

Maths Planning and Ideas



Week Commencing: 18.05.20

Year Group: Year 6

This week, we are going to be revisiting some of the key learning that the children will need as they prepare for their next year of schooling. This may mean that they are consolidating learning that they already understand or are perhaps having another go at some of the trickier topics. The subject areas may also jump around a little but this sequence of lessons has been put together in order to support our oldest children as much as possible before they head to secondary school.

	Monday	Tuesday	Wednesday	Thursday	Friday
Area of Learning	Arithmetic LC: Can you review your arithmetic understanding?	LC: Can you multiply fractions by integers (whole numbers)?	LC: Can you multiply fractions by fractions?	LC: Can you divide fractions by integers?	LC: Can you find fractions of an amount?
	<p><i>For these lessons, we will be using the Home Learning Section of the White Rose Maths Scheme and website: https://whiterosemaths.com/homelearning/year-6/</i></p> <p><i>Each day there will be a short video to watch and activities to complete, which will be provided below. The dates of these lessons may not match the date that chn are completing the work so please check to make sure that you have selected the correct lesson, shown in green on this plan.</i></p> <p><i>Any problems, just let Mrs Shepherd know!</i></p>				
Activity	<p>Starter: Complete the 10 mental maths questions for Monday (provided below)</p> <p>Main Activity</p>	<p>Starter: Complete the 10 mental maths questions for Tuesday (provided below)</p> <p>Main Activity Watch the video for Summer Term Week 4 (wb 11.05.20) – Lesson 1 to help refresh</p>	<p>Starter: Complete the 10 mental maths questions for Wednesday (provided below)</p> <p>Main Activity Watch the video for Summer Term Week 4 (wb 11.05.20) – Lesson 2</p>	<p>Starter: Complete the 10 mental maths questions for Thursday (provided below)</p> <p>Main Activity Watch the video for Summer Term Week 4 (wb 11.05.20) – Lesson 3 to</p>	<p>Starter: Complete the 10 mental maths questions for Friday (provided below)</p> <p>Main Activity Watch the video for Summer Term Week 4 (wb 11.05.20) – Lesson 4 to help refresh your</p>

Apologies that last week's link didn't work the first time round but I think that the practice paper from My Mini Maths went down really well.

So we're going to try another one, this time Paper 2.

We'd really like to know how everyone is getting on too and if there are any areas that you want us to work on during the coming weeks ☺

Independent Activity

Complete the arithmetic test linked below:

<https://myminimaths.co.uk/year-6-arithmetic-practice-papers/>

Scroll down until you can select Paper 2 – the answers are also provided so that you can mark your work.

your memory on how to multiply fractions:

Lesson 1 - Multiply fractions by integers

Independent Activity

The questions and resources for today encourage you to look at multiplying fractions in different ways, to support what we have already completed in class.

To check, remember that integers can be written over 1, e.g. 4 would be 4/1 and 7 would be 7/1. This will help you when you come to multiply – remember, multiply the numerators, then the denominators. Try to simplify your answers if you can.

Have a go at the questions below and the problem solving – some will be harder than others.

to help refresh your memory on how to multiple different fractions:

Lesson 2 - Multiply fractions by fractions

Independent Activity

Again, the process has not changed from when we looked at this in class – we are multiplying numerators and then denominators. Simplifying your answers is very important here though so really try to if you can – look back at last weeks work to remind yourself if you are unsure.

Have a go at the questions below – some will be harder than others.

help refresh your memory on how to divide fractions by whole numbers:

Lesson 3 - Divide fractions by integers

Independent Activity

In class, we have used the butterfly method to quickly answer these questions. Don't forget, whole numbers can be written over 1 as a fraction.

Although we are dividing by integers, the method involves multiplying – here's a reminder:

$$\frac{2}{3} \div 4$$

$$\frac{2}{3} \div \frac{4}{1} \quad \text{Numerator} = 2 \times 1$$

$$\frac{2}{3} \div \frac{4}{1} \quad \text{Denominator} = 4 \times 3$$

memory on how to find fractions of a given amount:

Lesson 4 - Fractions of an amount

Independent Activity

We did a lot of work on this in our mental maths activities recently, so this should be a nice way to end the week!

