

Hola niñas/niños

First have a go at completing the activity mat. Remember, this is an optional task.

Activity mat 1 will be a little less challenging.

Activity mat 2 will be more challenging.

Please choose **just 1 maths mat** to complete before starting the main task.

Maths Mat 1 -

Section 1

Write the 24-hour digital time to match the time (pm) shown on the clock.



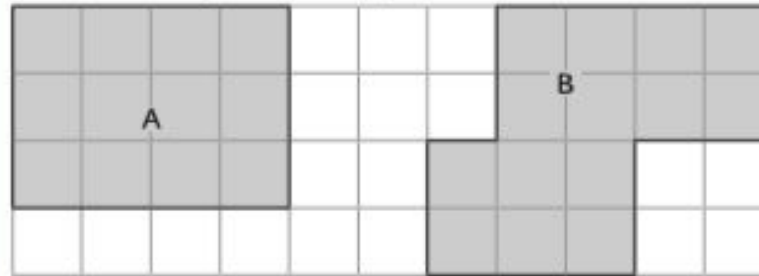
Section 2

Calculate the following using the partitioning method.

$$84 \times 6 =$$

Section 5

Find the perimeter of A and B. (Each square is 1cm x 1cm)

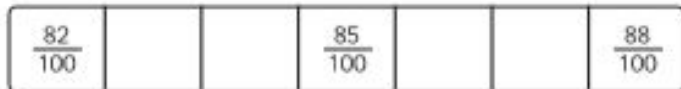


A =

B =

Section 3

Fill in the missing fractions to complete this sequence.



Section 6

Use the following signs to make these equations true: \leq \geq

$$6.74 \quad \square \quad 6.73$$

$$2.55 \quad \square \quad 2.49$$

Section 7

Ben's mum gave him £28 for his birthday.

His Dad gave him a three quarters of this amount extra.

How much money was Ben given altogether?

Section 4

On a computer game called Big Foot's Quest, you need 2750 points to reach Level 3. You need another 1550 points to reach Level 4. How many points do you need altogether to reach Level 4?

Section 8

A shop sells three types of sunglasses. What is the difference in price between the most expensive and least expensive sunglasses?



Mat 2 - challenging questions

Section 1

The temperature is 3°C. Two hours earlier, the temperature was 6°C colder. What was the temperature two hours earlier?

Section 2

A library has 14 bookcases. Each bookcase has 5 shelves. A librarian estimates there are 60 books on each shelf.

How many books are there in the library, rounded to the nearest one thousand?

Section 3

Complete these calculations:

$$\begin{array}{r} 49\ \square \\ + 3\ \square\ 8 \\ \hline \square\ 4\ 8 \end{array}$$

$$\begin{array}{r} 6\ \square\ 7 \\ - \square\ 4\ 1 \\ \hline \square\ 0\ 6 \end{array}$$

Section 4

Order the following fractions from smallest to largest:

$$\frac{1}{4} \quad \frac{3}{8} \quad \frac{3}{16} \quad \frac{1}{8}$$

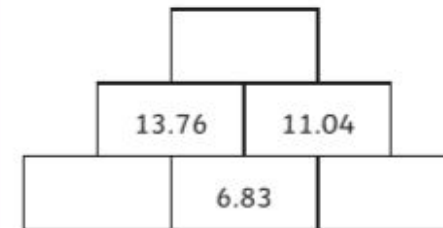
| | | | |
|--|--|--|--|
| | | | |
|--|--|--|--|

smallest

largest

Section 5

Adjacent squares are added together to give the number above. Complete the number wall.



Section 6

1 gallon = 4.5 litres

A car's petrol tank has a capacity of 50 litres. How many gallons is the capacity of the petrol tank to the nearest gallon.

Section 7

Write the name of these shapes.



Section 8

Children count the number of children who cycle to school each day.

| Week | Number of children who cycled to school |
|-----------|---|
| Monday | 8 |
| Tuesday | 12 |
| Wednesday | 3 |
| Thursday | 11 |
| Friday | 9 |

What is the highest number of children who could have cycled every day?

For the main task we are going to continue to work from the White Rose site. We are going to calculate fractions of an amount. Please follow the link carefully.

Please let the video guide you when tackling the activity.

1. Copy or click on the link (press Ctrl then click) <https://whiterosemaths.com/homelearning/>

Then click Year 5

Summer Term Plans
White Rose Maths in partnership with the BBC Bitesize Daily team has developed a 12-week learning programme for the summer term. This scheme is designed to help children be ready for their next year of school.
[Click here for more details](#)

Hello there, Parents and Carers!

