

Maths- 8.6.20

Here are your maths tasks for this week- please use the book provided to complete the tasks ☺ We normally do maths Monday-Thursday, with Friday being our day for Mathletics and Times table rockstars to consolidate other areas of learning. Please see the Times table sheet for suggested activities. I've attached an arithmetic paper for Friday to complete this week too ☺

Monday

This week, we will be looking at converting measures, including pounds and pence. Today, we will be thinking about converting km into meters. When we are converting, we need to remember that mostly they follow our times tables, they've just been multiplied by 10 in most cases. Below are some facts which will help you answer some questions today:

$$1000m = 1km$$

$$500m = \frac{1}{2} km$$

$$250m = \frac{1}{4} km$$

So, if we said how many meters are in 2km, we would know that 1000 is in 1, so 2000 would be in 2. If we said 2.5km converted into meters, we would know that 2.5 is the same as 2500 meters. It is similar to when we were diving and multiplying by 10 and 100. If we convert from Km into Meters- we are going to multiply by 1000. If we are converting from Meters into km, we are dividing by 1000. See below for 2.5km into meters.

Thousands	Hundreds	Tens	Ones	Tenths	Hundredths
2	5	0	2 0	5	

Because there are 3 zeros in 1000, we need to move the numbers across three places to the left for Km to m. For meters into Km we would move 3 to the right.

Task

Using the information above, see if you can complete these few questions below:

1a. Match up the equal distances.

$3\frac{1}{2} km$	4km
7,500m	6,000m
4,000m	3,500m
6km	$7\frac{1}{2} km$



VF

2a. True or false?

$$5,000m < 4\frac{1}{2} km$$

1b. Match up the equal distances.

9,500m	$1\frac{1}{2} km$
2km	5,000m
1,500m	$9\frac{1}{2} km$
5km	2,000m



VF

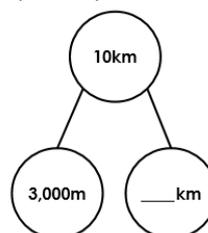
2b. True or false?

$$6\frac{1}{2} km > 5,500m$$

3a. Which is the odd one out?



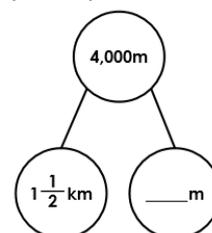
4a. Complete the part whole model.



3b. Which is the odd one out?



4b. Complete the part whole model.



Challenge

3b. Mattias has cycled 4,500m.

Hope has cycled $4\frac{1}{2}$ km.

Hope says,



I have cycled further than Mattias.

Is Hope correct? Explain your answer.

Tuesday

Today, we will be having a think about converting hours into minutes. Here's some information below which will help us to answer some questions today:

30 seconds = $\frac{1}{2}$ minute

60 seconds = 1 minute

15 minutes = quarter of an hour

30 minutes = half an hour

60 minutes = 1 hour

We need to think of converting our hours/minutes like the 6 times tables. Have a look at the pattern below, it is just the same as our 6 times tables, but the numbers have been multiplied by 10.

1 hour = 60 minutes

2 hours = 120 minutes

3 hours = 180 minutes

Task

Using the information above, see if you can work out these questions below:

