

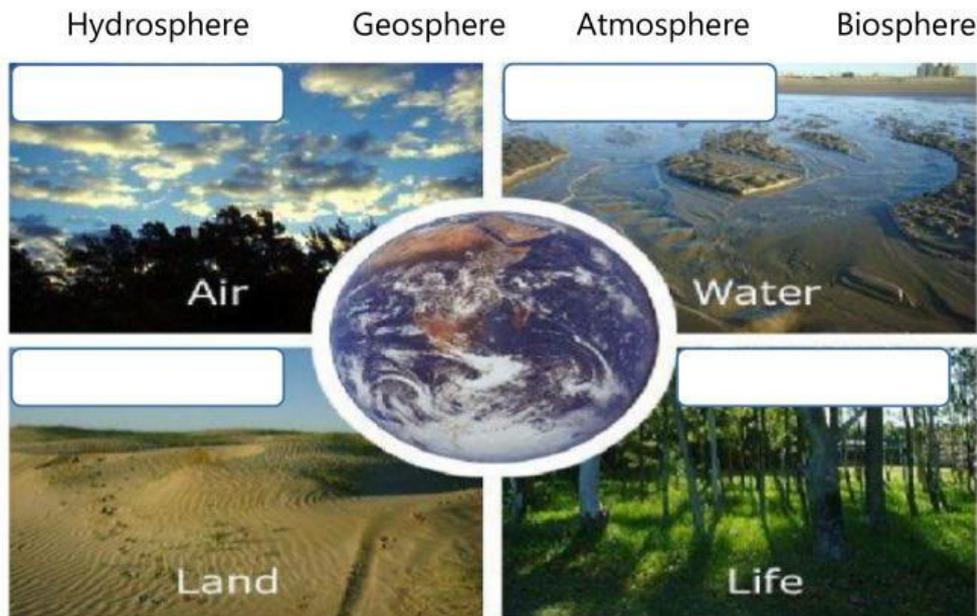
7th Grade SCIENCE EXIT TEST – PART 1

EARTH'S SPHERES & STRUCTURES

Earth's 4 Spheres:

Lithosphere (land), Hydrosphere (water), Biosphere (living things), Atmosphere (air)

- The prefix "hydro" in the word hydrosphere means:
 - Life
 - Water
 - Earth
 - Air
- What 2 spheres are represented in the picture to the right?
 - Geosphere and hydrosphere
 - Hydrosphere and atmosphere
 - Biosphere and geosphere
 - Atmosphere and biosphere
- In each of the 4 boxes, label the correct system.



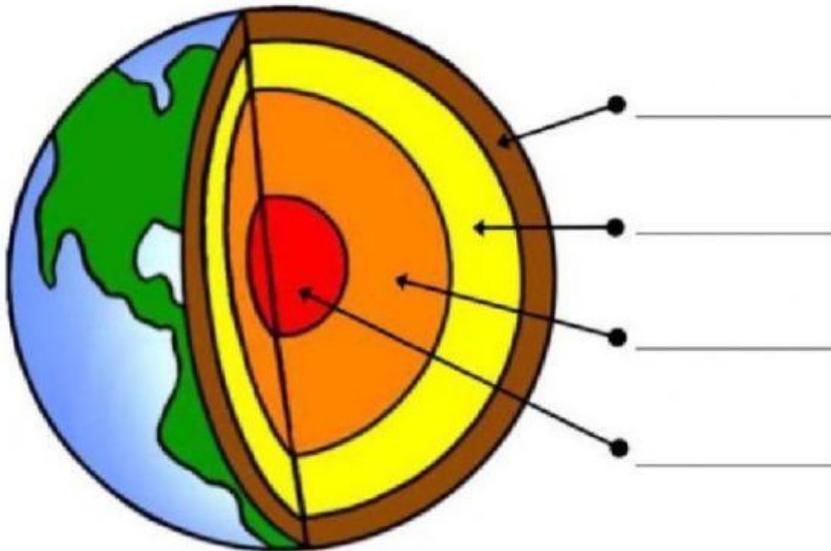
- What spheres are included in clouds producing rain?
 - Atmosphere to Hydrosphere
 - Biosphere to Geosphere
 - Geosphere to Atmosphere
 - Biosphere to Atmosphere