As schools worldwide close for now in response to COVID-19 you might be wondering how best to help your child or children with their studies at home.

Always happy to help, the White Rose Maths Team has prepared a series of five maths lessons for each year group from Year 1-8. We will be adding five more each week for the next few weeks. Every lesson comes with a short video showing you clearly and simply how to help your child to complete the activity successfully.

Home Learning

- Summer Term
- Easter Fun
- Home Learning – Early Years
- Home Learning – Year 1
- Home Learning – Year 2
- Home Learning – Year 3
- Home Learning – Year 4
- Home Learning – Year 6
- Home Learning – Year 6
- Home Learning – Year 7
- Home Learning – Year 8
- Home Learning – Year 9
- Home Learning – Year 10

Early Years **Year 1** **Year 2**

Year 3 **Year 4** **Year 5** ← **click**

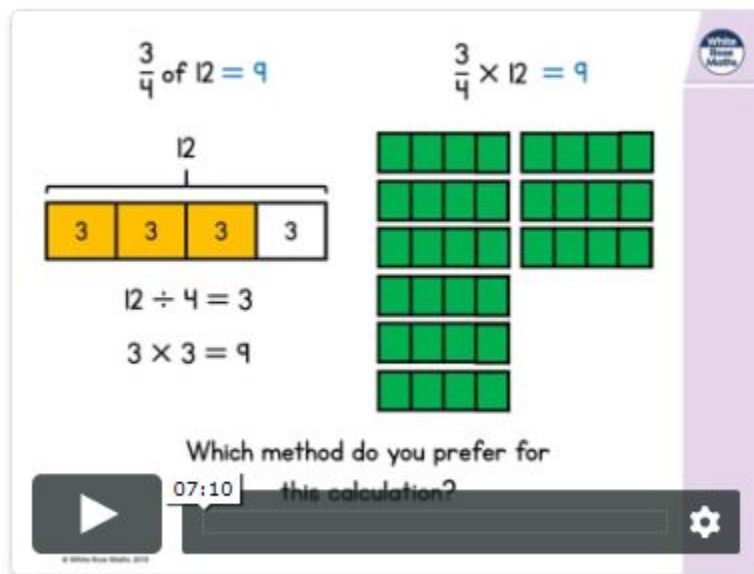
Year 6 **Year 7** **Year 8**

Year 9 **Year 10** **By Topic**

Click

First, watch the video to support your learning and use it to work on the activity sheets below.

Lesson 4 - Fractions as operators



The video player interface shows two methods for calculating $\frac{3}{4}$ of 12. On the left, a number line from 0 to 12 is divided into four equal segments, each labeled '3'. Below it, the equations $12 \div 4 = 3$ and $3 \times 3 = 9$ are shown. On the right, a grid of 12 green squares is arranged in 3 rows and 4 columns. The first three rows are shaded green, representing $\frac{3}{4}$ of the total. Below the grid, the equation $\frac{3}{4} \times 12 = 9$ is shown. A question at the bottom asks, 'Which method do you prefer for this calculation?'. The video player includes a play button, a progress bar at 07:10, and a settings gear icon.

Looking for the worksheets? Contact your child's school to check if they have a subscription to our worksheets. Alternatively, [read more here](#) or get some extra practice from [BBC Bitesize](#).

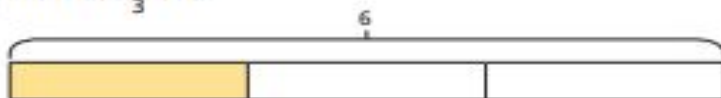
Fractions as operators

1 a) Work out $\frac{1}{3} \times 6$



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

b) Work out $\frac{1}{3}$ of 6



$$\frac{1}{3} \text{ of } 6 = \square \div \square = \square$$

c) What is the same about these calculations?

d) Work out $\frac{2}{3}$ of 6

$$\frac{2}{3} \text{ of } 6 = \square \div \square \times 2 = \square$$

e) Work out $\frac{2}{3} \times 6$



$$\frac{2}{3} \times 6 = \square = \square$$



2 Complete the calculations.

a) $\frac{1}{3} \times 12 = \square$

$\frac{1}{3}$ of 12 = \square

b) $12 \times \frac{1}{4} = \square$

$\frac{1}{4}$ of 12 = \square

c) $12 \times \frac{2}{3} = \square$

$\frac{2}{3}$ of 12 = \square

d) $\frac{3}{4} \times 12 = \square$

$\frac{3}{4}$ of 12 = \square

What do you notice?

