

**ACTIVITY 6.1 Movement**

**Distance-time graphs**

Name: \_\_\_\_\_

*homework 1 Hand in on 14/Feb 20/13 Monday*

**Skills: knowledge, numeracy**

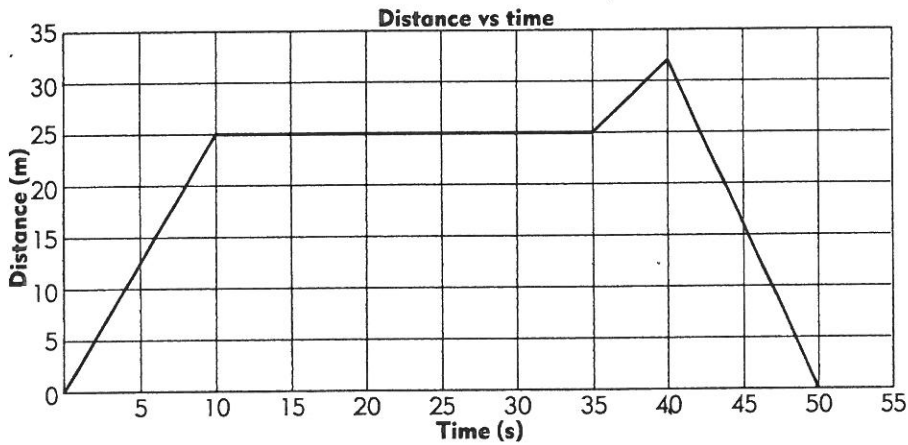
1 Use the words in the box below to fill in the missing gaps in the paragraph:

Speed is the \_\_\_\_\_ a vehicle travels each second. The standard units for speed are \_\_\_\_\_ or \_\_\_\_\_.

m/s distance metres per second

2 State the formula for speed in words and symbols.

3 John decided to take a walk in the playground. He plotted the graph below to show how his distance changed with time during the walk.



Use the graph to answer the following questions:

- a At what time did John stop walking and talk to Brianna? \_\_\_\_\_
- b How many seconds did their conversation take? \_\_\_\_\_
- c Calculate John's speed during the first 10 seconds. Show your working.  
\_\_\_\_\_
- d Calculate John's speed after he started moving again.  
\_\_\_\_\_
- e What was John's total walking distance?  
\_\_\_\_\_
- f Calculate John's total displacement. Show all working.  
\_\_\_\_\_
- g Calculate John's speed on the way back. Show all working.  
\_\_\_\_\_
- h Calculate the average speed for the whole journey.  
\_\_\_\_\_