

## Science Skills Year 8 booklet: 6

### Distance-Time graphs

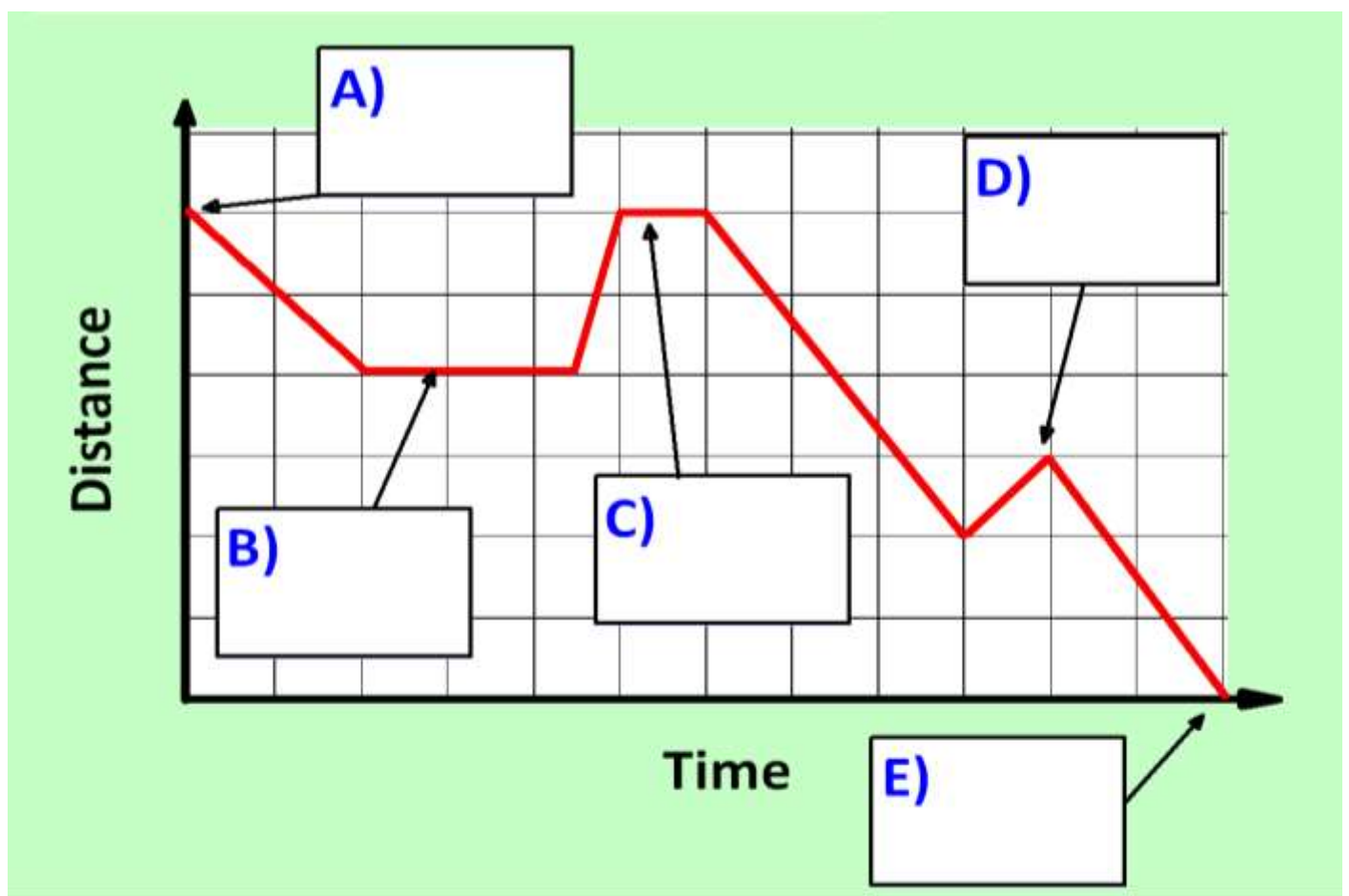
Task 1 deadline (self-assessed):

Task 2 deadline (peer-assessed):

Task 3 deadline (teacher-assessed):

The tasks in this booklet relate to the graph below. Read the following information before attempting any of the tasks.

The graph below shows the journey of a pupil on their way home from school:



## Task 1

*Everyone to do-* Match the key terms to the definitions:

Distance	Speed is increasing/speeding up.
Time	Not moving.
Speed	A measure of how much distance is covered in a certain time.
Stationary	A measure of how long something takes.
Accelerate	A measure of how far something is/travelled.