3 Tick the calculation in each pair that is easier to work out.

a) $\frac{1}{5} \times 7$

$\frac{1}{5}$ of 7

b) $\frac{1}{5} \times 10$

$\frac{1}{5}$ of 10

c) $\frac{3}{5} \times 10$

$\frac{3}{5}$ of 10

d) $\frac{3}{10} \times 5$

$\frac{3}{10}$ of 5

Compare answers with a partner.

4 Complete the calculations.

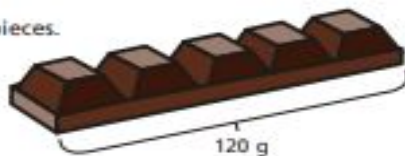
a) $\frac{5}{6} \times 12 = \frac{\square}{\square}$ of 12 =

b) $\frac{3}{4} \times 24 = \frac{\square}{\square}$ of 24 =

c) $\frac{2}{7} \times \square = \frac{\square}{\square}$ of 28 =

d) $\frac{\square}{\square} \times 45 = \frac{4}{5}$ of =

5 A bar of chocolate has 5 equal pieces.
The whole bar weighs 120g.



How much do three pieces weigh?

a) Write two calculations that will give the answer to the problem.

b) Work out the answer.

Three pieces of chocolate weigh

6 Teddy and Annie are working out $\frac{3}{7} \times 42$

a)

I will multiply 42 by $\frac{3}{7}$



Teddy

Use Teddy's method to work out the calculation.

b)



Annie

I will find $\frac{3}{7}$ of 42

Use Annie's method to work out the calculation.

c) Whose method do you prefer? _____

Explain why.

d) When is it easier to find fractions of amounts rather than multiply fractions?

Give some examples for each method.

Answers -

Fractions as operators

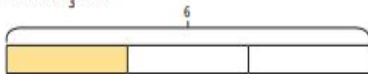
Use Maths

- 1 a) Work out $\frac{1}{3} \times 6$



$$\frac{1}{3} \times 6 = \frac{6}{3} = 2$$

- b) Work out $\frac{1}{3}$ of 6



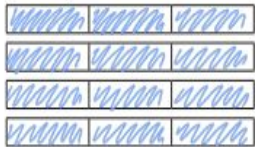
$$\frac{1}{3} \text{ of } 6 = 6 \div 3 = 2$$

- c) What is the same about these calculations?

- d) Work out $\frac{2}{3}$ of 6

$$\frac{2}{3} \text{ of } 6 = 6 \div 3 \times 2 = 4$$

- e) Work out $\frac{2}{3} \times 6$



$$\frac{2}{3} \times 6 = \frac{12}{3} = 4$$

- 2 Complete the calculations.

| | |
|--------------------------------|--------------------------------|
| a) $\frac{1}{3} \times 12 = 4$ | c) $12 \times \frac{2}{3} = 8$ |
| $\frac{1}{3}$ of 12 = 4 | $\frac{2}{3}$ of 12 = 8 |
| b) $12 \times \frac{1}{4} = 3$ | d) $\frac{3}{4} \times 12 = 9$ |
| $\frac{1}{4}$ of 12 = 3 | $\frac{3}{4}$ of 12 = 9 |

What do you notice?

- 3 Tick the calculation in each pair that is easier to work out.

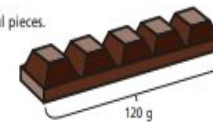
| | |
|------------------------------|-----------------------|
| a) $\frac{1}{5} \times 7$ ✓ | $\frac{1}{5}$ of 7 |
| b) $\frac{1}{5} \times 10$ | $\frac{1}{5}$ of 10 ✓ |
| c) $\frac{3}{5} \times 10$ | $\frac{3}{5}$ of 10 ✓ |
| d) $\frac{3}{10} \times 5$ ✓ | $\frac{3}{10}$ of 5 |

Compare answers with a partner.

- 4 Complete the calculations.

| |
|---|
| a) $\frac{5}{6} \times 12 = \frac{5}{6}$ of 12 = 10 |
| b) $\frac{3}{4} \times 24 = \frac{3}{4}$ of 24 = 18 |
| c) $\frac{2}{7} \times 28 = \frac{2}{7}$ of 28 = 8 |
| d) $\frac{4}{5} \times 45 = \frac{4}{5}$ of 45 = 36 |

- 5 A bar of chocolate has 5 equal pieces. The whole bar weighs 120g.



