1. Moon's gravitational pull is 1/6 of the earth's gravitational pull. Calculate the weight of a body whose mass is 60 kg on: (a) the moon's surface. (b) the earth's surface.
2. A wheel of a car rotating uniformly makes 400 revolutions in one minute. How long will the wheel take to make one revolution?

3. Describe five contributions of physics to the development of Rwanda as a nation!
4. A body has a mass and weight, Which one

   stay constant everywhere?   Kg is its SI unit?
   Is scalar quantity?   Vector quantity?

5. (a) By using the internet and reference books, (a) what meant the term "inertia" (b) Give and explain newton 3 laws of motion.

6. Alice and Yvette decided to walk to a picnic site 10 km away. They walked the first 6 km at an average speed of 5.5 km/h and the rest at 4 km/h. (a) How long did the journey take? (b) What was their average speed for the journey?

7. The graph in Fig. **1.1** shows the motion of a body falling freely under gravity.

(a) Determine the values of displacement(s) at t = **1.5 s, 2s, 2.5s** and 4 s.

(b) Draw a graph of velocity(v) against time (t).

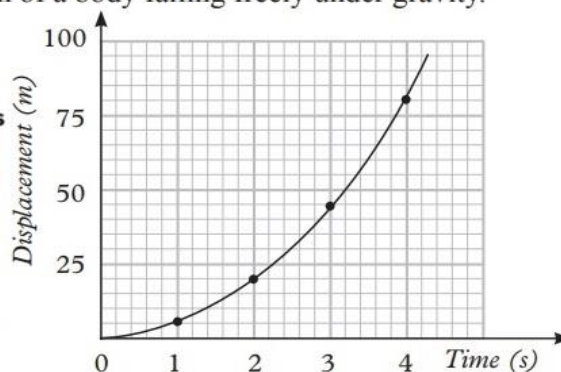**(c)** Use your graph in (b) to find the value of gravitational acceleration.

Fig. **1.1** Displacement-time graph

8. (a) what do you understand about viscous drag
(b) Do research on the importance of upthrust force to:
1. Divers and some animals e.g crocodiles. 2. Ship industry
(c) Give and explain 3 examples of effect of force in daily life
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Merry Christmas and happy new Year