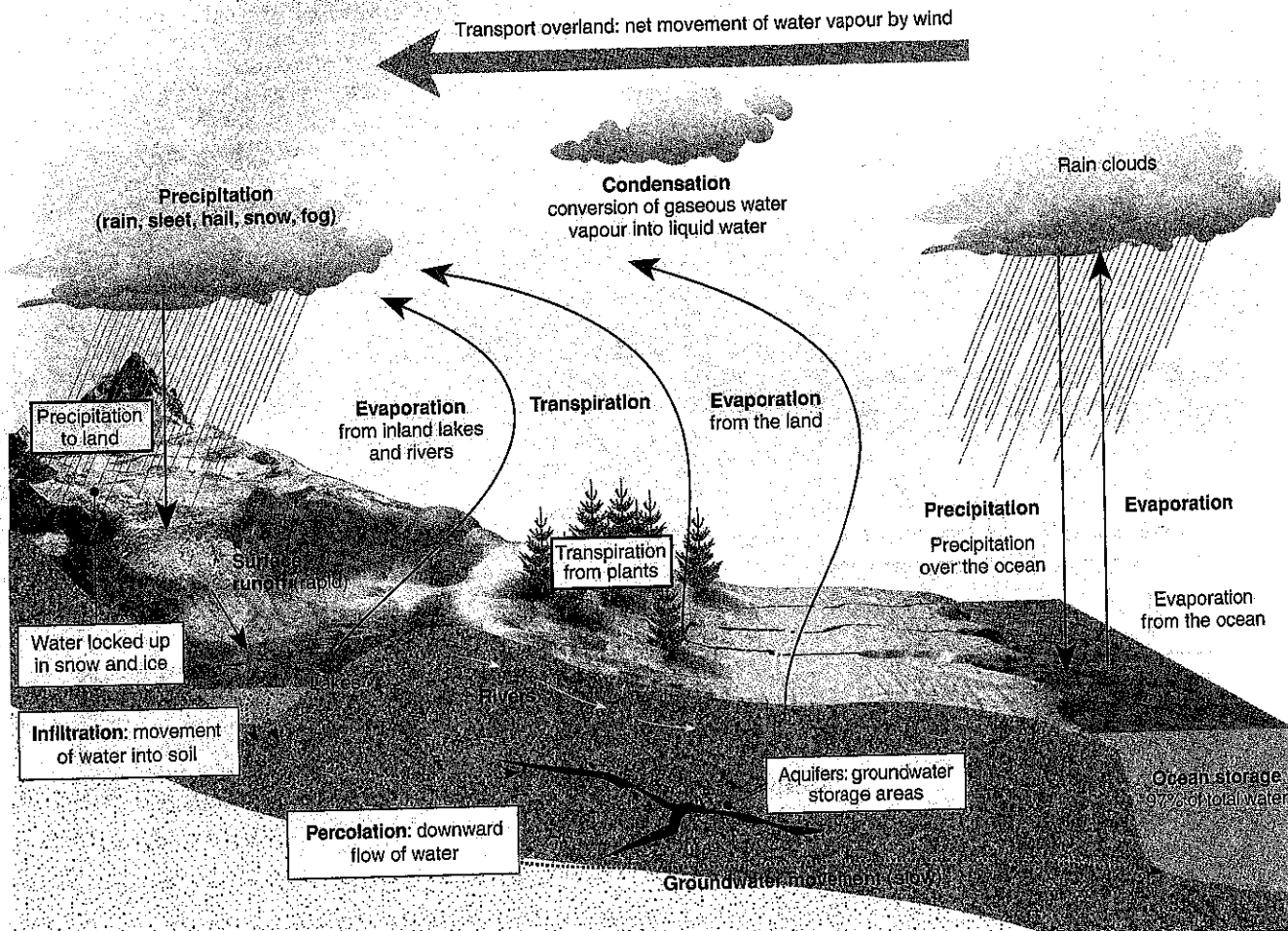


The Water Cycle

The hydrologic cycle (water cycle), collects, purifies, and distributes the Earth's fixed supply of water. The main processes in this water recycling are described below. Besides replenishing inland water supplies, rainwater causes erosion and is a major medium for transporting dissolved nutrients within and among ecosystems. On a global scale, evaporation (conversion of water to gaseous water vapour) exceeds precipitation (rain, snow etc.) over the oceans. This results in a net movement of water vapour (carried by winds) over the land. On land, precipitation exceeds

evaporation. Some of this precipitation becomes locked up in snow and ice, for varying lengths of time. Most forms surface and groundwater systems that flow back to the sea, completing the major part of the cycle. Living organisms; particularly plants, participate to varying degrees in the water cycle. Over the sea, most of the water vapour is due to evaporation alone. However on land, about 90% of the vapour results from plant transpiration. Animals (particularly humans) intervene in the cycle by utilising the resource for their own needs.



1. Identify two ways in which water returns to the oceans from the land:

- (a) _____
- (b) _____

2. Briefly describe three ways in which humans may intervene in the water cycle, and the effects of these interventions:

- (a) _____
- (b) _____
- (c) _____

3. Identify the main reservoir for water on Earth: _____

4. Identify the main reservoirs for fresh water: _____

5. Describe the important role of plants in the cycling of water through ecosystems: _____