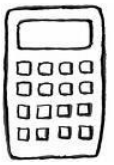
Name:	Teacher Assessment



Section A Converting Units Grade D / C

1. Which metric unit would you use to measure the following?

(a) The length of a pencil

Answer ……

(1)

(b) The amount of petrol in a car's tank

Answer ……

(1)

(c) The area of a football pitch

Answer ……

(1)

(d) The weight of a bus

Answer ……

(1)
(Total 4 marks)

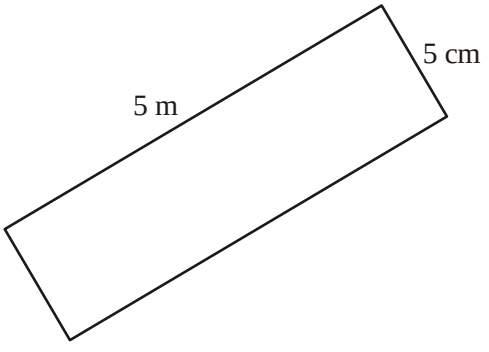
2. (a) Convert 5 metres into centimetres.

.....

Answer ..... cm

(1)

(b) The diagram shows a rectangle.



Not to scale

Work out the perimeter.
Give your Answer in centimetres.

.....

.....

Answer ..... cm

(2)
(Total 3 marks)

3. Videos are stored on shelves.
Each video is 25 mm wide.
Each shelf is 90 cm long.

How many videos can be stored on 5 shelves?

.....

.....

.....

.....

.....

.....

Answer .....

(Total 3 marks)

4. The weight of a 2p coin is 7g.
Find the weight of £10 worth of 2p coins.
Give your Answer in kilograms.

.....

.....

.....

.....

.....

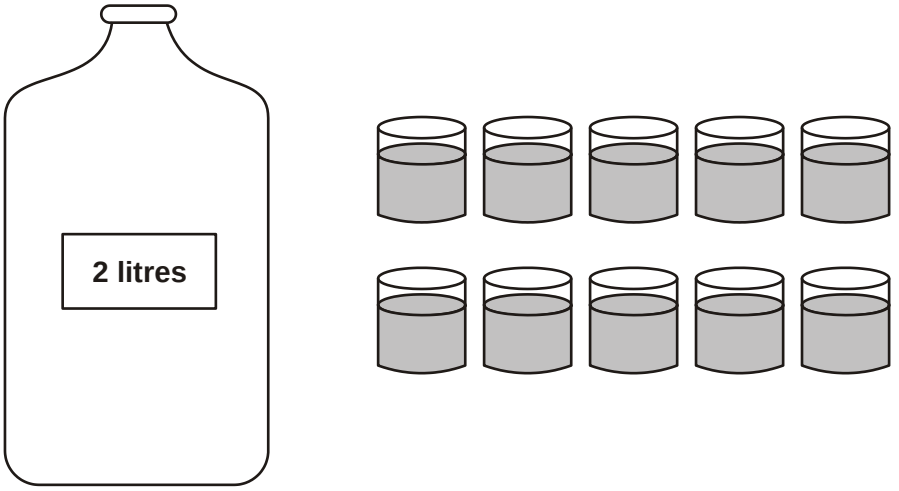
.....

Answer .....kilograms

(Total 4 marks)

5. A bottle contains 2 litres of water.
1 litre = 1000 cm^3
The water is shared equally into 10 identical cups.

Each cup is $\frac{2}{3}$ full.



How much will a cup hold when it is full? Give your answer in cm^3.
You **must** show your working.

.....

.....

.....

.....

.....

.....

Answer …….... cm^3

(Total 4 marks)

6. Tick the correct boxes to say whether the following statements are true or false.

		True	False
(a)	1 pound is approximately 450 grams.	☐	☐
(b)	1 foot is approximately 15 centimetres.	☐	☐
(c)	1 mile is approximately 1.6 kilometres.	☐	☐

(Total 3 marks)

7. (a) Convert 5 litres to pints.

.....

.....

.....

Answer ..... pints

(2)

(b) Convert 7 pounds to kilograms.

.....

.....

Answer ..... kg

(2)

(Total 4 marks)

8. The table shows the conversion between gallons and litres.

1 gallon = 4.55 litres

(a) Convert 8 gallons to litres.

.....

.....

Answer ..... litres

(2)

(b) Convert 40 litres to gallons.

.....

.....

Answer ..... gallons

(2)

(Total 4 marks)

9. Change $3\frac{1}{2}$ kilograms into pounds.
Give your answer to the nearest pound.

.....

.....

Answer ..... pounds

(Total 2 marks)

10. Use the following conversions to change 2 tonnes into pounds (lb).

1 tonne = 1000 kg 1 kg = 2.205 pounds (lb)

.....

.....

.....

.....

.....

Answer ..... pounds (lb)

(Total 3 marks)

11. You are given that

1 litre = 1.76 pints and 1 gallon = 8 pints

Convert 25 litres to gallons.
Show your working.

.....

.....

.....

Answer ..... gallons

(Total 3 marks)

12. Dilip has a space in his living room which is $2\frac{1}{2}$ feet wide.

He has a bookcase which is 80 cm wide.

Will the bookcase fit into the space?
You **must** show your working.

.....

.....

.....

.....