<p>5a. Fill in the gaps.</p> <table border="1" style="width: 100%; border-collapse: collapse; text-align: center;"> <thead> <tr> <th style="width: 50%;">Hours</th> <th style="width: 50%;">Minutes</th> </tr> </thead> <tbody> <tr> <td>1 hour 40 minutes</td> <td></td> </tr> <tr> <td></td> <td>15</td> </tr> <tr> <td>2 hours 10 minutes</td> <td></td> </tr> <tr> <td></td> <td>170</td> </tr> <tr> <td>3 hours 20 minutes</td> <td></td> </tr> </tbody> </table> <p style="text-align: right; font-size: small;">VF</p>	Hours	Minutes	1 hour 40 minutes			15	2 hours 10 minutes			170	3 hours 20 minutes		<p>5b. Fill in the gaps.</p> <table border="1" style="width: 100%; border-collapse: collapse; text-align: center;"> <thead> <tr> <th style="width: 50%;">Minutes</th> <th style="width: 50%;">Seconds</th> </tr> </thead> <tbody> <tr> <td></td> <td>70</td> </tr> <tr> <td>1 minute 25 seconds</td> <td></td> </tr> <tr> <td></td> <td>165</td> </tr> <tr> <td>3 minutes and 40 seconds</td> <td></td> </tr> <tr> <td></td> <td>255</td> </tr> </tbody> </table> <p style="text-align: right; font-size: small;">VF</p>	Minutes	Seconds		70	1 minute 25 seconds			165	3 minutes and 40 seconds			255	<p>7a. Match the times together to find the odd one out.</p> <div style="display: flex; flex-wrap: wrap; justify-content: space-around; align-items: center;"> <div style="border: 1px solid blue; border-radius: 10px; padding: 5px; margin: 5px;">125 seconds</div> <div style="border: 1px solid blue; border-radius: 10px; padding: 5px; margin: 5px;">1 hour 40 minutes</div> <div style="border: 1px solid blue; border-radius: 10px; padding: 5px; margin: 5px;">140 minutes</div> <div style="border: 1px solid blue; border-radius: 10px; padding: 5px; margin: 5px;">100 minutes</div> <div style="border: 1px solid blue; border-radius: 10px; padding: 5px; margin: 5px;">2 minutes 5 seconds</div> </div> <p style="text-align: right; font-size: small;">VF</p>	<p>7b. Match the times together to find the odd one out.</p> <div style="display: flex; flex-wrap: wrap; justify-content: space-around; align-items: center;"> <div style="border: 1px solid blue; border-radius: 10px; padding: 5px; margin: 5px;">145 seconds</div> <div style="border: 1px solid blue; border-radius: 10px; padding: 5px; margin: 5px;">3 hours 30 minutes</div> <div style="border: 1px solid blue; border-radius: 10px; padding: 5px; margin: 5px;">105 seconds</div> <div style="border: 1px solid blue; border-radius: 10px; padding: 5px; margin: 5px;">210 minutes</div> <div style="border: 1px solid blue; border-radius: 10px; padding: 5px; margin: 5px;">1 minute 45 seconds</div> </div> <p style="text-align: right; font-size: small;">VF</p>
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<p>6a. Use <, > or = to make the statement correct.</p> <p>3 minutes 15 seconds 190 seconds</p> <p style="text-align: right; font-size: small;">VF</p>	<p>6b. Use <, > or = to make the statement correct.</p> <p>4 hours 30 minutes 270 minutes</p> <p style="text-align: right; font-size: small;">VF</p>	<p>8a. Which children were quicker in week 2?</p> <table border="1" style="width: 100%; border-collapse: collapse; text-align: center;"> <thead> <tr> <th style="width: 20%;">Name</th> <th style="width: 40%;">Week 1</th> <th style="width: 40%;">Week 2</th> </tr> </thead> <tbody> <tr> <td>Joey</td> <td>3 hours 5 minutes</td> <td>170 minutes</td> </tr> <tr> <td>Sam</td> <td>260 minutes</td> <td>4 hours</td> </tr> <tr> <td>Nyab</td> <td>5 hours 10 minutes</td> <td>305 minutes</td> </tr> </tbody> </table>	Name	Week 1	Week 2	Joey	3 hours 5 minutes	170 minutes	Sam	260 minutes	4 hours	Nyab	5 hours 10 minutes	305 minutes	<p>8b. Which children were quicker in week 1?</p> <table border="1" style="width: 100%; border-collapse: collapse; text-align: center;"> <thead> <tr> <th style="width: 20%;">Name</th> <th style="width: 40%;">Week 1</th> <th style="width: 40%;">Week 2</th> </tr> </thead> <tbody> <tr> <td>Barney</td> <td>2 minutes 50 seconds</td> <td>180 seconds</td> </tr> <tr> <td>Jibrail</td> <td>6 minutes</td> <td>275 seconds</td> </tr> <tr> <td>Tia</td> <td>240 seconds</td> <td>4 minutes 5 seconds</td> </tr> </tbody> </table>	Name	Week 1	Week 2	Barney	2 minutes 50 seconds	180 seconds	Jibrail	6 minutes	275 seconds	Tia	240 seconds	4 minutes 5 seconds
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Challenge:

5b. Jonah says,



I ran the race in 4 hours 25 minutes. I win.

Ellen says,



I ran the race in 425 minutes. I win.

Explain who is correct.

Wednesday

Today, we will be answering some conversion word problems to apply the information that we have learnt above. This is tricky so if you do need a bit more help, see the information help for this week at the bottom of this sheet. Remember these points:

30 seconds = $\frac{1}{2}$ minute

60 seconds = 1 minute

15 minutes = quarter of an hour

30 minutes = half an hour

60 minutes = 1 hour

Remember 60 minutes is in 1 hour

10) How many hours is 420 minutes?

11) How many hours is 390 minutes?

12) How many hours is 555 minutes?

- 1) I cook a turkey for Christmas dinner for 5 hours 20 minutes, how much is this in just minutes?
- 2) I bake a cake that needs 2 hours, 20 minutes in the oven, how long is this in minutes?
- 3) I watch a football match that lasts 110 minutes, how long is this in hours and minutes?
- 4) The school play runs for 555 minutes, how many hours and minutes is this?