The rule for finding fractions of amounts is: divide by the denominator, multiply by the numerator (divide by the bottom, multiply by the top).

Have a go at the questions below – some will be harder than others.

Remember to give yourself between 35-40mins to complete the paper.			So in this case, the answer would be $\frac{2}{12}$ or $\frac{1}{6}$. Have a go at the questions below – some will be harder than others.	
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Starter Activities

Monday	Tuesday	Wednesday	Thursday	Friday
1. 125×236	11. 407×311	21. 798×201	31. 308×114	41. 651×480
2. $108.4 + 12.06$	12. $216.35 + 0.04$	22. $405.2 + 13.13$	32. $546.9 + 7.002$	42. $541.2 + 5.01$
3. $656 - ? = 56$	13. $722 - ? = 148$	23. $280 - ? = 42$	33. $560 - ? = 89$	43. $815 - ? = 265$
4. $2700 = ? + 900$	14. $1300 = ? + 800$	24. $4800 = ? + 700$	34. $5600 = ? + 800$	44. $9400 = ? + 300$
5. If $10\%=12$, $25\%=?$	15. If $10\%=8$, $35\%=?$	25. If $10\%=6$, $45\%=?$	35. If $10\%=5$, $85\%=?$	45. If $10\%=10$, $95\%=?$
6. Simplify $\frac{4}{12}$	16. Simplify $\frac{3}{9}$	26. Simplify $\frac{8}{16}$	36. Simplify $\frac{6}{8}$	46. Simplify $\frac{20}{100}$
7. $\frac{2}{3} + \frac{1}{6}$	17. $\frac{4}{6} + \frac{3}{12}$	27. $\frac{1}{4} + \frac{3}{8}$	37. $\frac{3}{5} + \frac{2}{10}$	47. $\frac{4}{10} + \frac{1}{20}$
8. Give 2 factors of 15	18. Give 2 factors of 12	28. Give 2 factors of 10	38. Give 2 factors of 18	48. Give 2 factors of 20
9. Give 2 multiples of 4	19. Give 2 multiples of 8	29. Give 2 multiples of 5	39. Give 2 multiples of 7	49. Give 2 multiples of 10
10. $7905 \div 31$	20. $10,044 \div 31$	30. $5797 \div 31$	40. $12,927 \div 31$	50. $1612 \div 31$

If you cannot print off these questions, please don't worry – simply have a go at writing the calculations and answers in your book or on a piece of paper!

Monday 18.05.20

Arithmetic Paper available to download using link provided

Tuesday 19.05.20

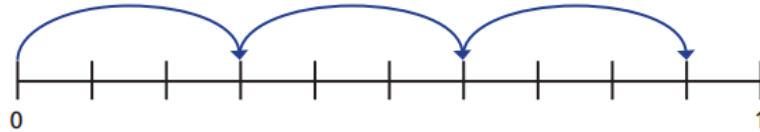
1 Complete the calculations.

a)

$$\frac{2}{7} \times 2 = \square$$

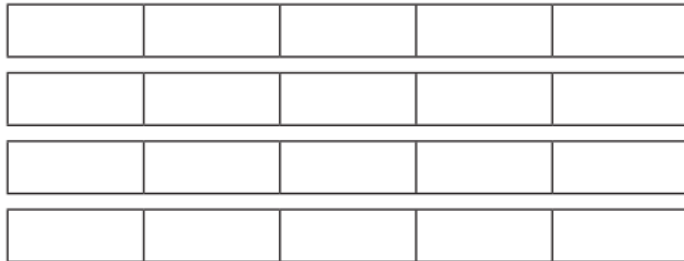


b)



$$3 \times \frac{3}{10} = \square$$

2 a) Shade the bar models to show $\frac{2}{5} \times 4$



b) Complete the multiplication.

$$\frac{2}{5} \times 4 = \square$$

3 Complete the calculations.

a) $\frac{1}{3} \times 1 = \square$

b) $\frac{3}{4} \times 1 = \square$

$$\frac{1}{3} \times 2 = \square$$

$$\frac{3}{4} \times 2 = \square$$

$$\frac{1}{3} \times 3 = \square$$

$$\frac{3}{4} \times 3 = \square$$

$$\frac{1}{3} \times 4 = \square$$

$$\frac{3}{4} \times 4 = \square$$

$$\frac{1}{3} \times 5 = \square$$

$$\frac{3}{4} \times 5 = \square$$

$$\frac{1}{3} \times 6 = \square$$

$$\frac{3}{4} \times 6 = \square$$

What patterns do you notice?