The Interaction between Earth's Spheres

- Water evaporating from the surface of a lake moves from the _____.
 - Geosphere to the hydrosphere
 - Atmosphere to the geosphere
 - Hydrosphere to the atmosphere
 - Atmosphere to the Cryosphere
- When carbon dioxide dissolves from the air into the ocean-the interaction is between:
 - The atmosphere and Hydrosphere
 - The atmosphere and Geosphere
 - The atmosphere and biosphere
 - The atmosphere and Atmosphere
- An example of the biosphere would be:
 - Glacier
 - Wind
 - Mountain
 - Penguin

Earth's Crust, Mantel, & Core

1. Label the layers in the structure of the Earth.



2. The mantle is the _____ layer of Earth that is composed of iron, aluminum, calcium, magnesium, silicon, and oxygen
3. The _____ is the last and innermost layer which is separated into the liquid outer core and the solid inner core.
4. The _____ can be found at the deepest region of the planet.
5. The _____ is the outermost layer of Earth. It is the thinnest layer as it makes up only about one percent of Earth.

Earth's Internal & External Forces

1. Earthquakes are a result of built up _____ in the Earth's crust.
2. Stress builds in the Earth because of the _____ and _____ as the crust heats and cools.
3. Volcanoes can be formed by _____ oozing out of the ground when the lithosphere pulls apart.
4. Scientists who study earthquakes and related phenomenon are called _____.

SHAPING THE EARTH'S SURFACE

Earth's Landforms & Topography

Label the diagrams using the words below:

Canyon

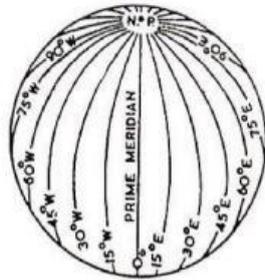
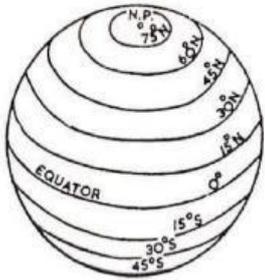
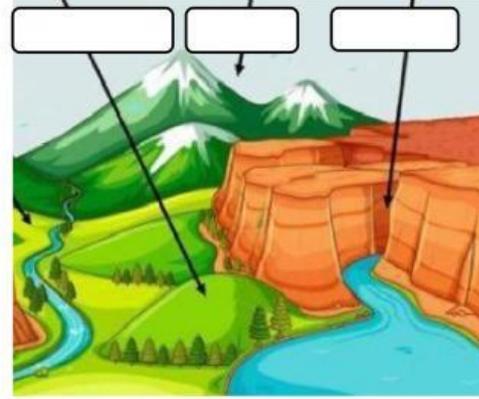
Mountain

