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| 1. A ball stuck in a tree has \_\_\_\_\_\_\_\_\_\_\_ energy |  | |
| 2. Define: Kinetic Energy |  | |
| 3. Energy is the ability to \_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_ in the motion or position of something. |  | |
| 4. The higher an object is off the ground, the more \_\_\_\_\_\_\_\_\_\_\_\_ potential energy it has. |  | |
| 5. List and give examples of the three types of potential energy. |  | |
| 6. Define Mechanical Energy |  | |
| 7. Differentiate between HEAT and THERMAL ENERGY |  | |
| 8. An electrical generator makes a light bulb glow when a hand crank is turned. What is the flow of energy transformations that occurs? |  | |
| 9. Define and give examples of:  Insulator:  Conductor: |  | |
| 10. Explain with a diagram and words, and provide 1 example of each:  Conduction:  Convection:  Radiation: |  | |
| **Matching** | | |
| A. friction B. heat C. mass D. mechanical E. speed F. work  \_\_\_\_ 1. \_\_\_\_\_\_\_ is the transfer of energy that occurs when a force is applied over a distance.  \_\_\_ 2. The kinetic energy of an object depends on its \_\_\_\_\_\_\_ and \_\_\_\_\_\_.  \_\_\_ 3. A system of object’s \_\_\_\_\_\_\_\_ energy is the total kinetic and potential energy.  \_\_\_ 4. \_\_\_\_\_\_\_\_ is thermal energy moving from high concentration to lower  concentrations.  \_\_\_ 5. Due to \_\_\_\_, when surfaces rub together, some mechanical energy will always  transform into thermal energy. | |  |
| A. chemical potential energy C. elastic potential energy  B. nuclear energy D. thermal energy  \_\_\_ 1. Energy due to motion of particles that make up an object  \_\_\_ 2. Energy stored in objects that are compressed or stretched  \_\_\_ 3. Energy stored and released in the nucleus of an atom.  \_\_\_ 4. Energy stored in the bonds between atoms. | |  |