|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Land degradation | Air pollution | Water pollution |  Point source | Non point source |
| Rural  | Urban | Natural | Agriculture | recreation |
| Deforestation | Erosion | desertification |  |  |

**Human Impact**

1. An area with a large human population and higher levels of air pollution \_\_\_\_\_\_\_\_\_\_\_\_
2. Human activity that damages the land to the point it can no longer support an ecosystem\_\_\_\_\_\_\_\_\_\_\_\_\_\_
3. Pollutants that enter a body of water at a specific identifiable location \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
4. Vehicle emissions can lead to \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
5. Pollution that does not have a specific identifiable source \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
6. Areas with a small human population and more open spaces \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Earth’s Structure**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Crust | Mantle  | Inner core | Outer core | Liquid |
| Solid  | Rock cycle | Magma | Sediments | Heat and pressure |
| Metamorphic | Sedimentary | Igneous | Melting and cooling | Convection currents |

1. Label the layers of the earth below
2. Which layer is made up of tectonic plates\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
3. The plates move because of \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ in the mantle
4. Which layer is made of a dense ball of solid metal?\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
5. Which layer is liquid metal \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
6. Label the rock cycle arrows and pictures:
7. A series of processes on Earths surface and interior that slowly changes rocks from one kind to another \_\_\_\_\_\_\_\_\_\_\_\_\_\_
8. Heat and pressure form \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ rock
9. Rock that forms from the cooling of magma below or at the surface \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

****

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Continental drift | Plate tectonics | Pangaea | Plate boundary | Divergent | Convergent |
| Transform | Sea floor spreading | Earthquake | Fault | Epicenter | Focus |
| Seismic waves | Footwall  | Hanging wall | Shield | Composite | Cindercone |
| Magma | Lava | Volcano | Folded  | Fault block |  |

**Plate Tectonics**

1. What is the name given to the supercontinent pictured at right\_\_\_\_\_\_\_\_\_\_\_\_\_
2. Name Alfred Wegener’s theory that stated that the continents were joined in a single landmass \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
3. The geological theory that states that pieces of earths lithosphere are in constant slow motion \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
4. Florida is not on a \_\_\_\_\_\_\_\_\_\_\_\_\_\_ so it has few earthquakes like California which is on a \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ boundary
5. A place here 2 plates come together or collide \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
6. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ mountains form when blocks or rock are squeezed together
7. What kind of mountains are shown \_\_\_\_\_\_\_\_\_\_\_\_\_
8. What is the area where the rock bends upward into an arch called \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
9. A break in a body of rock \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
10. Molten rock under the earth \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
11. Volcanoes with gently sloping sides and non-explosive eruptions \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
12. Tall volcanoes with alternating violent and quiet eruptions \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
13. Lava before it reaches the surface is called \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
14. label the focus, epicenter, fault, and seismic waves in the earthquake below
15. Label the vent, lava, magma, ash cloud on the volcano below

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**Earth’s history and Change over time**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Amber** | **Frozen in ice** | **Petrified** | **Fossil** | **Evolution**  | **Adaptation** |
| **Natural selection** | **Extinct** | **Variation** | **Index fossil** | **Relative**  | **Absolute** |
| **Isotope** | **Half life** | **Carbon** | **Uranium** | **Trace** | **decay** |

1. What do we call the preserved remains or traces of a dead organism \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
2. The process in which a species changes over time \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
3. Process by which individuals better suited to their environment survive and reproduce \_\_\_\_\_\_\_\_\_\_\_\_\_\_
4. A trait that improves chances of survival and reproduction for a group of individuals in a population\_\_\_\_\_\_\_\_\_\_\_\_
5. What type of fossil preserves remains of an insect with little or no change \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
6. A fossil formed when minerals replace all or part of an organism\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
7. A fossil that provides clues about activities of ancient organisms \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
8. Fossils that were widely distributed but only lived for a short period of time \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
9. An organism that no longer exists on earth \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
10. Radioactive dating enables geologists to determine \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ age.
11. A rocks age compared to the ages of other rocks \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ age
12. What do we call the time it takes for half of the radioactive atoms in a sample to decay \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
13. What is it called when an unstable isotope breaks down into a more stable isotope?\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
14. Which isotope would you use to find the absolute age of a once living specimen \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
15. Which rock layers are older than layer 4. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
16. Which rock layers are newer than layer 4 \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
17. Which is older, the intrusion or layer 5 \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
18. Which layer is more likely to contain fossils 4 or 5 – why?



**Name\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Final Exam Review Sheet**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Wave** | **Medium** | **Solid** | **Liquid** | **Gas** |
| **Mechanical** | **Electromagnetic** | **Visible light** | **Rainbow** | **Radio** |
| **Gamma** | **Xray** | **Microwave** | **Ultraviolet** | **Infrared** |
| **Crest** | **Trough**  | **Wavelength** | **amplitude** | **Solid** |
| **Liquid** | **gas** |  |  |  |

**Waves**

1. What is a disturbance that transfers energy from place to place \_\_\_\_\_\_\_\_\_
2. The material through which a wave travels \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
3. Which kind of material do mechanical waves travel through most quickly?\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
4. Label the parts of the wave

 1\_\_\_\_\_\_\_\_\_ 2\_\_\_\_\_\_\_\_\_\_3\_\_\_\_\_\_\_\_\_\_\_\_4\_\_\_\_\_\_\_\_\_\_\_\_

1. Which kind of wave does NOT need a medium? *\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_*
2. Which EM waves have the highest frequency?\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
3. What kind of wave does a police officer use for speed control \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
4. What is visible light\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
5. What is the relationship between wavelength and frequency in e-m waves?\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
6. Label the example of *reflection and refraction and and absorption, transmission Draw a beam scattering*



**Energy Transfer and Heat**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Heat | MRS CHEN forms of energy  | Law of conservation of energy | Faster | Slower | Temperature |
| Convection | Conduction | Radiation | insulation |  |  |

1. You warm your hands by rubbing them together. The friction converts \_\_\_\_\_\_\_\_\_\_\_ to \_\_\_\_\_\_\_\_\_\_ energy
2. A flashlight is left on. The chemical energy has changed to \_\_\_\_\_\_\_\_\_\_ and \_\_\_\_\_\_\_\_\_\_\_\_\_
3. Energy cannot be crated or destroyed it just changes forms \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
4. object\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
5. Which process should the person at right use to protect his hand\_\_\_\_\_\_\_\_\_
6. Label the Heat transfer processes that are taking place in the following picture: *convection/conduction/radiation*

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
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