Challenge

Dora says,



To convert hours to minutes, I multiply the number of hours by 60

Is she correct? Can you explain why?

Thursday

Today, we will look at converting weeks to days and years to months. Have a look at the information below to help you:

We know that:

$$1 \text{ week} = 7 \text{ days}$$

$$12 \text{ months} = 1 \text{ year}$$

$$365 \text{ days} = 1 \text{ year}$$

$$24 \text{ hours} = 1 \text{ day}$$

$$366 \text{ days in a leap year}$$

So, if we said how many days are in 2 weeks, we would do 7×2 which would give us 14. So 14 days in 2 weeks. If we then said how many days are in 3 weeks, we would do 7×3 which would give us 21. So 21 days in 3 weeks.

If we said how many months are in 2 years, we would do 12×2 which would give us 24. If we then said how many months in 3 years, we would do 12×3 which would give us 36. So 36 months are in 3 years.

Task:

See if you can use the information above to help you answer these questions below.

1. How many days in 6 weeks?
2. How many months in 4 years?
3. How many days in 5 weeks?
4. How many months in 8 years?
5. How many hours in 3 days?
6. How many hours in 7 days?
7. How many hours in 2 days?
8. How many months in 5 years?

For the next ones you will need to **divide**.

9. How many days is the same as 144 hours?
10. How many years is the same as 48 months?
11. How many years is the same as 96 months?
12. How many years is the same as 24 months?
13. How many weeks is the same as 21 days?
14. How many weeks is the same as 56 days?
15. How many weeks is the same as 14 days?

Challenge:

True or false?

- 3 days > 72 hours.
- $2\frac{1}{2}$ years = 29 months
- 11 weeks 4 days < 10 weeks 14 days

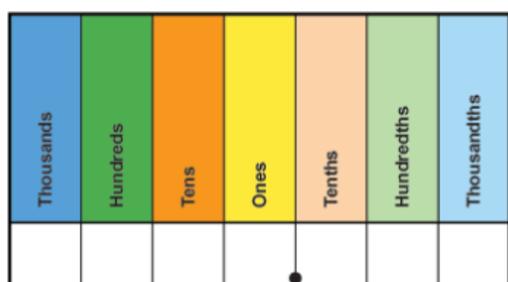
Friday

TT rockstars/Mathletics/Arithmetic test ☺ If you have completed all of the Mathletics activities which I have assigned, please choose on the homepage an activity which relates to the maths you have been doing this week.

Help for this week

Converting km and m

Converting km and m is all based around the idea of multiplying or dividing numbers by 1000. If we are going from km to meters, we are making the number bigger so we need to multiply it by 1000. As it is normally a decimal, we would place the number before the decimal in the ones column and the number after the decimal in the tenths column. We would then move the number along to the left 3 times as there are 3 zeros in 1000 (this is when multiplying) to get the answer. When we are going from meters into km, we need to divide the number by 1000, so this time we would write the number in the thousands, hundreds, tens and ones and move them all 3 places to the right to make the number smaller. It might be an idea to start with this first to get your child used to moving the numbers and the understanding of when we make a number bigger we move it to the left and when we make it smaller we move it to the right. This is a tricky concept so please don't panic if you don't understand it straight away!



Conversion videos to show step by step

If the above method of multiplying and dividing by 1000 is abit tricky- try these videos first to see it helps your understanding.

- Converting km to m and vice versa - <https://www.youtube.com/watch?v=ybc2QAAtsLw4>
- Converting hours to minutes and vice versa- https://www.youtube.com/watch?v=4Vo_W2rp87c

Songs/rhymes

As all of the children know, I do love having rhymes and songs to help me and the children learn the different concepts and ideas. Here is a brilliant one for the days in each month:

30 Days Has September

30 days has September,
April, June and November.
All the rest have 31,
Excepting February alone,
Which only has 28 days clear,
And 29 in each leap year.

Games relating to this week:

- Bingo game to help with conversion so you get used to seeing what the numbers look like when they have been converted https://garyhall.org.uk/gordons/swf/Bingo_-_measures.swf
- Conversion target game- this allows children to convert and choose the correct conversions (multiple choice) https://garyhall.org.uk/gordons/swf/Dart_Board_-_measures.swf
- Further worksheets to support/practice your conversions: <https://garyhall.org.uk/maths-objectives/131/convert-between-different-units-of-measure-for-example-kilometre-to-metre-hour-to-minute>

If you need any extra support, please email me on michaelsyddallyear4@gmail.com and I will help ☺