

## Maths 23.02.21

Monday, February 08, 2021 3:16 PM

Please write all of your answers in **RED** so it is easier for us to find. Don't forget your Reasoning Rex at the bottom of the page. If you finish, please move on to the next challenge or go on accelerated maths. **PLEASE SHOW YOUR WORKING OUT FOR AT LEAST 2 QUESTIONS.** This can be using the draw tool or a picture.

**5 minute challenge!** - Please aim to complete all of these questions even if it takes you longer than 5 minutes.

1. \_\_\_\_\_ + 35 = 115
2.  $3/5 \div 6 =$  (think back to kfc)
3.  $234 + 13456 =$
4.  $8 - 2.425$
5.  $\frac{3}{4} \times \frac{1}{2} =$

### **Counting starter:**

Prime numbers

What is a prime number?

**Prime numbers**  
A number that you can only divide by 1 and itself is a prime number. Primes only have two factors.

The first ten positive prime numbers are:

2 3 5 7 11  
13 17 19 23 29

To find out if a two-digit number is prime, try dividing it by 2, 3, 5 and 7. If these numbers are not factors, the number is prime. On the grid below, the numbers on green squares are multiples of 2, 3, 5 or 7. The numbers on purple squares are prime.

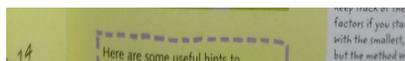
|    |    |    |    |    |    |    |    |    |     |
|----|----|----|----|----|----|----|----|----|-----|
| 1  | 2  | 3  | 4  | 5  | 6  | 7  | 8  | 9  | 10  |
| 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20  |
| 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30  |
| 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40  |
| 41 | 42 | 43 | 44 | 45 | 46 | 47 | 48 | 49 | 50  |
| 51 | 52 | 53 | 54 | 55 | 56 | 57 | 58 | 59 | 60  |
| 61 | 62 | 63 | 64 | 65 | 66 | 67 | 68 | 69 | 70  |
| 71 | 72 | 73 | 74 | 75 | 76 | 77 | 78 | 79 | 80  |
| 81 | 82 | 83 | 84 | 85 | 86 | 87 | 88 | 89 | 90  |
| 91 | 92 | 93 | 94 | 95 | 96 | 97 | 98 | 99 | 100 |

**Prime factors**  
A factor that is only 1 and the number itself is called a prime factor. The prime factors of 15 are 3 and 5.

**Factor tree**  
You can make a factor tree to find out the prime factors of a number. To start, take a number and split it into two factors. Then split each factor into two more factors until you can't divide any more. The numbers at the bottom of the tree are the prime factors.

This is a factor tree for 60. You don't need to write down 1 and 60, because 1 is always a factor and it doesn't split 60.

It can help you find the prime factors of a number.



## TBQ: Can I convert metric measures?

### Recap:

You will need to be secure with your knowledge of dividing and multiplying by 10, 100 and 1000 today.

Practise this skill by answering these questions. Use the PV grid if you need to.

I would suggest you create your own PV grid for today!

| Tth<br>Ten Thousands<br>10 000 | Th<br>Thousands<br>1000 | H<br>Hundreds<br>100 | T<br>Tens<br>10 | O<br>Ones<br>1 | t<br>Tenths<br>0.1 | h<br>Hundredths<br>0.01 | th<br>Thousandths<br>0.001 |
|--------------------------------|-------------------------|----------------------|-----------------|----------------|--------------------|-------------------------|----------------------------|
|                                |                         |                      |                 |                |                    |                         |                            |

$$12 \times 100 =$$

$$3.3 \times 10 =$$

$$1800 \text{ divided by } 1000 =$$

Please watch this video if you cannot remember how to.

<https://kids.classroomsecrets.co.uk/resource/dividing-by-10-100-and-1000-video-tutorial/>

Watch the video below. This is new Y6 learning so it is essential that you watch it.

<https://vimeo.com/504805400>

[Spr6.7.2 - Convert metric measures](#)

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If you need any more help, please read page 46 of your SAT's book.

There are some conversion grids in the files section of TEAMS (under Maths support).

Fill in the blank spaces below.

a) There are \_\_\_\_\_ grams in 1 kilogram.  
There are \_\_\_\_\_ kilograms in one tonne.

b) There are \_\_\_\_\_ millilitres in 1 litre.

c) There are \_\_\_\_\_ millimetres in 1 centimetre.  
There are \_\_\_\_\_ centimetres in 1 metre.  
There are \_\_\_\_\_ metres in 1 kilometre.

