


Complete the work below either in the booklet or on Teams – hand any printed copies to your Tutor on Friday.

<p><u>English</u></p> <p>Watch the video clips and make notes: Creative Writing: What makes a good short story? (thenational.academy)</p>	<p><u>Maths</u></p> <p>Sparx Maths – Complete the extra Home Learning that has been set. If you do not know your password, go to the Sparx site, and request a password reset.</p>
<p><u>Science</u></p> <p>Read through the information and answer the questions.</p> <p>1) Speed</p>	<p><u>History</u></p> <p><u>The Museum of the World</u> Using this interactive resource, explore the galleries and artefacts in the British Museum. Create a 'must see' guide to the museum including your top 5 artefacts.</p> <p>Museum of the World (britishmuseum.withgoogle.com)</p>
<p><u>Geography</u></p> <p>Complete the work on Volcanoes in USA.</p> <p> Lesson 3 4- 11th May Volcanic landscapes Yel.pptx</p>	

Science**Speed**

Speed is a measure of how far an object has moved in a certain time. Speed is a **scalar**, while velocity is a **vector**.

They both can be calculated using the equation:

Speed = distance ÷ time

$v = s \div t$

where **v** is the velocity or speed (in m/s)

s is the distance (in m)

t is the time (in s)

This equation can be re-arranged to

Time = distance ÷ speed

Distance = speed x time

**Example**

Calculate speed if an objects travels 20m in 5 seconds

Distance is 20m. Time is 5 seconds. Speed is ?

- **Speed = distance ÷ time.**
- **Speed = 20m ÷ 5s**
- **Speed = 4m/s**

Example question: Usain Bolt ran his 100m world record at an average speed of 10.44 m/s. How long did it take for him to finish the race?

Step 1: Write the equation. Rearrange if necessary.

$t = s \div v$

Step 2: Write down the variables

s = 100 m

v = 10.44 m/s

Step 3: Calculate the answer

$t = 100 \div 10.44 = 9.58 \text{ s}$

The average person **walks** at a speed of 1.5 m/s, **runs** at a speed of 3 m/s and **cycles** at a speed of 6 m/s. The speed of **sound** in air is 330 m/s.

Speed can also be measured in units of kilometres per hour (km/h) or miles per hours (mph).

Questions

Q1 Work out the **speed** of a car travelling on a straight track for:

- a) 100 m in 10 s = 10 m/s e) 1000 m in 200 s
- b) 320 m in 16 s f) 300 m in 20 s
- c) 1500 m in 180 s g) 50 m in 4 s
- d) 700 m in 35 s h) 450 m in 22 s

Q2 **How far** does a bus move if it's travelling at:

- a) 10 m/s for 30 s e) 15 m/s for 28 s
- b) 15 m/s for 20 s f) 20 m/s for 20 s
- c) 12 m/s for 180 s g) 100 m/s for 300 s
- d) 5 m/s for 70 s h) 180 m/s for 20 s

Q3 **How long** does it take a car to travel:

- a) 10 m at 20 m/s e) 180 m at 6 m/s
- b) 50 m at 10 m/s f) 40 m at 12 m/s
- c) 55 m at 30 m/s g) 200 m at 8 m/s
- d) 90 m at 20 m/s h) 2,000 m at 16 m/s





