

Maths Planning and Ideas



Week Commencing: 08.06.20

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 and divide by 10, 100 and 1000?	LC: Can you multiply a decimal by an integer?	LC: Can you divide a decimal by an integer?	LC: Can you represent decimals as fractions?
	<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>Please note that for this week, activities will be from the wb 18.05.20 on the White Rose website, as we are revisiting some key areas of learning.</p> <p><i>Any problems, just let Mrs Shepherd know!</i></p>				
Activity	Starter: Complete the 10 mental maths questions for Monday (provided below)	Starter: Complete the 10 mental maths questions for Tuesday (provided below) Main Activity	Starter: Complete the 10 mental maths questions for Wednesday (provided below) Main Activity	Starter: Complete the 10 mental maths questions for Thursday (provided below) Main Activity	Starter: Complete the 10 mental maths questions for Friday (provided below) Main Activity

Main Activity

The arithmetic work that I have seen completed over the last few weeks has been brilliant and it has been great to hear feedback from parents to explain that more and more of you are completing all of the questions.

Let's keep up the momentum for another week and challenge yourself to beat your previous score.

Independent Activity

Complete the arithmetic test linked below:

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

Please complete **Paper 4**.

You should aim to give yourself between 35-40mins

Watch the video for **Summer Term Week 5 (wb 18.05.20) – Lesson 1** to help refresh your memory on how to multiply and divide by 10, 100 and 1000 in an efficient way:

Lesson 1 - Multiply and divide by 10 100

Independent Activity

This is a skill that we have covered many times before but it still causes some confusion when it comes to solving these questions quickly and efficiently. Remember, you can always use a HTO board if you need to for support.

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

Watch the video for **Summer Term Week 5 (wb 18.05.20) – Lesson 2** to recap our work on using column multiplication with decimals:

Lesson 2 - Multiply decimals by integers

Independent Activity

Much of this activity links to the work we did at the start of home learning all about multiplying decimals in the context of money.

Some of these questions show you different representations of the problem but the core workings are the same so don't worry if you initially find them challenging.

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

Watch the video for **Summer Term Week 5 (wb 18.05.20) – Lesson 3** to help support your use of division with decimals:

Lesson 3 - Divide decimals by integers

Independent Activity

These questions rely upon your prior knowledge of division. Remember, there are a number of strategies to help you solve these and your times tables knowledge will be key to making these questions easier.

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

Watch the video for **Summer Term Week 5 (wb 18.05.20) – Lesson 4** to link back to last week's work on showing decimals as fractions:

Lesson 4 - Decimals as fractions

Independent Activity

Last week, our work on FDP was a little tricky, so this activity will help support your understanding of how decimals can be shown as a fraction.

Top Tip – think of the decimal in terms of how many wholes and then how many /100 or /1000. This will make the transition between to two a little easier.

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

to complete the paper. The answers are also provided so that you can mark your work...but no sneak peaks beforehand please! 😊

Starter Activities

Monday	Tuesday	Wednesday	Thursday	Friday
1. $15.2 + 7.75$	11. $18.97 + 6.78$	21. $57.81 + 4.40$	31. $66.3 + 78.45$	41. $201.6 + 0.07$
2. $16 \times ? = 112$	12. $29 \times ? = 174$	22. $58 \times ? = 280$	32. $85 \times ? = 255$	42. $39 \times ? = 312$
3. 5.5×100	13. 6.2×10	23. 9.4×1000	33. 4.6×10	43. 0.3×100
4. Which is bigger - $\frac{5}{10}$ or 30%?	14. Which is bigger - $\frac{3}{10}$ or 3%?	24. Which is bigger - $\frac{7}{10}$ or 0.85?	34. Which is bigger - $\frac{1}{5}$ or 12%?	44. Which is bigger - $\frac{3}{4}$ or 0.9?
5. Find $\frac{1}{3}$ of 30	15. Find $\frac{1}{5}$ of 35	25. Find $\frac{2}{3}$ of 90	35. Find $\frac{4}{5}$ of 20	45. Find $\frac{2}{7}$ of 49
6. Write 0.65 as a fraction	16. Write 0.21 as a fraction	26. Write 0.02 as a fraction	36. Write 0.89 as a fraction	46. Write 0.07 as a fraction
7. $£7.24 + 39p$	17. $£2.45 + 91p$	27. $£18.69 + 48p$	37. $£0.77 + 123p$	47. $£0.14 + 500p$
8. 7°C colder than 4°C	18. 9°C colder than 5°C	28. 10°C colder than 5°C	38. 18°C colder than 11°C	48. 25°C colder than 15°C
9. Difference between 52 and 13	19. Difference between 78 and 12	29. Difference between 144 and 91	39. Difference between 456 and 209	49. Difference between 568 and 315
10. $3800 \div 200$	20. $4600 \div 200$	30. $8800 \div 200$	40. $10,000 \div 200$	50. $7200 \div 200$

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 08.06.20

Arithmetic Paper available to download using link provided

4 Complete the calculations.

a) $13.44 \times 10 =$

d) $4.4 \times$ $= 4,400$

b) $41.4 \times 100 =$

e) $= 1.03 \times 100$

c) $0.415 \times 1,000 =$

f) $30.44 =$ $\times 10$

5 Complete the diagrams.



What do you notice? Why does this happen?

6 Write $>$, $<$ or $=$ to compare the number sentences.

$1.4 \times 10 \times 10 \times 10$ $1.4 \times 1,000$

$1.4 \times 10 \times 100$ $1.4 \times 1,000$

$1.4 \times 10 \times 10$ $1.4 \times 1,000$

$1.4 \times 10 \times 2$ 1.4×100

- 1 Complete the calculations and sentences.
Use place value counters to help you.

Th	H	T	O	Tth	Hth
	●	●●●			

a) $140 \div 10 = \square$

When the number is divided by 10 the counters move place to the right.

b) $140 \div 100 = \square$

When the number is divided by 100 the counters move places to the right.

c) $140 \div 1,000 = \square$

When the number is divided by 1,000 the counters move places to the right.

- 2 Complete the diagram.



- 3 a) Draw counters to represent the calculations.

$123 \div 1$

H	T	O	Tth	Hth	Thth

$123 \div 10$

H	T	O	Tth	Hth	Thth

$123 \div 100$

H	T	O	Tth	Hth	Thth

$123 \div 1,000$

H	T	O	Tth	Hth	Thth

- b) Complete the calculations.

$123 \div 1 = \square$

$123 \div 10 = \square$

$123 \div 100 = \square$

$123 \div 1,000 = \square$

What do you notice?

4 Complete the calculations.

a) $16 \div 10 =$

d) $332 \div$ $= 0.332$

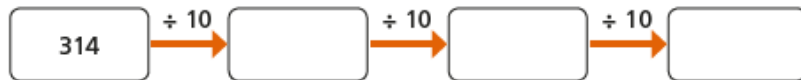
b) $43.4 \div 100 =$

e) $2.4 \div 200 =$

c) $614 \div 1,000 =$

f) $5.09 =$ $\div 20$

5 Complete the diagrams.



What do you notice? Why does this happen?

7 Dexter is solving the calculation $5,400 \div 100$



I think the answer is 54.00

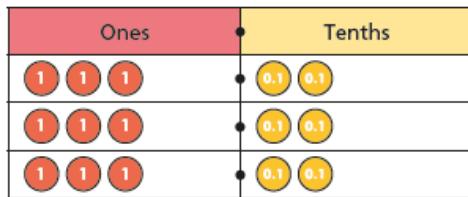
Is Dexter correct? _____

Explain your reasoning.