(Total 3 marks)

13. Petrol costs 88p per litre.

Calculate the price of 1 gallon of petrol.
Use the conversion 1 gallon = 4.5 litres.

.....

.....

.....

Answer £.....

(Total 2 marks)

14. Apples are sold in a farm shop at £1.76 per kilogram.

Calculate the price of 1 pound of apples.

Use the conversion 1 kilogram = 2.2 pounds

.....

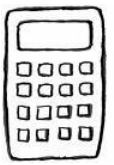
.....

Answer .....

(Total 3 marks)

Success:	Target:

Teacher Assessment



Section B Speed Grade D / C

1. Sharon travels from Leeds to London in her car. The distance she travels is 200 miles. The journey takes her 4 hours. Find Sharon's average speed.

.....

.....

.....

Answer .....

(Total 3 marks)

2. Brian travels 150 miles in 3 hours. Clive travels 110 miles in 2 hours.

Who is travelling faster? You **must** show all your working.

.....

.....

.....

.....

.....

.....

(Total 3 marks)

3. A snail travels 80 metres in 20 hours.

Find the average speed of the snail in

(a) metres per hour

……

……

……

Answer …… metres per hour

(2)

(b) metres per day.

……

……

Answer …… metres per day

(2)

(Total 4 marks)

4. Kristen drives 252 miles from Redcar to London in 4 hours and 30 minutes.

Calculate her average speed in miles per hour.

.....

.....

.....

.....

Answer .....mph

(Total 3 marks)

5. Sue drives a distance of 11 miles. She drives for $\frac{1}{4}$ of an hour.

Calculate Sue's average speed. Give your answer in miles per hour.

.....

.....

.....

Answer ..... miles per hour

(Total 2 marks)

6. Alan drove 12 miles. The journey took 15 minutes.

What was Alan's average speed?

.....

.....

.....

.....

Answer .....

(Total 4 marks)

7. Dave drives 15 miles to work. The journey takes 20 minutes.

What is Dave's average speed in miles per hour?

.....

.....

.....

.....

Answer ..... mph

(Total 3 marks)

8. Charles drove 132 miles at an average speed of 55 mph.Calculate the time taken for this journey.

Give your answer in hours and minutes.

.....

.....

.....

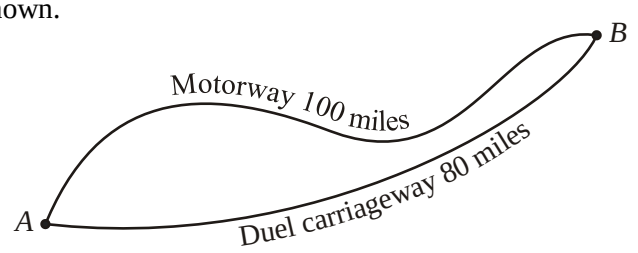
.....

.....

Answer ..... hours ..... minutes

(Total 4 marks)

9. Two towns, *A* and *B*, are connected by a motorway of length 100 miles and a dual carriageway of length 80 miles as shown.



Jack travels from *A* to *B* along the motorway at an average speed of 60 mph.
Fred travels from *A* to *B* along the dual carriageway at an average speed of 50 mph.
What is the difference in time between the two journeys?
Give your answer in minutes.

.....

.....

.....

.....

Answer ..... minutes

(Total 4 marks)

10. A car produces 2.78 kg of carbon dioxide per hour when driven in a city.
The car travels 30 miles in a city at an average speed of 20 mph.
How much carbon dioxide does the car produce during its journey?

.....

.....

.....

.....

.....

Answer ..... kg

(Total 3 marks)

11. Susan completes a journey in two stages.
In stage 1 of her journey, she drives at an average speed of 80 km/h and takes 1 hour 45 minutes.

(a) How far does Susan travel in stage 1 of her journey?

.....

.....

.....

.....

Answer ..... km

(2)

(b) Altogether, Susan drives 190 km and takes a total time of 2 hours 15 minutes.
What is her average speed, in km/h, in **stage 2** of her journey?

.....

.....

.....

.....

.....

.....

Answer ..... km/h

(2)
(Total 4 marks)

12. In a training session Ben runs 10 km around a 400 m track.

(a) How many 400 m laps does Ben complete?

.....

.....

.....

.....

.....

.....

Answer .....

(3)

(b) On average Ben completes each 400 m lap in 80 seconds.
Calculate Ben's average speed in metres per second.

.....

.....

.....

.....

Answer ..... m/s

(2)

(c) What is the total time that Ben takes to complete the 10 km training session?
Give your answer in minutes and seconds.

.....

.....

.....

.....

.....

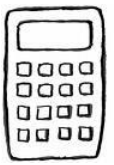
.....

Answer ..... minutes ..... seconds

(3)(Total 8 marks)

Success:	Target:

Teacher Assessment



Section C Density Grade B

1. A metal bar has a volume of 250 cm^3.
It has a mass of 1.7 kg.
Calculate the density of the metal.
State the units of your answer.

.....

.....

.....

.....

Answer .....

(Total 3 marks)

2. A prism has the following properties.

Area of cross-section	0.6 m^2
Mass	15 kg
Density	20 kg per m^3

Calculate the length of the prism.

.....

.....

.....

.....

.....

Answer ..... m

(Total 4 marks)

Success:	Target: