

# Earth Science 11

## Unit 1 – Earth and its Solar System

### Day 2 – Earth is Unique

Name: Schaub

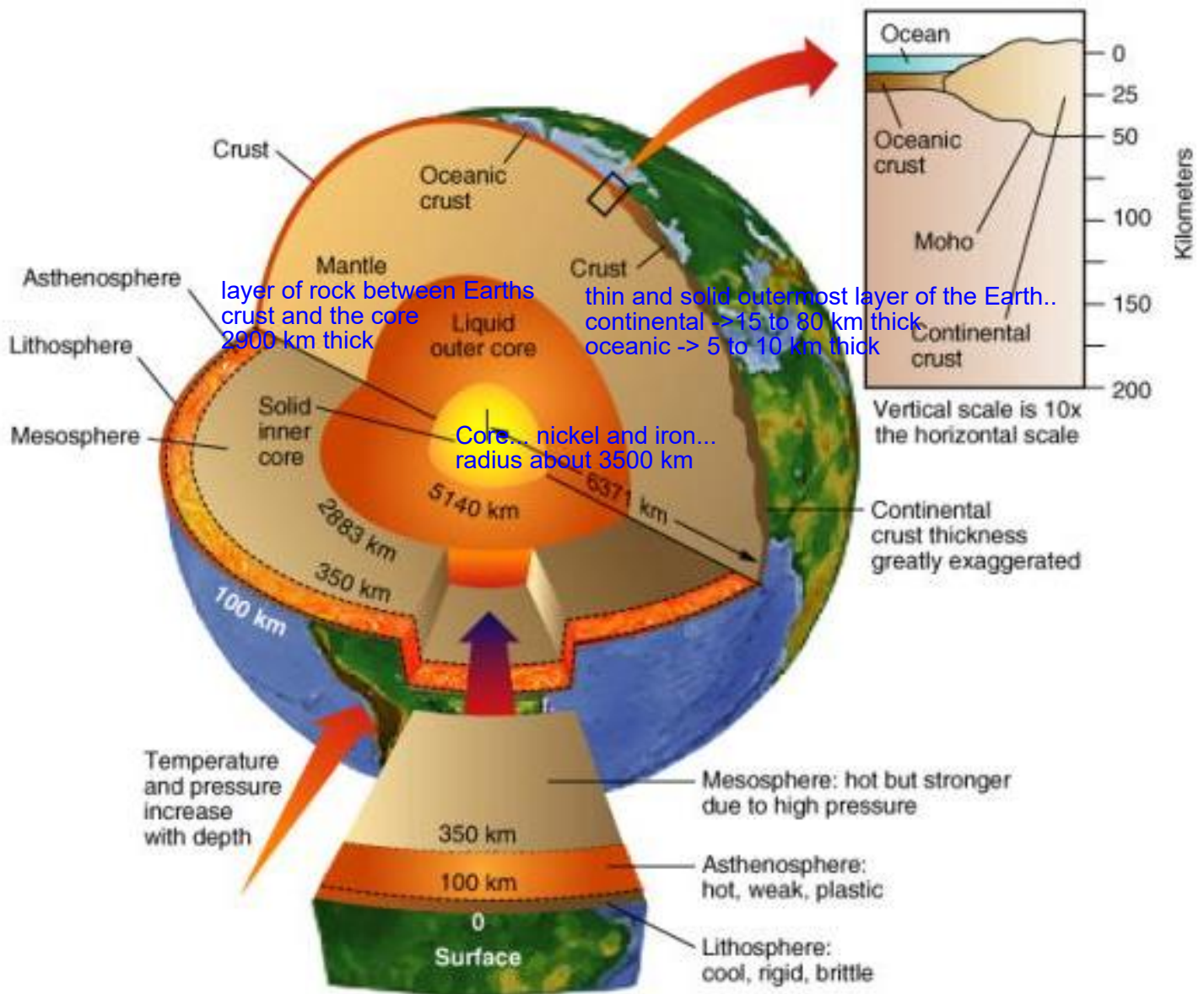
Date: \_\_\_\_\_

Block: \_\_\_\_\_

Earth is the 3rd planet from the sun and formed about 4.6 billion years ago.

71 % of Earth's surface is water

Earth is an oblate spheroid ... also known as a slightly flattened sphere. Its pole to pole circumference is 40 007 and its equatorial circumference is 40 074.

