FLPS
Physical Science

Name _____

Physical Science Study Guide
4th Marking Period

VOCABUALRY
Directions: Define the following words on a separate sheet of paper.

1. Heat
2. Conduction
3. Thermal energy
4. Temperature
5. Internal combustion engine
6. Radiation
7. Insulator
8. Convection
9. Solar collector
10. Specific heat
11. Heat engine
12. Thermal energy
13. Thermal conductor
14. Thermal insulator
15. Combustion
16. External combustion engine
17. Radiator
18. Solar energy
19. Insulation
20. Expansion
21. Contraction
22. Mechanical energy
23. Evaporation
24. Ocean thermal energy
25. reservoir

SHORT ANSWER QUESTIONS

Directions: On a separate sheet of paper answer the following questions using full sentences.

1. What changes thermal energy into mechanical energy?
2. What are some methods of heat transfer?
3. What must happen to radiant energy for it to change to thermal energy?
4. In what is fuel burned inside chambers called cylinders?
5. What? Does not require the presence of particles of matter
6. When are waste gases removed from a four stroke engine?
7. What can heat move easily through?
8. What material is a poor insulator of heat?
9. What form is water in for it not to be considered a fluid?
10. Give an example of a heat mover.
11. How can the ocean be used as a source of energy? Give two examples.
12. Describe the different ways energy can be transferred on an electric stove. How can each type of energy transfer take place?
13. Why do we wear darker clothes in winter and lighter color clothing in summer?
14. Why does wearing two or three layers of clothing help keep you warmer in cold weather than one layer?
15. What is passive and active solar heating?
16. What basic principle are they both based on?
17. How are convection currents created? Give two examples of convection current in nature.
18. How are temperature and kinetic energy related?
19. How do heat and thermal energy differ?
20. Name three ways thermal energy is transferred.
21. What has an unusually high specific heat, which means it takes more energy to raise the temperature?
22. Explain why on a hot summer day, some objects in a car don't get as hot as others.
23. Give three examples of internal combustion engines.
24. What are three types of heating systems?
25. How does the human body transfer its thermal energy into the surrounding environment?