Plateau

Waterfall

Hill

River



Latitude
Earthquake
Longitude
Volcano



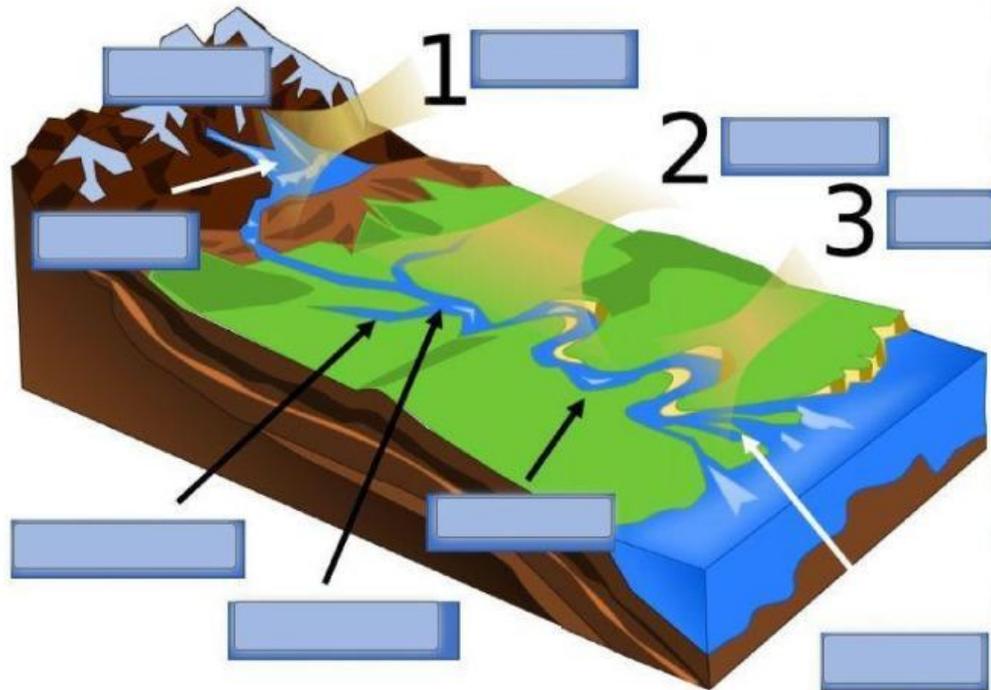
Shorelines and Beaches

- A coastline is _____.
 - Where there's a high level of contamination
 - Where people go on holiday
 - Where the land meets the water
 - Where the beach is
- How is sand formed?
 - Big boulders that fall and become small
 - Machines crash pieces of rock
 - Pieces of boulders worn away by the water
 - the force of waves
- A gently sloping surface produced by wave erosion and extending from the base of the wave-cut cliff is called a:
 - Wave cut beach
 - Deserted beach
 - Surfer's beach
 - Plateau

Rivers & Streams

Write the name of the different stages and parts of the river in the correct place.

Upper course - Middle course - Lower course - Meander - Confluence
- Tributary - Source - Waterfall - Mouth



Weathering, Erosion, & Deposition

1. The moving of broken rocks and soil from one place to another: _____
2. The wearing away or changing of rocks into small pieces _____
3. The carrying of weathered material (rocks or soil) to a new location: _____

Matching:

1. _____ A vibration or shaking of the Earth's crust
2. _____ A tool used to measure an Earthquake
3. _____ Melted rock found within the Earth
4. _____ A break in the crust along which rocks move
5. _____ A mountain that forms when melted rock flows through the Earth's crust
6. _____ Melted rock that reaches Earth's surface
7. _____ A tool used to measure temperature

Magma

Fault

Earthquake

Lava

Thermometer

Volcano

Richter Scale

How Natural Events Can Change Habitats

1. A mass of snow, ice or rocks that slides rapidly down the side of a mountain
 - a. Landslide
 - b. Flood
 - c. Volcano
2. A great amount of water coming over a place from the ocean.
 - a. Blizzard
 - b. Flood
 - c. Tsunami
3. Some lava and gases coming up suddenly from below the earth surface out of a mountain.
 - a. Sandstorm
 - b. Lightning
 - c. Volcano
4. Continuous dry weather when there is not enough water in the area.
 - a. Flood
 - b. Sandstorm
 - c. Drought
5. A large, circular storm with strong winds.
 - a. Sandstorm
 - b. Blizzard
 - c. Hurricane
6. A sudden violent shaking of the ground, typically causing great destruction.
 - a. Tornado
 - b. Earthquake
 - c. Flood

EARTH'S ENERGY RESOURCES

Geothermal Energy: Use the words below to fill in the blanks in the paragraph

Heat Hot Steam Volcanic Generator
Surface Electricity Wells Turbine Water

Geothermal power plants are used to generate _____. Geothermal energy is the _____ that comes from below the ground in areas of _____ activity. _____ are drilled into a known geothermal reservoir. Cold _____ is pumped under pressure through the injection well into a layer of _____ rocks. The rocks heat the water and the hot water then returns to the _____. The decrease in the pressure causes the water to turn into _____. The steam turns the _____, which generates electricity in a _____. The steam cools and turns back to water which can then be used again in the system to continue the process.

Solar, Water, & Wind

1. Water and Wind are:
 - a. Renewable sources of energy
 - b. Nonrenewable sources of energy
2. What is the name of the man-made structure that holds a lot of water
 - a. River
 - b. Dam
 - c. Wind turbine
3. What do dams require to work?
 - a. Wind, rain, and hail
 - b. Turbines, generators, and moving water
 - c. Wind power

Biofuels & Fossil Fuels

Biofuels

1. Bioethanol and wood are obtained from growing:
 - a. Plants
 - b. Algae
 - c. Potatoes
2. Biogas is obtained from the recycling of _____ products.
 - a. Vegetable
 - b. Waste
 - c. Distilled
3. Fuel _____ is used for heating and cooking.
 - a. Gas
 - b. Wood
 - c. Engine

Fossil Fuels: Fill in the gaps with the words provided.