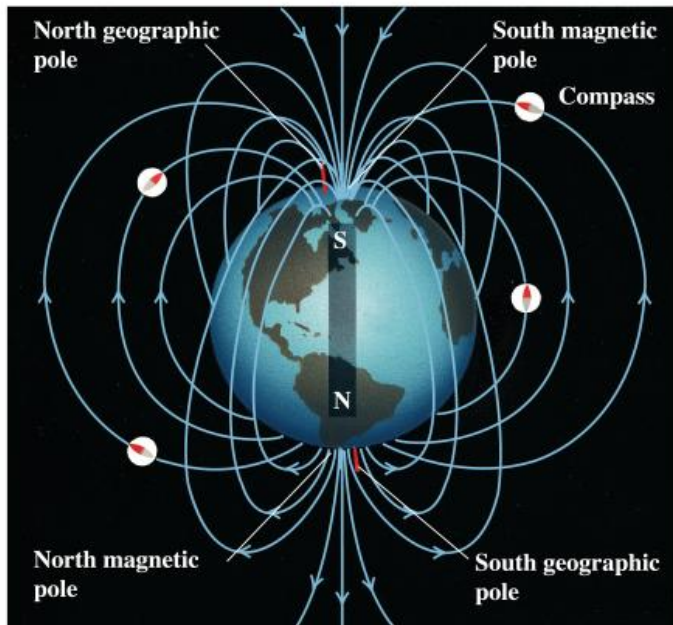


Copyright 1999 John Wiley and Sons, Inc. All rights reserved.

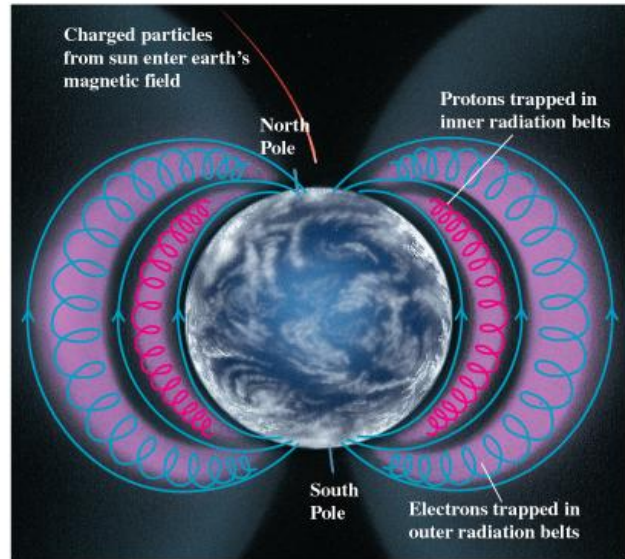
Oceanic Crust: The crust found under oceans.

Continental Crust: The crust found on continents (on land)

**Earth's Magnetic Field:** Earth's magnetic field extends beyond the atmosphere and affects a region of space called the magnetosphere. Scientists believe that motions within the liquid iron outer core produce electric currents that in turn create Earth's magnetic field



Copyright © Addison Wesley Longman, Inc.



(a)

Copyright © Addison Wesley Longman, Inc.

**Earth's Gravity Field:** gravity -> force of attraction between all matter in the universe

depends on mass of the objects and the distance between them (Newton)

larger masses and closer together.... greatest attraction

**Oxygen:** Oxygen is a key ingredient to life. All human beings breathe oxygen.

Oxygen is constantly put into the atmosphere by plants and trees

Earth has a breathable atmosphere.

**Water:** Water on Earth can be found anywhere, in its three states. It can be frozen, taking the form of ice. It can be liquid, seen in seas and oceans and lakes

Water is essential for life – our bodies are 50-70% water.

Water can transport nutrients, absorb heat and regulate body temperature

**Photosynthesis:** Sunlight is very important. Heat, light, and energy all come from the sun. Trees and plants need the Sun to produce oxygen through a process called photosynthesis. We also need sunlight to grow our food - crops and animals.

**Atmosphere:** PROTECTIVE!!!! needed for the survival of humans.

The ozone is the layer around the earth that screens out harmful radiation.

**Temperature:** Because of Earth's ideal distance from the Sun, it receives the perfect amount of heat and light to support life. Earth is the only planet in our solar system with the right temperature range for there to be liquid water