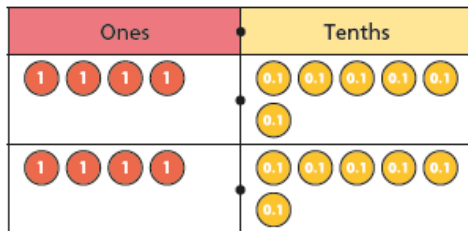
Wednesday 10.06.20

1 Use place value counters to solve the calculations.

a) $3.2 \times 3 = \square$

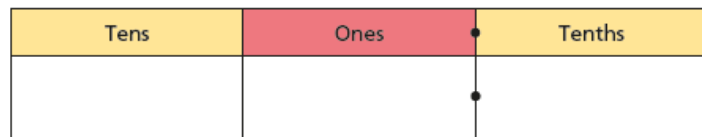


b) $4.6 \times 2 = \square$

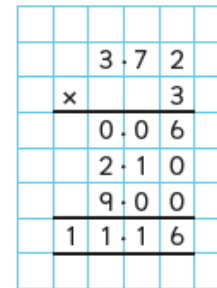


2 Solve the multiplication. Draw your answer.

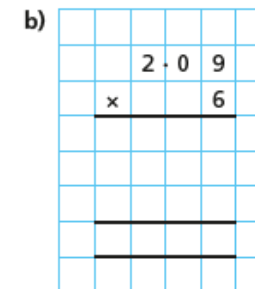
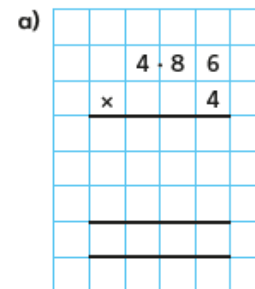
$12.2 \times 3 = \square$



3 Nijah uses long multiplication to solve 3.72×3



Use long multiplication to work out the calculations.



4 Work out the multiplications.

a) $5.2 \times 4 = \square$

d) $\square = 2.34 \times 3$

b) $14.3 \times 3 = \square$

e) $11.505 \times 4 = \square$

c) $6 \times 9.1 = \square$

f) $9.602 \times 6 = \square$

- 5 0.25 kg of flour is needed to make one cake.
How much flour is needed to make four cakes?



- 6 Work out the multiplications.

a) $7.2 \times 2 =$

$7.2 \times 4 =$

$14.4 \times 4 =$

$7.2 \times 8 =$

b) $= 3.45 \times 3$

$= 34.5 \times 3$

$= 345 \times 3$

- 7 Amir is solving 3.4×4



To solve this, I
did 34×4 , which was 136
Then I multiplied my answer
by 10 to get an answer
of 1,360

Do you agree with Amir? _____

Explain why.

Problem Solving

- 8 Use the digits 1, 2, 3 and 4 once each to create a calculation.

1	2	3	4	
	·		×	

- a) How many different products can you make?

- b) What is the greatest possible product?

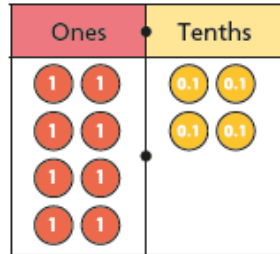
- c) What is the smallest possible product?

- d) What is the product closest to 12?

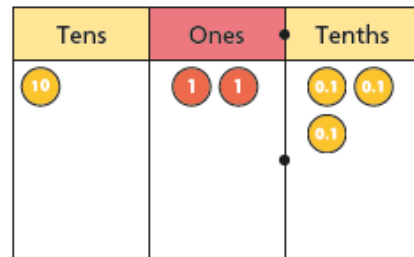
Thursday 11.06.20

1 Use place value counters to work out the divisions.

a) $8.4 \div 4 =$

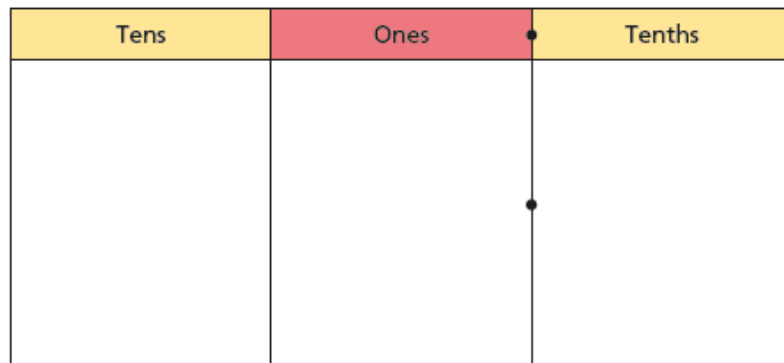


b) $12.3 \div 3 =$

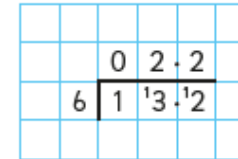


2 Work out the division. Draw your answer.

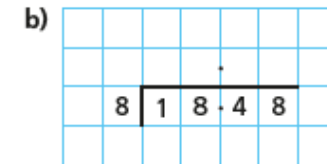
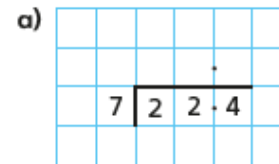
$16.4 \div 4 =$



3 Brett uses short division to work out $13.2 \div 6$



Use short division to work out the calculations.