**Chilli Challenge!** Please write all of your answers in **red**. If you finish your challenge early, either move on to the next challenge or go on one of the maths programmes. **Don't forget the Reasoning Rex!**

**Mild:**

**Q1) Complete the bar models and use them to help you work out the conversion rates. Watch this video to help you.**

**A) There are \_\_\_\_\_ m in 4 km**

|         |         |      |      |
|---------|---------|------|------|
| 1 km    | 1 km    | 1 km | 1 km |
| 1,000 m | 1,000 m |      |      |

B) There are \_\_\_\_\_ cm in 8m.

|       |       |       |    |    |    |    |    |
|-------|-------|-------|----|----|----|----|----|
| 1m    | 1m    | 1m    | 1m | 1m | 1m | 1m | 1m |
| 100cm | 100cm | 100cm |    |    |    |    |    |

C) There are \_\_\_\_\_ ml in 12 litres.

|        |        |        |        |        |    |    |    |    |    |    |    |
|--------|--------|--------|--------|--------|----|----|----|----|----|----|----|
| 1l     | 1l     | 1l     | 1l     | 1l     | 1l | 1l | 1l | 1l | 1l | 1l | 1l |
| 1000ml | 1000ml | 1000ml | 1000ml | 1000ml |    |    |    |    |    |    |    |

D) There are \_\_\_\_\_ g in  $6\frac{1}{2}$  kg

|         |         |         |      |      |      |                  |
|---------|---------|---------|------|------|------|------------------|
| 1 kg    | 1 kg    | 1 kg    | 1 kg | 1 kg | 1 kg | $\frac{1}{2}$ kg |
| 1,000 g | 1,000 g | 1,000 g |      |      |      |                  |

E)  $2\text{kg} =$  \_\_\_\_\_ g

Hot:

Q1)

A)  $2\text{kg} =$  \_\_\_\_\_ g

B)  $5\text{kg} =$  \_\_\_\_\_ g

C)  $10\text{kg} =$  \_\_\_\_\_ g

D)  $12\text{kg} =$  \_\_\_\_\_ g

Q2)

A)  $1\text{l} =$  \_\_\_\_\_ ml

B)  $5\text{l} =$  \_\_\_\_\_ ml

C)  $11\text{l} =$  \_\_\_\_\_ ml

Q3)

A)  $10\text{mm} =$  \_\_\_\_\_ cm

B)  $2.01\text{km} =$  \_\_\_\_\_ m

Q4) A bag of dog food weighs 2.5 kg. Write this weight in grams.

**Answer:**

**Flamin' Hot:**

Q1:

- A) 10mm = \_\_\_\_\_ cm  
 B) 11mm = \_\_\_\_\_ cm  
 C) \_\_\_\_\_ mm = 11cm  
 D) \_\_\_\_\_ mm = 1.1cm  
 E) \_\_\_\_\_ mm = 10.1cm  
 F) \_\_\_\_\_ mm = 11cm

Q2:

- A) 2.1km = \_\_\_\_\_ m  
 B) 2.01km = \_\_\_\_\_ m  
 C) 2.001km = \_\_\_\_\_ m  
 D) 2.011km = \_\_\_\_\_ m

Q3:

Write &gt; , &lt; or = to complete the statements.

- a) 100 m  1 km      b) 5.1 l  5,100 ml  
 10 m  10 cm      607 l  0.607 ml  
 10.1 mm  101 cm      0.05 l  5 ml

Q4:



What is the mass of one of the boxes? Give your answer in grams. **Answer:**

Q5:

A) There are 1,000 kg in one tonne.

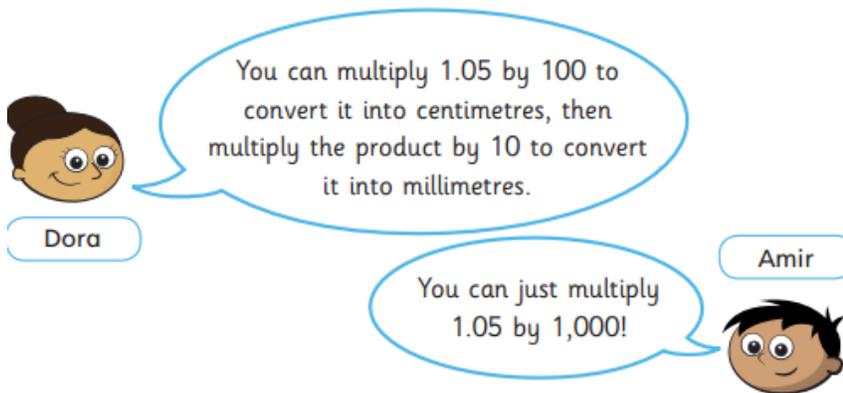
How many grams are there in one tonne? **Answer:**

B) A car weighs 1.3 tonnes.

Write the weight of the car in grams. **Answer:**

### Reasoning Rex:

Dora and Amir are trying to convert 1.05 metres into millimetres.



Who do you agree with? Explain your thinking.

**Answer:**

**If you finish all the tasks, you can go on accelerated maths, TTRocks and Maths Facts.**