

Hillside School 2012 EC quarter III Grade 7 Physics worksheet.

I. Give short answer for the following questions on an independent paper so that it will be taken as individual assignment and to get you prepared for both test 2 and final examination.

1. Describe the following terms precisely.

- a. Lever b. Pulley c. Torque
- d. Effort e. Load f. Wastage of energy
- g. Temperature h. Heat i. Extensive property
- j. Intensive property

2. Write 4 differences between **Boiling & Evaporation**.

3. What are the 3 effects of heating?

4. Define;

- a. Absolute zero(0k or -273°C) b. Sound
- c. Echo d. Melting
- e. Melting point f. Heat g. Expansion

5. What factors affect evaporation of liquids?

6. Write the boiling point and ice point for

- a. Celsius scale b. Fahrenheit scale c. Kelvin scale

7. What is the value of;

- a. MA of Single Fixed Pulley?
- b. MA of Single Moveable Pulley?
- c. Efficiency of an ideal machine?

8. Give 3 devices that are examples of

- a. Third class lever b. Second class lever
- c. First class lever

II. Match the following terms.

A

B

9i. Intensive property

9ii. Extensive property A. Heat

9iii. Total kinetic energy

9iv. Average kinetic energy B. Temperature

9v. Measure of hotness & coldness

9vi. Form of energy

III. WORKOUT THE FOLLOWING QUESTIONS(Show all the necessary steps).

10. A 20m ramp is used to lift 120N load to a 4m high building by applying 30N effort force. Calculate ;

a. MA b. VR c. Efficiency d. Work input

e. Work output f. Wastage of energy

11. How far away should a building be from a source of sound to give an echo in 4 seconds? (Given speed of sound at 0 °C =331 m/s)

12. Assume the lab technician of Physics laboratory measured the lab room temperature to be 25°C. Covert this temperature to;

a. Fahrenheit scale b. Kelvin scale

13. Suppose a 60kg box is loaded 6m away from the pivot of the see-saw and a 40kg sack is loaded at the other end of the see-saw. At what distance should a sack be from the pivot to balance the system?

14. Convert 122°F to; a. Tc b. Tk

15. Convert 20°C to; a. Tf b. Tk

16. Convert 273k to; a. Tf b. Tc

17. A ship's sonar sends messages and receives the echoes from the ocean bottom 0.6 seconds after the sound is sent down from the ship. How deep is the water beneath the ship? (Given speed of sound in still water = 1450 m/s)

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