

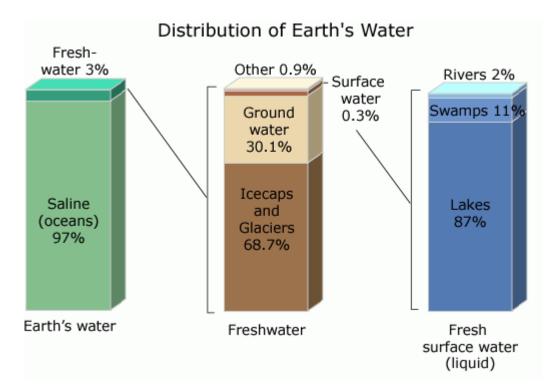
English for Science



WATER - Introduction

Brainstorming

How many percent of the earth's surface is covered by water? What happens when water **freezes**? What happens when water **condenses**? What happens when water **evaporates**?



Task: Describe the distribution of Earth's water. Use emphasizers only, not more than /almost all, most. Give contrasts by using while, whereas etc.

As green plants make food, they give off water vapor to the atmosphere through pores in their leaves in a process called **transpiration**.

Water also evaporates from the surface of a human skin when our body gets rid of its moisture. *How do we call that process?*

During all the years between the formation of the earth and now, water has been moving continuously into and out of the atmosphere in a process called **water** or **hydrologic cycle**.

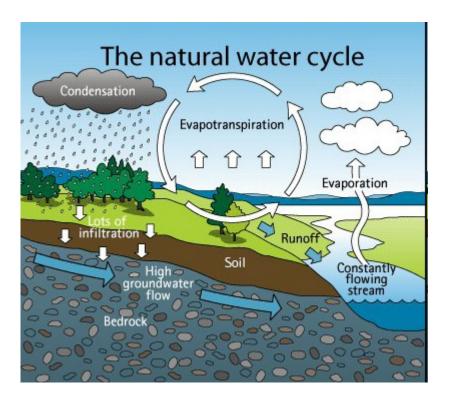
Task: Describe the process in pairs.

Key words: cool, cause (as a verb), enter, fall (back), return, soak into, stay on the surface, run off, precipitation, evapotranspiration, (under) ground water supply

Grammar revision: 1.vyjádření stejné míry

2.vyjádření přímé úměry

Why is this process, on a worldwide basis, a balanced system?



Conversation Topic

Describe a **stream near your home**.

Where does it **start**? Try to give the exact **location**.

What larger body of water does it flow into?

Is it **clean or polluted? What causes** the pollution?

*Is there a hope for improvement (sewage water treatment plant / reduction of pollution)?*Does it provide a *habitat* for many plants and animals?

Key words: spring, start, source, rise, head (pramen, pramenit), origin (pramen),

thermal spring / well head (zřídlo/vřídlo), outflow / karst spring ("vyvěračka"), sinking / foundering (propadání, ponor), stream (potok, pramínek, říčka), streamlet (potůček, strouha, pramének), brook, creek (potok), the upper reaches of a river (horní tok); river bed (řečiště), bank (břeh), watercourse (tok), confluence (soutok), waterway (splavný tok), channel (průliv), canal / industrial watercourse (průplav), well (studna), dam (hráz), reservoir / lake (přehradní nádrž)

Warning: water bed =vrstva hrubého štěrku na bázi jílu! stem=pramenit z čeho (jen přeneseně) microbiological analysis of drinking water (pitné vody), liquid wastes, sewage = odpadní vody

What is a structure like bridge that takes water across a valley?

More vocabulary in Lingea - Rivers and Lakes or Rivers- Unit 3 in our Syllabus.

Task 1: Find the synonyms in the text Water and Ancient Civilizations to fit the following meanings:

Belonging to times long past = need (par.1) = Cultivate by growing (2) = proof (3) = began/developed/originated (4) =

supplying dry land with water by means of ditches etc. (4) =

Task 2: Find the opposites in the text to fit the following meanings:

Interrupted (1) - , set free into nature (3) - came to an end (4) - fall (5) - , decreased (5) -

People cannot live without fresh water. Their body cells and body processes depend on a continual supply of fresh water. Also, the food that people eat requires water to grow.

Civilizations could not develop without the invention of farming. With farming, people could stay in one place and raise their own food rather than relocate depending on the availability of natural foods.

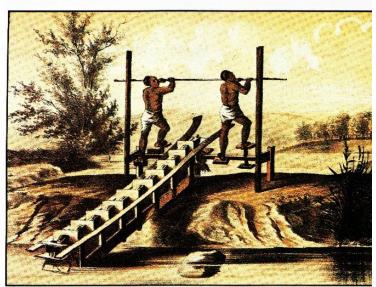
Evidence indicates that people in the Middle East began raising grain, goats, and sheep about 11 000 years ago. Crops were raised and animals domesticated about 9500 years ago in Southeast Asia and about 8500 years ago in what is now Mexico.

About 5000 years ago, four major civilizations arose. Each of those civilizations developed in a river valley that contained fertile soil for farming and fresh water for irrigation and for use by people. The four river valleys are the Nile (in present-day Egypt), the Tigris and the Euphrates (in present-day Iraq), the Indus (in present-day Pakistan), and the

Hwang Ho, or Yellow River (located in present-day China).

Scientists who study the past feel that there is a connection between the rise and fall of civilizations and the way they used their land and other natural resources. In the case of the Sumerians, who lived in the valley between the Tigris and the Euphrates Rivers, there is evidence that they destroyed their farmlands by poor irrigation practices.

Water and Ancient Civilizations



They increased the salt content of the soil to a point where crops could no longer be raised (a problem that still occurs in areas that water their crops by irrigation).

(text from Fariel, R. - Hinds, R. - Berey, D.: Earth Science, Addison-Wesley 1987)

Tasks - Věra Hranáčová, English for Earth Science

Homework: Gap-fill test "Water collects on the ground"