

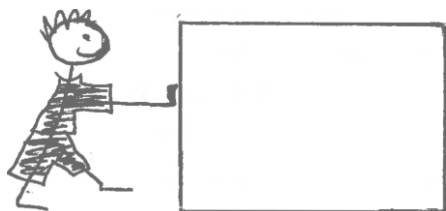
Work sheet Gr9

Work, energy, Power and Thermal decomposition

1. A Spar truck exerts a force of 10000N over a distance of 15 m the direction of the force. Calculate the work done.
2. What is Peter's gravitational acceleration on earth if he has a mass of 65kg?
3. Calculate the weight of a 20kg travel bag.
4. 4. The larger the mass of an object, the (smaller/larger/same) as the objects weight.
5. A block with a force of 35N is lifted by a pull scale for 2m.
 - a. Calculate the work?
 - b. Calculate the power if it duration is 5 seconds to do the work?
6. Calculate the work done by Jondelda when she lifts the shopping bag of 4kg onto the kitchen counter(1.5m).
7. The astronaut of South African has a mass of 90 kg on Mars. What is his weight on the earth??
8. 8. At what rate will Chari 5400J perform work if he plays tennis for 8 minutes?
9. 9. Jana pushes a 20kg crate over the 1500mm lawn. How much work did Jana do??
- 10.10. A man lifts an object with a mass of 10kg perpendicular to a height of 5m in 20s.
 - a. What is the objects weight?
 - b. How much work has been done?
 - c. What is the rate of work?

11.

- a. What forces work on the crate?
- b. Which forces work on the man?



- a. Name the test of the following substances
- b. Water
- c. Ammoniac
- d. Carbon dioxide
- e. oxygen
- f. Hydrogen

13. The thermal decomposition of ammonium carbonate



- a. Write down the chemical reaction in a word equation.
- b. What type of reaction takes place?
- c. Name the process of the chemical reaction.
- d. What energy conversion takes place during the decomposition reaction?

14. Give the definition of activation energy?



- a. Write down a word equation.
- b. Is this an exo- or endothermic reaction



- a. Write down a word equation
- b. What is the name of the process?
- c. What type of reaction takes place?