How much do three pieces weigh?

- a) Write two calculations that will give the answer to the problem.

$$\frac{3}{5} \times 120 \quad \frac{3}{5} \times 120$$

- b) Work out the answer.

Three pieces of chocolate weigh 72g

- 6 Teddy and Annie are working out $\frac{3}{7} \times 42$

a)

I will multiply 42 by $\frac{3}{7}$



Teddy

Use Teddy's method to work out the calculation.

$$42 \times \frac{3}{7} = \frac{126}{7} = 18$$

18

b)

I will find $\frac{3}{7}$ of 42



Annie

Use Annie's method to work out the calculation.

18

- c) Whose method do you prefer? _____

Explain why.

Various answers

- d) When is it easier to find fractions of amounts rather than multiply fractions?

Give some examples for each method.

Lastly - use the 'Get the Answers' tab to check your work

Challenge mat answers 1-

Answers

Section 1

Write the 24-hour digital time to match the time (pm) shown on the clock.



21.23

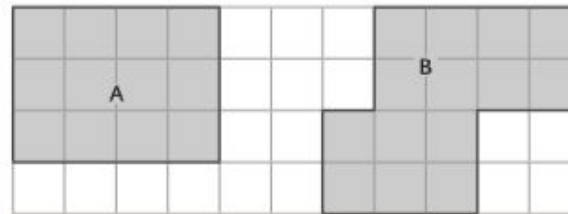
Section 2

Calculate the following using the partitioning method:

$$84 \times 6 = 504$$

Section 5

Find the perimeter of A and B. (Each square is 1cm x 1cm)



A = 14cm

B = 18cm

Section 3

Fill in the missing fractions to complete this sequence.

| | | | | | | |
|------------------|------------------|------------------|------------------|------------------|------------------|------------------|
| $\frac{82}{100}$ | $\frac{83}{100}$ | $\frac{84}{100}$ | $\frac{85}{100}$ | $\frac{86}{100}$ | $\frac{87}{100}$ | $\frac{88}{100}$ |
|------------------|------------------|------------------|------------------|------------------|------------------|------------------|

Section 6

Use the following signs to make these equations true: < or >

$$6.74 > 6.73$$

$$2.55 > 2.49$$

Section 7

Ben's mum gave him £28 for his birthday.

His Dad gave him a three quarters of this amount extra.

How much money was Ben given altogether?

£49

Section 4

On a computer game called Big Foot's Quest, you need 2750 points to reach Level 3. You need another 1550 points to reach Level 4. How many points do you need altogether to reach Level 4?

4300

Section 8

A shop sells three types of sunglasses. What is the difference in price between the most expensive and least expensive sunglasses?



£4.69



£2.99



£5.85

£2.86

Challenge mat 2 answers -

Section 1

The temperature is 3°C. Two hours earlier, the temperature was 6°C colder. What was the temperature two hours earlier?

-3°C

Section 2

A library has 14 bookcases. Each bookcase has 5 shelves. A librarian estimates there are 60 books on each shelf.

How many books are there in the library, rounded to the nearest one thousand?

4000

Section 3

Complete these calculations:

$$\begin{array}{r} 490 \\ + 358 \\ \hline 848 \end{array} \quad \begin{array}{r} 647 \\ - 441 \\ \hline 206 \end{array}$$

Section 4

Order the following fractions from smallest to largest:

$\frac{1}{4}$ $\frac{3}{8}$ $\frac{3}{16}$ $\frac{1}{8}$

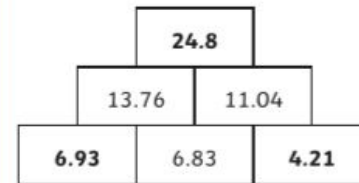
| | | | |
|---------------|----------------|---------------|---------------|
| $\frac{1}{8}$ | $\frac{3}{16}$ | $\frac{1}{4}$ | $\frac{3}{8}$ |
|---------------|----------------|---------------|---------------|

smallest

largest

Section 5

Adjacent squares are added together to give the number above. Complete the number wall.



Section 6

1 gallon = 4.5 litres

A car's petrol tank has a capacity of 50 litres. How many gallons is the capacity of the petrol tank to the nearest gallon.

11 gallons

Section 7

Write the name of these shapes.



cuboid



square-based pyramid

Section 8

Children count the number of children who cycle to school each day.

| Week | Number of children who cycled to school |
|-----------|---|
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What is the highest number of children who could have cycled every day?

3