Sixth Grade Final Exam Review Sheet

Name_____ Date_____ Class_____ #___

Energy:

A. Vocabulary

Energy, potential energy, kinetic energy, elastic potential energy, gravitational potential energy, mechanical energy, thermal energy, electrical energy, electromechanical energy, nuclear energy, Law of conservation of energy, conversions, temperature, Celsius, Ferenheit, Kelvin, heat, conduction, convection, radiation, convection currents

B. Concept questions

1. Describe the difference between Kinetic energy and potential energy and mention the types of energy in each of these groups.
2. Use examples from daily life to explain how energy is transformed on a daily basis.
3. Give an example from daily life for each of the types of Kinetic energy.
4. Explain how mass and speed are related to kinetic energy
5. Explain the law of conservation of energy and give two examples to help explain
6. What happens to the total amount of energy when transformations occur?
7. What energy conversions happen when we warm our coffee in the microwave?
8. What are fossil fuels made of and what kind of energy do they have?
9. Explain why throwing a baseball has both potential and Kinetic energy.
10. When Piedad walks into the room talks to Ms. Muñoz and then leaves, What are the energy transformations that occur.? Be detailed.
11. What kind of energy is found in the following: a bouncing ball, a glass sitting on the table, the sun shining, the bicycle rolling down the hill, a hot pot of water, stretched rubber band?
12. What is the relationship between work and energy?
13. What transformation of energy happen in food chain (from sun to consumer)?
14. What energy conversions occur when a pendulum is moving? Why does it eventually stop moving?
15. What are some conversions found in your project.
16. What happens to a cup of hot coffee and a popsicle that are left on a teble in a room.
17. What is the relationship of density with convection currents.
18. Explian how convection currents happen in a pot of boiling water.
19. Explain the similarities and differences between conduction, convection and radiation.
20. What is the difference between thermal energy and heat?
21. What is the difference between heat and temperature
22. From the bouncing lab:
    a. Explain the energy transformations that occurred when we bounced the ball.
    b. Why did the ball bounce lower each time it came back up?

Astronomy:

A. Vocabulary

supernova- red giant – nebula – protostar – white dwarf – pulsar - super giant – neutron star – black hole - milky way –binary eclipsing- binary star – spiral galaxy –elliptical galaxy – irregular galaxy - quasar-– Astronomical unit – Light year– satellite – galaxy