4 Work out the divisions.

a) $25.6 \div 8 =$

d) $= 19.45 \div 5$

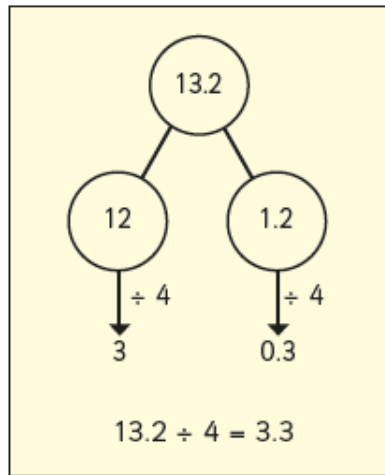
b) $14.8 \div 4 =$

e) $202.35 \div 3 =$

c) $18.48 \div 6 =$

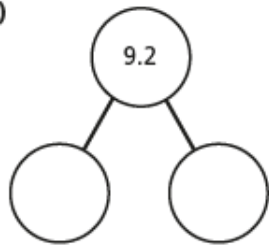
f) $105.12 \div 9 =$

- 5 Esther solves $13.2 \div 4$ by partitioning 13.2 into two numbers that are easier to divide.



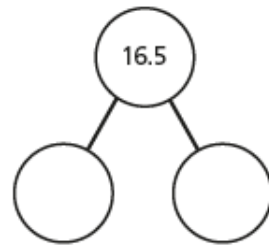
Use Esther's method to complete the part-whole model and calculation.

a)



$$9.2 \div 4 = \square$$

b)



$$16.5 \div 3 = \square$$

- 6 Work out the divisions.

a) $9.64 \div 4 = \square$

$$96.4 \div 4 = \square$$

$$0.964 \div 4 = \square$$

$$9.64 \div 8 = \square$$

b) $19.44 \div 9 = \square$

$$19.53 \div 9 = \square$$

$$19.62 \div 9 = \square$$

- 7 Fill in the missing numbers.

$$3.6 \div 4 = 36 \div \square$$

$$3.6 \div 4 = \square \div 8$$

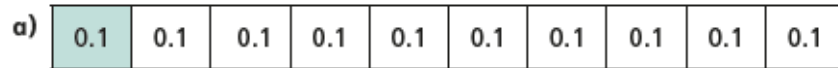
- 8 Complete the calculation.

$$8.4 \div \square = 4.2 \div \square$$

How many different solutions can you find?

Friday 12.06.20

1 Complete the sentences.

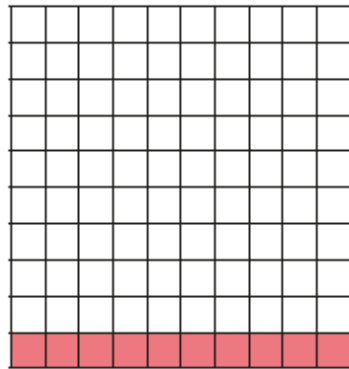


The whole has been divided into equal parts.

Each part is worth

This is equivalent to

b)



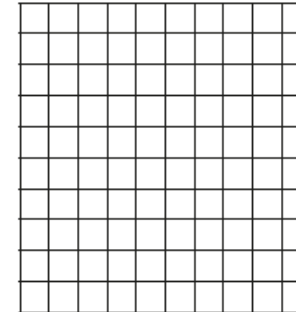
The whole has been divided into equal parts.

Each part is worth

parts out of are shaded.

This is equivalent to

2 a) Shade 0.17 of the hundred square.



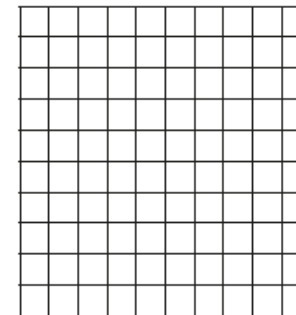
Complete the sentence.

parts out of are shaded.

