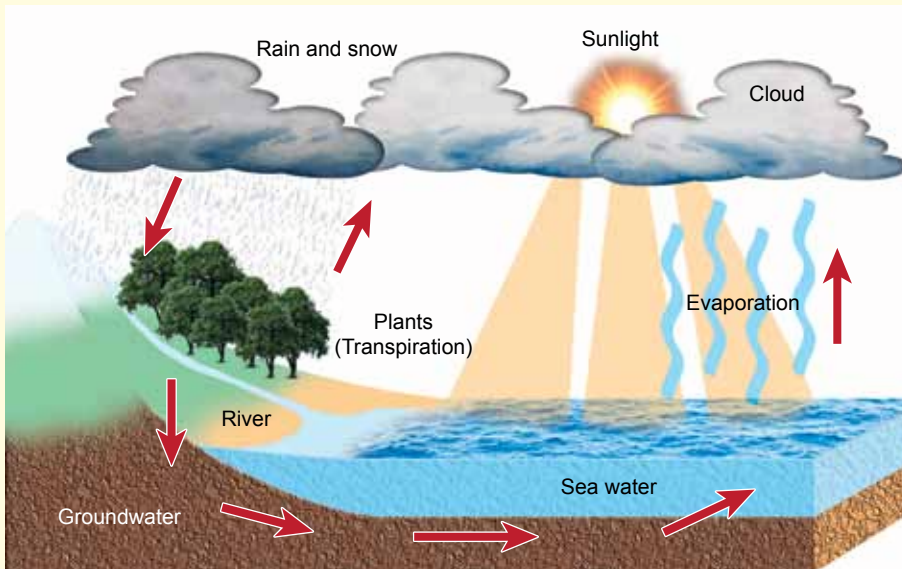


# Distribution of Water on Earth

## Water cycle

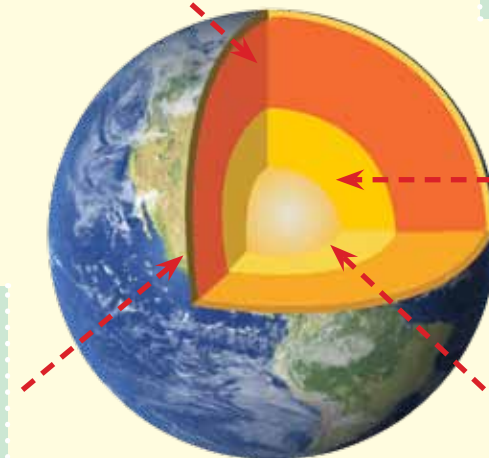


The amount of water contained in Earth is always constant. This is because there is a water cycle involving the movement of water from the sea to the atmosphere, and then from the atmosphere to the Earth's surface, and back to the sea.

## Earth's Layer

**Mantle** is a layer of Earth that lies beneath the crust. Mantle are topped in thick magma with a hot temperature between  $1400^{\circ}\text{C}$  and  $2500^{\circ}\text{C}$ . This layer measures between 100 km and 2900 km in depth.

