

## 7.1 Work, Energy and Power

1. Fill in the blanks with the correct answers.

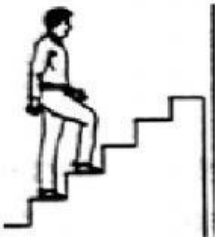



|           |         |          |              |          |
|-----------|---------|----------|--------------|----------|
| Joule (J) | 1 metre | Watt (W) | displacement | energy   |
| move      | 1 watt  | force    | work         | 1 newton |

- a) Work is the product of \_\_\_\_\_ and \_\_\_\_\_ in the direction of the force.
- b) The S.I. unit for work is \_\_\_\_\_.
- c) When force of \_\_\_\_\_ is used to \_\_\_\_\_ an object for a distance of \_\_\_\_\_ in the direction of force, work of 1 joule is done.
- d) \_\_\_\_\_ is the ability to do work.
- e) When \_\_\_\_\_ of 1 joule is done in 1 second, power of \_\_\_\_\_ has been used.
- f) The S.I. unit for power is \_\_\_\_\_.

2. Choose the correct answer.

- a) The amount of work done is \_\_\_\_\_ the amount of energy used.
- b) Power is the rate of \_\_\_\_\_.
- c) The greater the work done , the \_\_\_\_\_ the power needed.
- d) The two factors that affect the amount of work done are \_\_\_\_\_ and \_\_\_\_\_.

3. Diagram below shows a few activities. State whether the work is done or work not done.

|   |   |  |   |
|---|---|--|---|
| a)<br> | b)<br> | c)<br> | d)<br> |
|   |   |  |   |