5 Match the calculations.

$$\frac{2}{3} + \frac{2}{3}$$

$$\frac{1}{2} \times 6$$

$$\frac{1}{4} \times 24$$

$$18 \times \frac{1}{4}$$

$$\frac{3}{4} + \frac{3}{4} + \frac{3}{4} + \frac{3}{4}$$

$$\frac{1}{6} \times 10$$

$$\frac{5}{12} \times 4$$

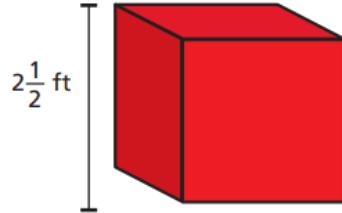
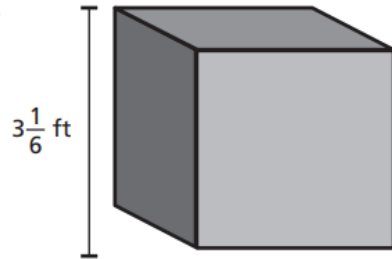
$$12 \times \frac{1}{2}$$

$$1\frac{1}{2} \times 3$$

$$\frac{1}{3} \times 4$$

Problem Solving

9



Jack builds a tower using grey blocks.

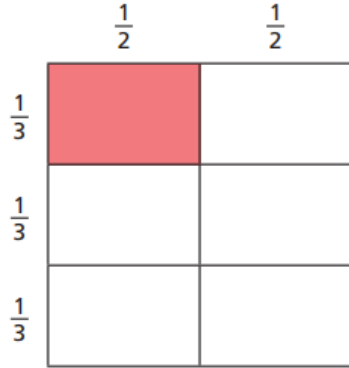
Alex builds a tower using red blocks.

The towers are exactly the same height.

How many blocks could they each have used?

Wednesday 20.05.20

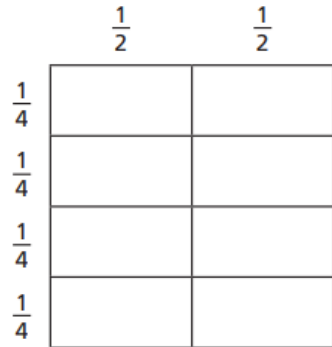
- 1 Dexter works out $\frac{1}{2} \times \frac{1}{3}$ using a grid method.



Explain how this shows $\frac{1}{2} \times \frac{1}{3} = \frac{1}{6}$

- 2 Shade the diagrams to show the fraction multiplications.
Complete the multiplications.

a) $\frac{1}{2} \times \frac{1}{4} = \square$



- 4 Complete the calculations.

a) $\frac{1}{4} \times \frac{1}{5} = \square$

e) $\frac{3}{4} \times \frac{1}{5} = \square$

b) $\frac{1}{5} \times \frac{1}{6} = \square$

f) $\frac{2}{5} \times \frac{5}{6} = \square$


c) $\square = \frac{1}{7} \times \frac{1}{8}$


g) $\frac{5}{7} \times \frac{5}{8} = \square$

d) $\frac{1}{8} \times \frac{1}{9} \times \frac{1}{10} = \square$

h) $\frac{3}{8} \times \frac{2}{9} \times \frac{3}{10} = \square$

- 5 Use the diagram to complete the calculations.

a) $\frac{1}{3}$ of $\frac{1}{4} = \square$ 

b) $\frac{2}{3}$ of $\frac{3}{4} = \square$ 

- c) What do you notice about your answers?
Talk to your partner.