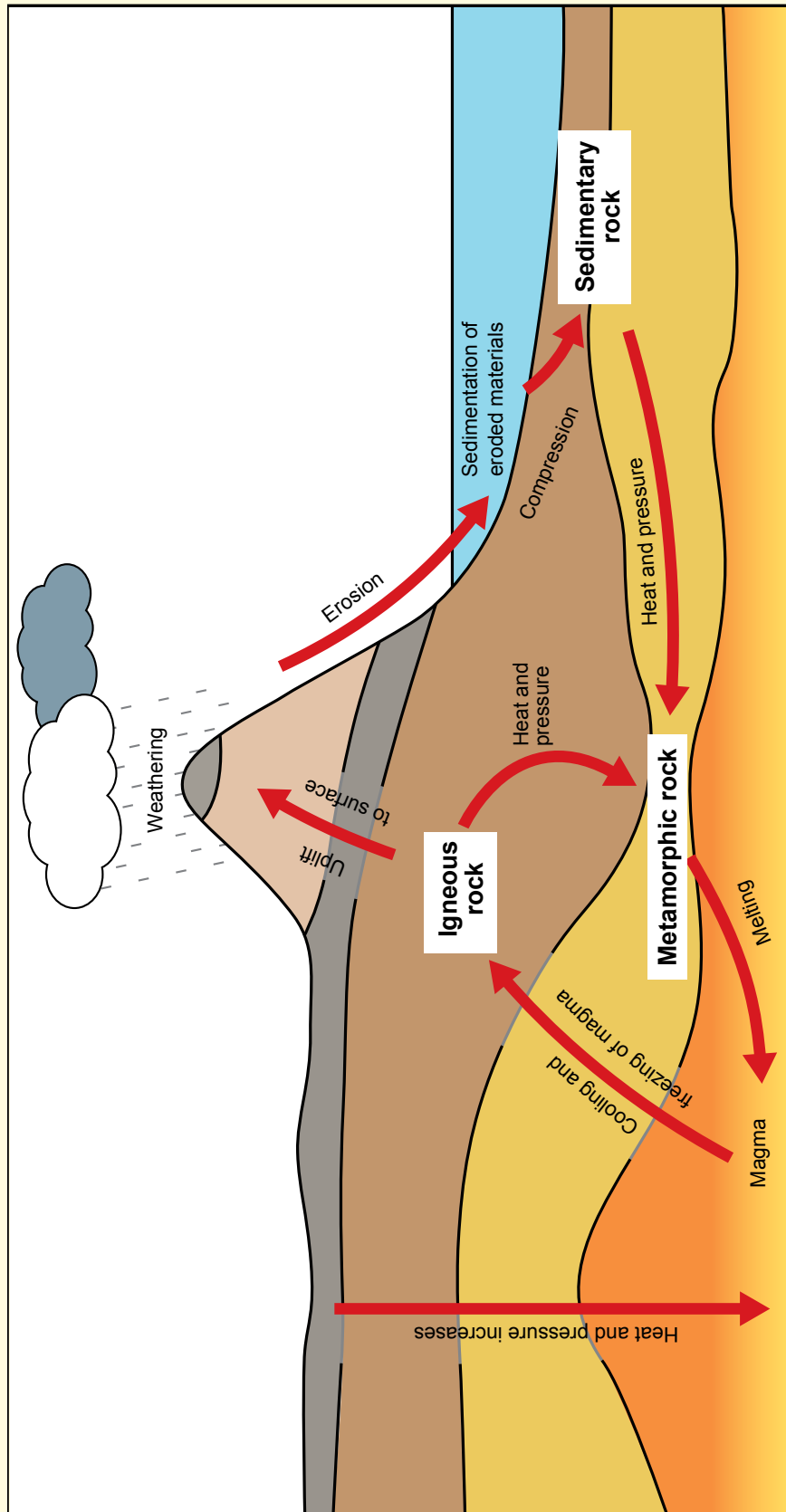
**Crust** is the outermost layer of Earth that becomes the living place for all living things. This layer is arranged on soil and rocks. The crust layer is between 0 and 100 km in depth from the surface of the ground.



**Outer core** is the layer of Earth that lies beneath the mantle. This layer is very hot, have temperature between  $3000^{\circ}\text{C}$  to  $5000^{\circ}\text{C}$ .

**Inner core** is the layer of Earth that lies beneath the outer core. The inner core is very hot ( $3000^{\circ}\text{C}$  –  $5000^{\circ}\text{C}$ ). The diameter of the inner core is about 6800 km.

# The Process of Rock Formation



| Igneous rock                                                                                                                                                       | Sedimentary rock                                                                                                                                                                                                        | Metamorphic rock                                                                                                                                                                                     |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <ul style="list-style-type: none"> <li>Formed when magma or lava from mantle layer cools and solidifies.</li> <li>Example: Granite, basalt and obsidian</li> </ul> | <ul style="list-style-type: none"> <li>Formed by sediment that is deposited for a long period of time, usually as layers at the bottom of a lake or sea.</li> <li>Example: Sandstone, mudstone and limestone</li> </ul> | <ul style="list-style-type: none"> <li>A result of transformation of igneous or sedimentary rocks which exposed to very high heat and pressure</li> <li>Example: Marble, slate and schist</li> </ul> |