collects in a hole or depression in the earth's surface; larger and deeper than a pond.                          |
| pond (US)   | A body of water that is smaller and shallower than a lake. (US)   |
| river basin, catchment area /basin, drainage area / basin (=povodí) | All the land that drains into a river, with its system of streams and other tributaries.  |
| runoff  | Water that follows off the earth's surface.   |
| sheet runoff  | Water that has no channels to direct its flow as it runs off the earth's surface.   |
| stream  | Runoff that follows in a channel between banks of soil, rock, or other material.  |
| swamp [o]   | A low-lying water-soaked marsh or bog that forms when a lake or pond fills with sediment and vegetation.                              |
| transpiration   | The process by which green plants, as they make food, give off water vapor through small openings in their leaves.                    |
| tributaries   | Streams and small rivers that empty into one large river system.  |
| water cycle   | The process by which water is continually recycling between the earth's surface and the atmosphere; also called the hydrologic cycle. |

## **Water In the Ground** (AW – Chpt. 7 Section 2)

|                    |  |
|--------------------|--|
| adhesion           | The attraction of water molecules to other kinds of molecules.   |
| aquifer            | A layer of permeable rock through which water travels.<br>Water-bearing strata. (zvodeň)   |
| artesian spring    | A natural flow of water from an artesian system.   |
| artesian system    | A combination of rock layers in which water passes downward through an aquifer.  |
| capillary action   | The upward movement of water in soil due to adhesion and cohesion.   |
| capillary fringe   | An area just above the water table that receives its moisture by capillary action.   |
| cohesion           | The attraction of one molecule to another molecule of the same kind.   |
| geyser             | The eruption from the ground of water and steam that has been heated by hot magma or rocks in the earth's crust.   |
| ground water       | Water that has infiltrated the earth.  |
| impermeable        | Property allowing no water to pass through a material.   |
| infiltration       | The process by which water sinks into the ground.  |
| permeability       | Property determining how easily water flows through a material.  |
| pore spaces        | Spaces between particles of sand or soil.  |
| porosity           | The total volume of the pore spaces in a certain volume of material.   |
| spring             | The place where ground water flows out of the ground because the water table has intersected the earth's surface.  |
| viscosity          | A measure of how easily a liquid flows.  |
| water table        | The boundary between the zone of aeration and the zone of saturation.<br>Upper boundary surface of the saturated zone. (Strahler)<br>Upper limit of the ground water body. |
| zone of aeration   | The layer of soil between the water table and the earth's surface.   |
| zone of saturation | The layer of soil below the water table.   |

## THE OCEAN

### The Bottom of the Ocean (AW Chapter 8 Section 1)

|                    |  |
|--------------------|--|
| abyssal plain      | Large flat area of the deep sea floor; formed by sediment flows that spill off the continental margins.  |
| continental margin | The region of the ocean bottom near the land areas; contains most of the sediment eroded from the land; separates a continent from the deep sea floor. |
| continental slope  | The steeper middle part of a continental margin. (svah) VH   |
| continental rise   | The lowest part of a continental margin. (úpatí) VH  |
| echo sounding      | A method of using noise (pings) to measure the depth of the ocean.   |
| island arc         | A chain of islands, usually curved, that separates a marginal sea from a major ocean.  |
| marginal sea       | A smaller body of salt water found along the margin of a major ocean.  |
| mid-ocean ridge    | A system of rugged mountains that extends down the middle of the ocean basins.   |
| Mid-Atlantic Ridge | A part of a mid-ocean ridge (Středoatlantský hřbet). VH  |
| East Pacific Rise  | A part of a mid-ocean ridge (Východopacifický práh). VH  |
| ocean              | The entire body of salt water that covers much of the earth's surface; also, any of its major geographical divisions.                                  |
| ocean basin        | The low-lying earth formation that contains the ocean's water; consists mainly of dense basaltic crustal rock.   |
| rift valley        | Deep valley in the center of the mid-ocean ridge; a site of active volcanism.  |
| Ring of Fire       | The region of volcanic activity that surrounds the basin of the Pacific Ocean.   |
| trench             | A long narrow depression of the deep sea floor; generally has steep sides; usually bordered by areas of volcanic activity.                             |
| guyot [gijot]      | A flat topped underwater mountain.   |
| seamount           | Volcanic cone growing upward from the ocean bottom layer by layer, usually rising more than 1000m above the floor.                                     |

## Properties of Ocean Water (AW Chapter 8 Section 2)

|                |  |
|----------------|--|
| photic zone    | The uppermost zone of the open ocean and the zone of most light.   |
| aphotic zone   | The part of the ocean that is in total darkness.   |
| disphotic zone | A zone of reduced light in the ocean; between 200m and 1000m deep.   |
| brine pool     | isolated spot of hot ocean water that contains concentrated amounts of dissolved solids (solanka); it forms when deep water circulation is restricted (VH) |
| floe           | A flat mass of ice, smaller than ice field, floating at sea.   |
| freezing point | The temperature at which a liquid freezes.   |
| icebergs       | Floating masses of ice that broke off <b>fresh water glaciers</b> .  |
| pack ice       | A large expanse of floating sea ice that has been broken and then refrozen into jagged pressure ridges. (pole ledových ker)                                |
| salinity       | Saltiness; a measure of the amount of total dissolved materials in water; grams of dissolved materials per kilogram of water (ppt = parts per thousand).   |
| sea ice        | Frozen ocean water.  |
| water mass     | A large volume of water characterized by a similar temperature, salinity, and density throughout its mass.   |
| water pressure | The force that a mass of overlying water exerts upon a submerged surface.  |

## **The Circulation of Ocean Water** (AW Chapter 8 Section 3)

|                    |  |
|--------------------|--|
| crest              | The highest point of a wave. (hřeben)  |
| gyre [džaiə]       | A closed system of rotating ocean currents. (koloběh proudů)   |
| high tide          | When the waterline of a body of water reaches its highest point.   |
| low tide, ebb      | When the waterline of a body of water reaches its lowest point.  |
| pounding of waves  | repeated heavy blows (vlnobití)  |
| rogue wave [rəʊg]  | A very high wave that forms on the open ocean when high waves of about the same wavelength have their crests coincide. (ničivá vlna)             |
| surf zone          | The area where breaking waves occur.   |
| swell              | A rhythmic pattern of waves. (vlnění)  |
| trough [trof]      | The lowest point between two wave crests. (pata vlny)  |
| tsunami            | A huge wave caused by an underwater earthquake somewhere along the ocean bottom; barely noticeable out at sea.                                   |
| upwelling          | A process by which deep, cold, nutrient rich water is brought to the surface and replaces lighter surface water. (výstup spodních vod)           |
| wave base          | The point below the surface of water at which the orbital motion of a wave nearly disappears (1/2 a wavelength below the midheight of the wave). |
| wave height [hait] | The vertical distance between a wave's highest and lowest points.  |
| wavelength         | The horizontal distance from a point on one wave to the corresponding point on the next wave.  |