Write 0.17 as a fraction.

0.17 =

b) Shade 0.2 of the hundred square.

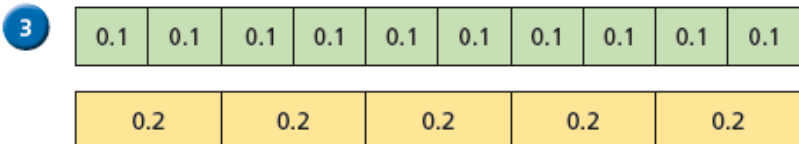


Complete the sentence.

parts out of are shaded.

Write 0.2 as a fraction in its simplest form.

0.2 =



Use the bar models to fill in the missing numbers.

$$0.2 = \frac{\square}{10} = \frac{1}{\square}$$

$$0.4 = \frac{\square}{10} = \frac{2}{\square}$$

$$\square = \frac{\square}{10} = \frac{4}{5}$$

4 Fill in the missing numbers.

a) $0.54 = \frac{\square}{100} = \frac{\square}{50}$

b) $0.6 = \frac{\square}{10} = \frac{\square}{5}$

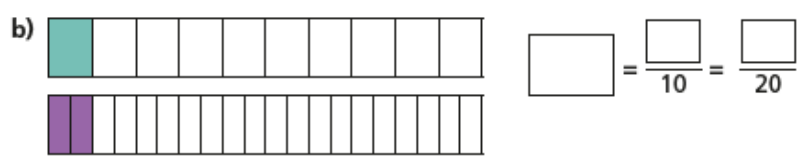
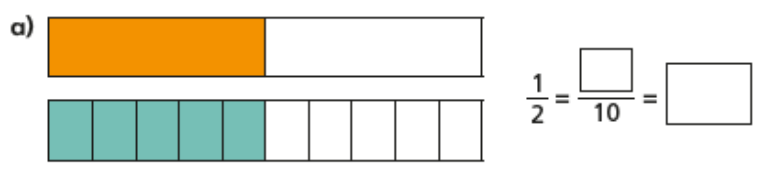
c) $0.3 = \frac{\square}{10} = \frac{\square}{100}$

d) $\square = \frac{9}{100}$

e) $\square = \frac{9}{10}$

f) $\frac{21}{50} = \frac{\square}{100} = \square$

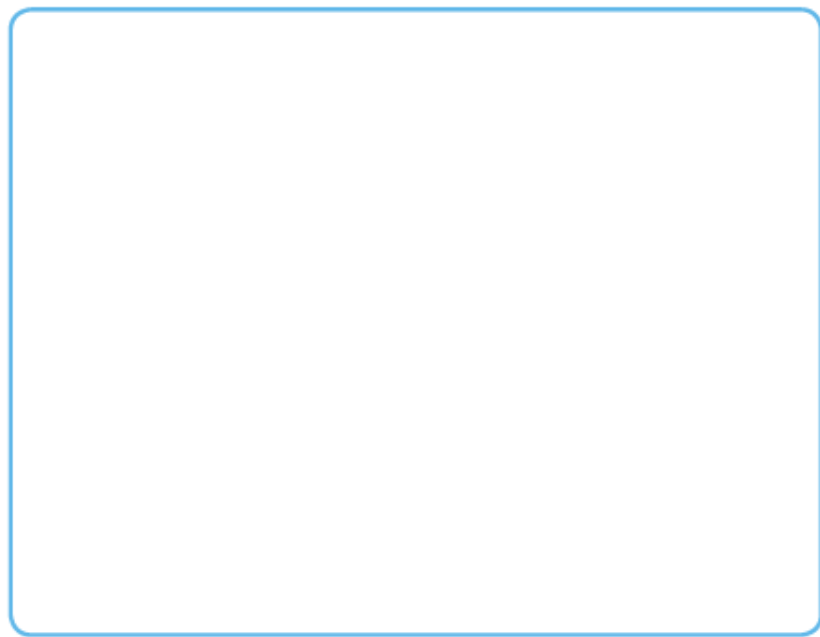
5 Use the bar models to fill in the missing numbers.



6

$0.3 = \frac{3}{10}$ so $0.37 = \frac{37}{10}$

Draw a diagram to show that Ron is wrong.



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.