

End of Unit Test

Name: Answers

Measures - FOUNDATION



1. (a) Choose the most suitable unit to measure the distance from one town to another. Circle your answer. (1)
- centimetres metres kilometres
- (b) Choose the most suitable unit to measure the volume of a dustbin. Circle your answer. (1)
- millilitres centilitres litres
- (c) Choose the most suitable unit to measure the weight of a pencil. Circle your answer. (1)
- grams kilograms tonnes
- (Total 3 marks)**

2. A train timetable is shown.

Southampton	10:15	11:45	13:15
Plymouth	14:54	16:24	17:57
Devonport	14:58	16:28	18:01

- (a) William catches the 10:15 from Southampton. He arrives in Devonport 4 minutes late. What time does he arrive in Devonport? (1)
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- Answer 15:02
- (b) How long is William's total journey? (1)
- 10:15 4 hours → 14:15 45 mins → 15:00
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- Answer 4 hours, 47 minutes
- (c) Kate catches the 11:45 from Southampton. She arrives in Plymouth on time. She goes shopping. She gets back to Plymouth station 90 minutes later. Is she back in time to catch the 17:57 train? You **must** show your working. (2)
- Arrives in Plymouth @ 16:24
- Back to station @ 17:54
- Yes - if she runs!
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- (Total 5 marks)**

3. The table shows information about journeys A and B. Complete the table.

	Distance travelled	Time taken	Average speed
A	32 miles	30 mins	64 mph
B	56 miles	1 hour 20 minutes	42 mph

$$\frac{D}{S \times T}$$

(Total 2 marks)

4. Jack drives 95 miles. He drives at an average speed of 38 mph. He starts his journey at 7 am. What time does he arrive?

$$\text{Time} = \frac{D}{S} = \frac{95}{38} = \frac{5}{2} = 2.5 \text{ hours}$$

$$7 \text{ am} + 2.5 \text{ hours} = 9:30 \text{ am}$$

Answer 9:30 am

(Total 3 marks)

5. Which of these is used to work out density? Tick a box.

- mass \times volume
- mass² \times volume
- mass \div volume
- volume \div mass

$$\frac{M}{D \times V}$$

(Total 1 mark)

6. A solid statue has volume 720cm³ and mass 2.5 kilograms. The density of bronze is 8 grams per cm³. Is the statue made of bronze? Show how you decide.

$$\text{Density} = \frac{M}{V} = \frac{2500}{720} = \frac{10}{3} = 3.\dot{3} \text{ g/cm}^3$$

It is not made of bronze.

(Total 3 marks)

7. The table shows the stopping distances for cars travelling at different speeds on dry roads.

Speed (miles per hour)	20	30	40	50	60
Stopping distance (feet)	44	84	136	200	276

The stopping distances on wet roads are **double** the stopping distances on dry roads. A car is travelling on a wet road where the speed limit is 30 mph. The car's stopping distance is 250 feet. Is the car travelling above or below the speed limit? Show how you decide.

84 x 2 = 168 feet (wet stopping distance)

The car must be going above the speed limit as its stopping distance is greater.

(Total 3 marks)

(Total for test = 20 marks)