Problem Solving

6 Fill in the missing numbers.

a) $\frac{1}{10} = \frac{1}{2} \times \frac{1}{\square}$

b) $\frac{1}{5} \times \frac{\square}{3} = \frac{2}{15}$

7 Fill in the missing numbers.

a) $\frac{1}{10} = \frac{\square}{4} \times \frac{\square}{5}$

b) $\frac{1}{4} = \frac{\square}{4} \times \frac{\square}{5}$

Thursday 21.05.20

2 Complete the divisions using the diagrams to help you.

a) $\frac{1}{3} \div 2 = \square$ 

b) $\frac{1}{3} \div 3 = \square$ 

c) $\frac{2}{3} \div 3 = \square$ 

3 $\frac{3}{4}$ of a kilogram of rice is divided equally between two bowls.



How much rice is in each bowl?

4 Work out the divisions.

a) $\frac{1}{5} \div 7 = \square$

f) $\square = \frac{5}{6} \div 12$

b) $\square = \frac{1}{6} \div 3$

g) $\frac{8}{3} \div 7 = \square$

c) $\frac{1}{4} \div 9 = \square$

h) $\square = \frac{19}{20} \div 5$

d) $\square = \frac{1}{7} \div 6$

i) $\frac{1}{100} \div 25 = \square$

e) $\frac{4}{9} \div 7 = \square$

j) $\square = \frac{45}{50} \div 20$

5 Write $<$, $>$ or $=$ to complete each statement.

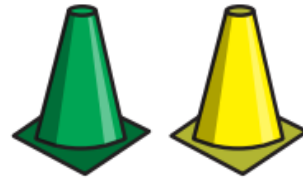
a) $\frac{1}{3} \div 5$ \bigcirc $\frac{1}{5} \div 3$

b) $\frac{1}{3} \div 3$ \bigcirc $\frac{1}{5} \div 5$

c) $\frac{3}{5} \div 5$ \bigcirc $\frac{3}{5} \div 3$

Problem Solving

- 6 There are some cones in the PE shed.
Classes 1, 2 and 3 share them equally.



- Class 1 put theirs into 4 equal piles.
- Class 2 put theirs into 5 equal piles.
- Class 3 put theirs into 11 equal piles.

What fraction of the whole number of cones is in each pile?

	Fraction in each pile
Class 1	
Class 2	
Class 3	

- 7 a) Which of these statements are true? Tick your answers.

$$\frac{1}{2} \div 2 \text{ is equal to } \frac{1}{2} \times \frac{1}{2}$$

$$\frac{1}{2} \div 4 = \frac{1}{2} \times \frac{1}{4}$$

$$\frac{1}{2} \div 3 = \frac{1}{2} \times \frac{1}{3}$$

$$\frac{1}{2} \div 5 = \frac{1}{2} \times \frac{1}{5}$$

Friday 22.05.20

2 Use your times tables knowledge to solve the calculations.

a) $\frac{1}{3}$ of 12 =

d) $\frac{1}{10}$ of 80 cm =

b) $\frac{1}{4}$ of £20 =

e) $\frac{1}{12}$ of 60 =

c) $\frac{1}{5}$ of 35 m =

f) $\frac{1}{7}$ of 84 kg =

Now use your answers to solve these calculations.