Energy can be obtained from the _____ of fuels made from the _____ of the _____ of plants and animals. Burning fossil fuels _____ up water in the _____ which is converted to _____. The steam passes through the _____ of the _____, causing them to move. As a result of the rotation of the _____, the copper _____ in the _____ move, producing _____.

Renewable & Non-Renewable Resources:

Choose whether the following resources are **renewable** or **non-renewable**.

- | | | | |
|----------------|-------|---------------------------|-------|
| 1. Wind | _____ | 6. Plutonium | _____ |
| 2. Natural gas | _____ | 7. Hay | _____ |
| 3. Petroleum | _____ | 8. Coal | _____ |
| 4. Cow Manure | _____ | 9. The sun | _____ |
| 5. Water | _____ | 10. Earth's internal heat | _____ |

ENERGY IN THE EARTH'S SYSTEM

Ocean Winds, Currents, & The Water Cycle

1. When solar energy comes through, the Earth's atmosphere is:
 - a. Absorbed
 - b. Reflected
 - c. Transmitted
 - d. Destroyed
2. High pressure systems are usually associated with:
 - a. Bad weather
 - b. Fair weather
 - c. Turning clockwise
 - d. Turning counter clockwise
3. The solar energy that comes to the Earth is absorbed by:
 - a. Gases in the atmosphere
 - b. Clouds
 - c. The land
 - d. The moon
4. Land and sea breezes occur because:
 - a. Land cools off and heats up faster than water
 - b. Land cools off more slowly than water
 - c. Land heats up more slowly than water
 - d. Water heat up more quickly than land

Match each of the words below with the correct definition.

5. Precipitation
 6. Evaporation
 7. Accumulation
 8. Condensation
 9. Transpiration
- a) Water stored in lakes and oceans
 - b) Rain, snow, sleet, or hail
 - c) Water vapor cools and returns to liquid
 - d) Sun heats up water and it becomes water vapor
 - e) Water evaporated from a plant

Weather vs Climate

1. Weather is the condition of the _____ over a particular period of time at a given time and location.
 - a. Troposphere
 - b. Atmosphere
 - c. Hydrosphere
2. Even though there is only one atmosphere on Earth, the weather isn't _____ all around the world.
 - a. Different
 - b. The same
 - c. Better
3. Weather tells you what _____ to wear each day.
 - a. Jewelry
 - b. Hairstyle
 - c. Clothes
4. Climate is the _____ weather of a place over a long period of time in a specific area.
 - a. Average
 - b. Total
 - c. Sum of

Air Pressure, Temperature, & Density

- Gas particles move _____ in all directions
 - Freely
 - Slowly
 - Backwards
- Air pressure is caused by the _____ particles hitting surfaces.
 - liquid
 - Water
 - Gas
- You can increase air pressure by putting _____ air into a tire.
 - More
 - Less
 - The same
- Objects that are less dense than water will _____ on the surface of the water.
 - Sink
 - Fly
 - Float
- Which object would be most likely to float on the water?
 - Anchor
 - Metal
 - Styrofoam
- Which object would be most likely to sink to the bottom?
 - Ship
 - Balloon
 - Anchor

Earth, Sun, and Moon: Move the following descriptions into the correct category.

Filled with craters

24 hrs for rotation

Is a star

Orbits nothing

Experiences phases

Planet

28 days for rotation

Covered with trees, soil, and water

Earth

Sun

Moon

Multiple Choice:

1. Nearest planet to the sun
 - a. Mercury
 - b. Earth
 - c. Venus
2. A star made of very hot gases
 - a. Earth
 - b. Mars
 - c. Sun
3. The Red planet
 - a. Venus
 - b. Mercury
 - c. Mars
4. Only planet where life exists
 - a. Earth
 - b. Saturn
 - c. Uranus
5. Largest planet in the solar system
 - a. Saturn
 - b. Neptune
 - c. Jupiter
6. Planet with seven rings
 - a. Neptune
 - b. Saturn
 - c. Jupiter
7. Number of planets in the Solar System
 - a. Six
 - b. Seven
 - c. Eight
8. The revolution of the Earth takes ____ days
 - a. 12
 - b. 24
 - c. 365
9. The rotation of the Earth takes ____ hours
 - a. 12
 - b. 24
 - c. 365
10. An imaginary line that goes through any spinning object
 - a. Axis
 - b. Rotation
 - c. Revolution