Date	**24.02.21**
Subject/s	**Maths**
Learning Objective	To answer word problems involving metric and imperial measures

		SA	TA
Success Criteria ✓! 📋	I know which measurements are imperial and which are metric		
	I know 1inch ~ 2.5cm 1 foot~ 30cm 1 yard ~ 90cm 1 ounce ~ 30g 1kg ~ 2.2lbs 1 mile ~ 1.6km 8km ~ 5miles 1 pint ~ 0.6l 1 gallon ~ 4.5l		
	I can highlight key information to help me understand the question.		
Support	Independent Adult Support ( ) Group Work		

Lockdown learning: DC

Pre-task:

4) Sarah and Bobby are comparing

the weight of their school bag.

Sarah's bag weighs 4lbs.

Bobby's bag weighs 68 ounces.

Whose bag weighs the heaviest?

Fill in the appropriate value to make these sentences true.

One mile is approximately ....1.6................ kilometres

One inch is approximately ....2.5................ centimetres

One litre is approximately ....1.75................ pints

One kilogram is approximately ....0.45................ pounds

One gallon is approximately ....0.22................ litres

One foot is approximately ....30................ centimetres

<u>Fluency</u>:

1	On Saturday Martin drives for 6 hours. His average speed is 35 mph. (a) How far does Martin drive on Saturday? ....miles **(2)** On Sunday Martin drives 320 km. (b) On which day does Martin drive further?

2 Gina cycles a distance of 20 miles.
Wendy cycles a distance of 30 kilometres.

Who travels further?

3 Hannah is 5 foot tall.
Natalie is 1.46 metres tall.
Kelly is 154 centimetres tall.

Arrange the girls in order of height.
Start with the shortest.

....

(3)

4 (a) Work out how many centimetres are in 1 mile.

....

(2)

(b) Work out how many millilitres are in 1 gallon.

....

(2)

5 An elevator has a weight limit of 600kg.

Six American footballers enter the elevator.

Sam weighs 230 pounds.
Harry weighs 217 pounds.
Aaron weighs 225 pounds.
Tom weighs 225 pounds.
Larry weighs 215 pounds.
Steve weighs 228 pounds.

Should all six American footballers use the elevator?

6

70 litres   125 pints   20 gallons

Starting with the smallest, arrange the oil drums in order of capacity.

7 A table is 150 cm long.

(a) Change 150 cm to an equivalent imperial length.

....

(1)

A vase holds 7 pints of water.

(b) Change 7 pints to an equivalent metric measure.

....

(1)

8   Pierre is driving through Wales and see this road sign.

Cardiff	16 miles
Swansea	70 miles
Holyhead	225 miles

He is going to drive to Holyhead.
Pierre hopes to drive at an average speed of 80 km/h.
He leaves at 06:45.

Work out what time Pierre should arrive in Holyhead.

Problem Solving and Reasoning	Answers
Explain it! Jeni has two children, Owen and Caitlin. • Owen weighed 8.8 lbs when he was born. • Caitlin weighed 3.5 kg when she was born. Who was heavier, Owen or Caitlin? Explain your answer.	2.2lbs ~ 1kg 8.8lbs ~ 4kg Owen ~ 4kg therefore he is heavier Or 1kg ~ 2.2lbs 3.5kg ~ 7.7lbs Caitlin ~ 7.7lbs
Use it! Kate and Saira weigh 185 lbs. Saira and Lucy weigh 186 lbs. Kate and Lucy weigh 201 lbs. How much do Kate, Saira and Lucy weigh altogether? Convert your answer into kilograms.	185 + 186 + 201 = 572lbs 572 = K + S + S + L + K + L so two of each person therefore divide by 2 All three weigh 572 / 2 = 286lbs 2.2lbs ~ 1kg 286lbs ~ 130kg
Use it! David is 6 foot 2 inches tall. Annabelle is 162 cm tall. Who is taller and by how much?	David 6 feet 2 inches 180cm ~ 6 feet 5cm ~ 2inches David ~ 185cm Therefore David is taller by 23cm

Further Challenge

There are some open markets in England that would like to sell fruit by their weight in lbs (pounds), but we often buy them in kilos.

0.45 kilo = 1 lb
2.20 lb = 1 kilo

You get about 4 apples or 4 bananas in one pound (1 lb).
So, roughly, what would 6 bananas and 4 apples together weigh in kilos?

You get about 6 mangoes in a kilo.
So, roughly, what would 30 mangoes weigh in pounds (lbs)?

You get about 6 oranges in one pound (1 lb).
So, roughly, what would 20 oranges weigh in kilos