a) $\frac{2}{3}$ of 12 =

d) $\frac{7}{10}$ of 80 cm =

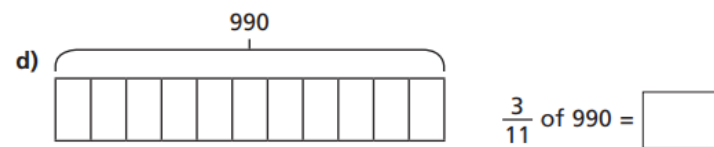
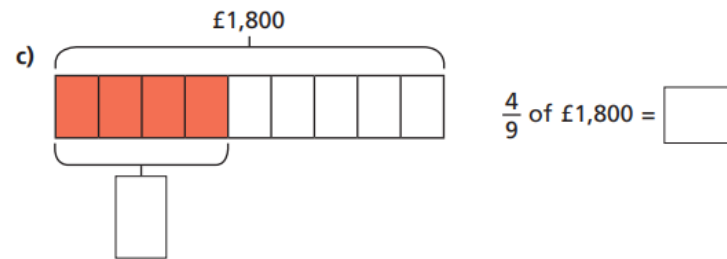
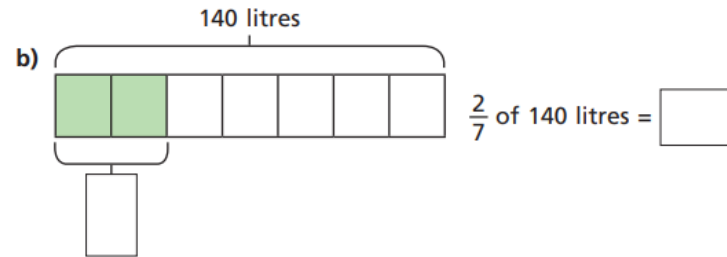
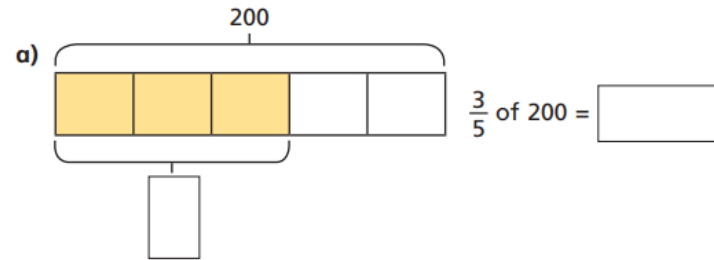
b) $\frac{3}{4}$ of £20 =

e) $\frac{11}{12}$ of 60 =

c) $\frac{3}{5}$ of 35 m =

f) $\frac{6}{7}$ of 84 kg =

3 Calculate the missing values.



- 4 a) In a school of 480 pupils, $\frac{2}{3}$ are juniors.
How many juniors are in the school?

- b) A factory makes 256 cars.
 $\frac{3}{8}$ are electric cars.
How many electric cars does the factory make?

- c) Brett uses $\frac{2}{5}$ of his £180 savings to buy a train ticket.
How much of his savings does he have left?

5



Alex has 288 m of fence to paint.

She paints $\frac{3}{12}$ of the whole fence on Monday. She then paints $\frac{1}{2}$ of what is left on Tuesday.

How much fence does she have left to paint?

Problem Solving

6 Fill in the missing numbers.

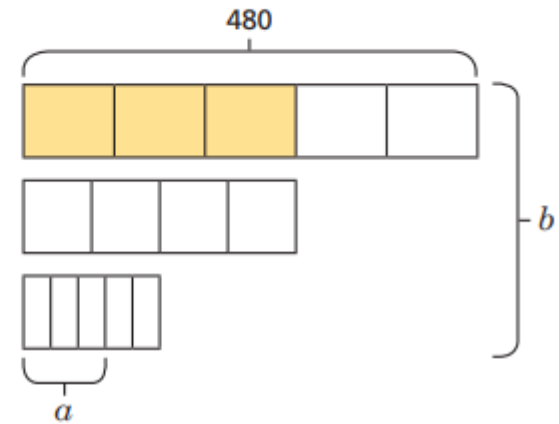
a) $\frac{\square}{10}$ of \$500 = \$150

c) $42 = \frac{\square}{100}$ of 700

b) $\frac{\square}{4}$ of 100 kg = 75 kg

d) $450 = \frac{\square}{20}$ of 3,000

7 Find the values of a and b .



$a = \square$

$b = \square$

Where can I complete further work?

[Twinkl](#) – Subscription service used by schools is offering a free premium service for teachers, parents and children to use whilst schools are closed. Enter the code **UKTWINKLHELPS** for access to worksheets, powerpoints and interactive games to support all areas of learning.

[Classroom Secrets](#) – Free Maths, Reading and Grammar home learning packs and interactive resources for all ages.

[White Rose Maths](#) – Free Maths home learning resources for all ages. Watch the videos and try the questions.

[Primary Stars](#) – Free Maths home learning packs for Year 1 and 2.

[BBC Bitesize Primary](#) – Free learning resources available for KS1 and KS2 across all subjects.

[I See Maths](#) – Free daily home maths lessons hosted by Gareth Metcalfe. Follow the link for videos, information and resources.

[Top Marks](#) – Free educational resources and games for English and Maths.

[ICT Games](#) – Free educational resources and games for English and Maths.