**Green:** you will be tested on the spelling of the five key terms

**Amber:** you will be tested on the spelling and the definition of the key terms

**Red:** you will be tested on the spelling and definition of the key terms. You will also need to put each into a sentence

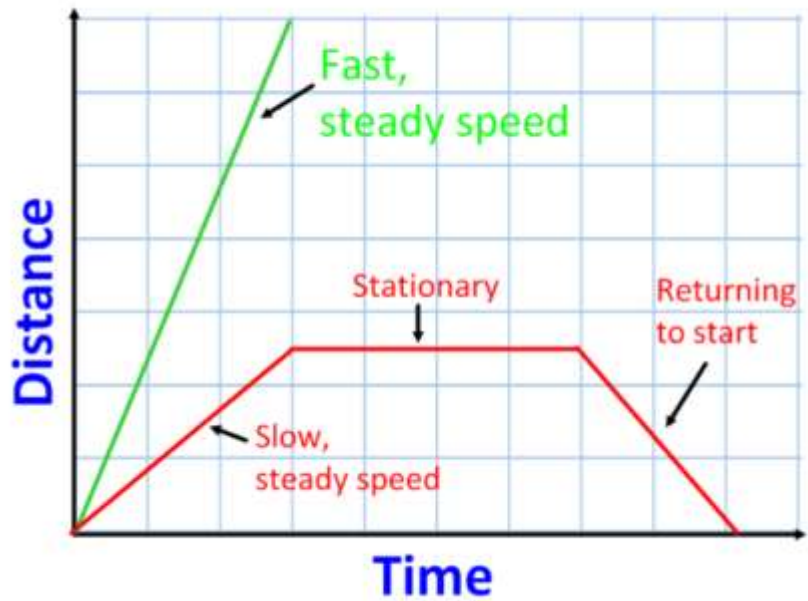
**Killer:** you will be asked for synonyms for the key terms (if there are any!)

## Task 2

**Green:**

Using the help image on the next page, state what is happening for each for the parts of the graph on the first page (A-E):

- A:
- B:
- C:
- D: Turns around.
- E:



Peer assessment:

STAR:

STAR:

WISH:

**Amber:**

On paper, describe the journey home that the pupil made. Note that at point D the pupil turns around. Use a paragraph of 40+ words.

Peer assessment:

STAR:

STAR:

WISH:

**Red:**

On paper, describe the journey home that the pupil made. Add data to your graph for the distance and the time, making sure you quote one piece of data for each part of the graph. Use multiple paragraphs and a minimum of 60 words in total.

Peer assessment:

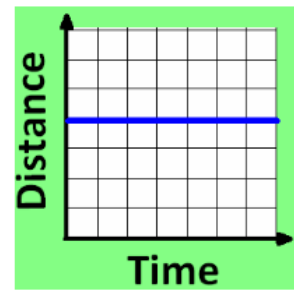
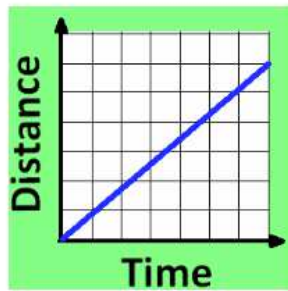
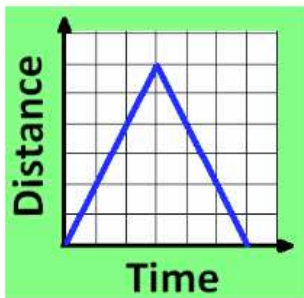
STAR:

STAR:

WISH:

### Task 3:

**Green:** Match the descriptions to the graphs below:



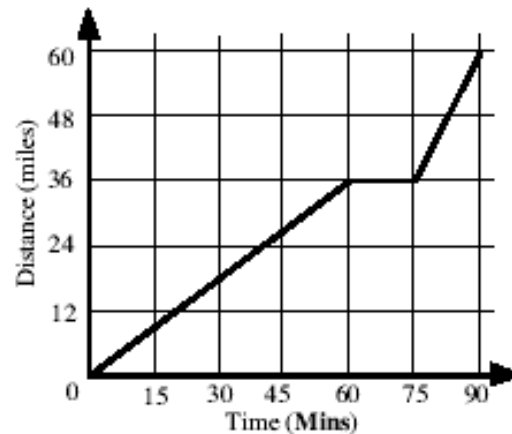
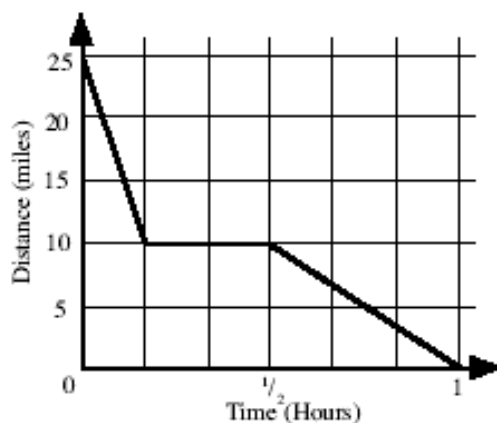
A motorbike travels away from home at a steady speed.

A runner runs at a steady pace to the end of the track, turns around and runs at the same speed back.

A car remains parked in a car park.

### Amber:

Work out the distance travelled in the first 30 minutes and the final 30 minutes of the two graphs below.



**Red:** For the graphs above, calculate the speed for each portion of each graph so you have 3 speeds per graph. *Hint: remember that speed should be in miles per hour (mph).*

#### Teacher assessment:

A2L = 1	Work is thorough, you have picked challenging tasks and have shown effort and understanding.
A2L = 2	Work has detail in most places, you have picked relevant tasks and have shown effort.
A2L = 3	Work lacks detail, there are some errors and shows some lack of preparation/understanding.
A2L = 4	Work is incomplete, there are errors throughout and a clear lack of preparation/understanding.

Teacher comment: