

| Year 5 | Maths | English | Science | Art | Geography |
|---|---|---|--|--|--|
| Wc 1st June | <p>White Rose daily activities to be completed in maths books www.whiterosemaths.com/homelearning/year-5/ (Week 6 on website) Lesson 1: Multiply fraction by integer Lesson 2: Multiply mixed number by integer Lesson 3: Fraction of amount Lesson 4: Fractions as operators</p> <p>Watch the videos and answer the questions in your books. Worksheets will be provided on the pages below for you to use.</p> <p>-----</p> <p>White Rose is also linked to BBC Bitesize so you could choose to complete the daily activities (in your maths book) from this website instead. https://www.bbc.co.uk/bitesize/dailylessons</p> <hr/> <p>Plus TT Rockstars 5 times a week MyMaths activities SAMLearning activities Sumdog activities</p> | <p>IDL activities SPAG.com activities SAMLearning activities</p> <p>Complete the Year 5 English daily activities on BBC bitesize – looks at a range of grammar – these can be done in your workbooks. https://www.bbc.co.uk/bitesize/dailylessons</p> <p><u>Reading</u> Read a piece of non-fiction information. It could be linked to your Geography poster research.</p> <p><u>Writing</u> Watch Jane Considine’s Sentence stacking videos on YouTube to build sentences into paragraphs. Jane Considine teaches these lessons daily at 9:45am. You can subscribe for free to get daily reminders of the lesson beginning. https://mailchi.mp/thetrainingspace.co.../webinar-subscription Or search ‘Jane Considine sentence stackers’ on YouTube to watch earlier lessons.</p> | <p>This week’s topic from BBC bitesize is: ‘How do animals reproduce?’ https://www.bbc.co.uk/bitesize/topics/zgssgk7/articles/z9xb39g</p> | <p>This week’s art topic from BBC bitesize is: Painting, Collage and Printmaking - Daily Life https://www.bbc.co.uk/bitesize/articles/zbdhnr</p> | <p>Research the Northern Lights and create an information poster about them.</p> <p>Where are they? How are they made? Are they always the same? What colours are they? Are they the same as the Southern lights?</p> |
| | | | | <p>History/P.E</p> | |

If you need to speak to Miss Porter, Mrs King or Mrs Bateman please email us on yr5teacher@unity.fcat.org.uk

We look forward to seeing your work either by email or on twitter @UnityPhase3

Multiply unit fractions by an integer

1 Complete the calculations.

Use the bar models to help you.



$$\frac{1}{5} + \frac{1}{5} + \frac{1}{5} = \square$$

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



$$\frac{1}{7} + \frac{1}{7} + \frac{1}{7} + \frac{1}{7} = \square$$

$$4 \times \frac{1}{7} = \square$$



$$\frac{1}{8} + \frac{1}{8} + \frac{1}{8} + \frac{1}{8} + \frac{1}{8} = \square$$

$$5 \times \frac{1}{8} = \square$$



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

$$7 \times \frac{1}{10} = \square$$



2 Complete the multiplications.

a) $3 \times \frac{1}{8} = \square$

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

b) $3 \times \frac{1}{10} = \square$

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

c) $\frac{1}{8} \times 5 = \square$

g) $8 \times \frac{1}{11} = \square$

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

h) $\frac{1}{11} \times 10 = \square$

3 Match the addition to the equivalent multiplication.

$$\frac{1}{3} + \frac{1}{3}$$

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

$$\frac{1}{5} + \frac{1}{5} + \frac{1}{5}$$

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

$$\frac{1}{5} + \frac{1}{5}$$

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

$$\frac{1}{4} + \frac{1}{4} + \frac{1}{4}$$

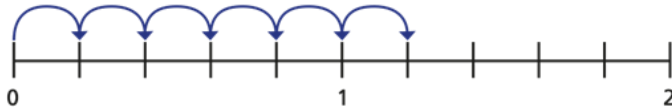
$$2 \times \frac{1}{3}$$

- 4 A pizza is cut into sixths.
Jack eats five of the slices.
Write a multiplication to represent this.

$$\square \times \square = \square$$

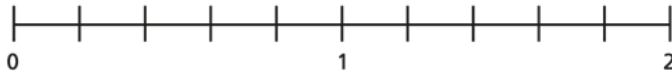
- 5 Complete the multiplications.
Use the number lines to help you.
Give each answer as an improper fraction and as a mixed number.

a)



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

b)



$$9 \times \frac{1}{5} = \square = \square$$

- 6 Complete the multiplications.

a) $11 \times \frac{1}{10} = \square = \square$

b) $11 \times \frac{1}{9} = \square = \square$

c) $\frac{1}{8} \times 11 = \square = \square$

d) $11 \times \frac{1}{7} = \square = \square$

e) $11 \times \frac{1}{6} = \square = \square$

What do you notice?
Does this pattern continue?

- 7 Complete the calculations.

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

e) $\frac{1}{8} \times \square = 1 \frac{3}{8}$

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

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

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

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

d) $\frac{1}{7} \times \square = 1 \frac{3}{7}$

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



Multiply non-unit fractions by an integer

1 Complete the calculations.

Use the bar models to help you.



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

$$3 \times \frac{2}{7} = \square$$



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

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



$$\frac{2}{9} + \frac{2}{9} + \frac{2}{9} + \frac{2}{9} = \square$$

$$4 \times \frac{2}{9} = \square$$



$$\frac{4}{9} + \frac{4}{9} = \square$$

$$2 \times \frac{4}{9} = \square$$

What do you notice about parts c) and d)? Talk to a partner.



2 Complete the multiplications.

a) $2 \times \frac{3}{7} = \square$

d) $5 \times \frac{2}{11} = \square$

b) $3 \times \frac{3}{11} = \square$

e) $\frac{2}{15} \times 7 = \square$

c) $\frac{2}{11} \times 4 = \square$

f) $\frac{7}{15} \times 2 = \square$

3

$$\frac{4}{11} \times 2 = \frac{8}{22}$$



Explain the mistake that Alex has made.

4

A cat eats $\frac{2}{15}$ of a bag of biscuits a day.

What fraction of the bag does the cat eat in 4 days?

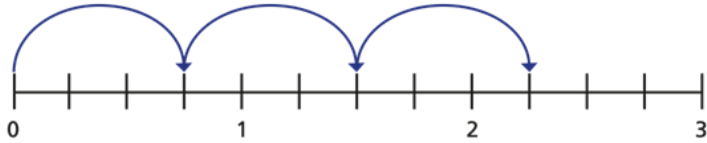
The cat eats \square of the bag in 4 days.

5 Complete the multiplications.

Use the number lines to help you.

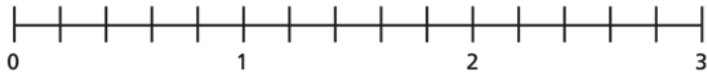
Give each answer as an improper fraction and as a mixed number.

a)



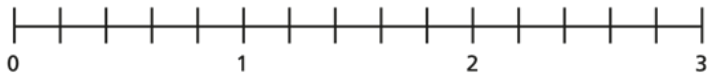
$$3 \times \frac{3}{4} = \boxed{} = \boxed{}$$

b)



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

c)



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



6 Complete the multiplications.

a) $5 \times \frac{2}{3} = \boxed{} = \boxed{}$

b) $4 \times \frac{4}{5} = \boxed{} = \boxed{}$

c) $\frac{2}{7} \times 11 = \boxed{} = \boxed{}$

d) $4 \times \frac{7}{9} = \boxed{} = \boxed{}$

e) $17 \times \frac{2}{11} = \boxed{} = \boxed{}$

f) Describe the pattern you can see in the answers.

g) What could the next multiplication in the pattern be?

Write two possible options.

7 Here are some digit cards.



Use the digit cards to complete the multiplication.

$$\boxed{} \times \frac{\boxed{}}{8} = \frac{15}{8} = \boxed{} \frac{\boxed{}}{8}$$



Multiply mixed numbers by integers

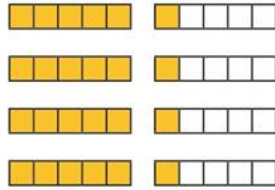
1 Complete the calculations.

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

$4 \times 1 = \square$

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

$\square + \square = \square$

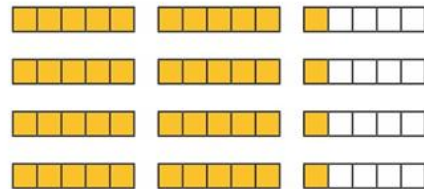


b) $4 \times 2\frac{1}{5}$

$\square \times 2 = \square$

$4 \times \square = \square$

$\square + \square = \square$

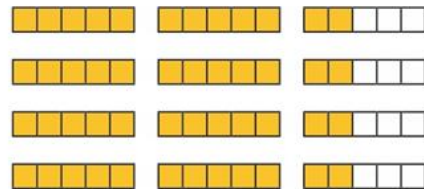


c) $4 \times 2\frac{2}{5}$

$\square \times \square = \square$

$4 \times \square = \square = \square$

$\square + \square = \square$

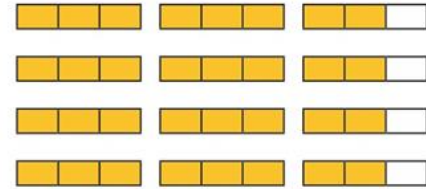


d) $4 \times 2\frac{2}{3}$

$\square \times \square = \square$

$\square \times \square = \square = \square$

$\square + \square = \square$



2 Complete the multiplications.

a) $3 \times 8\frac{2}{7} = \square$

d) $4 \times 6\frac{3}{19} = \square$

b) $2 \times 12\frac{2}{11} = \square$

e) $2\frac{2}{25} \times 12 = \square$

c) $6\frac{2}{11} \times 4 = \square$

f) $3\frac{1}{15} \times 8 = \square$

What is the same and what is different about your answers?

3 One bag of potatoes weighs $1\frac{3}{4}$ kg.



How much do 5 bags of potatoes weigh?

kg

4 Complete the calculations.

a) $5 \times 2\frac{2}{3} = 10 + \frac{10}{3} = \square$

b) $4\frac{3}{7} \times 5 = 20 + \square = \square$

c) $8 \times 2\frac{5}{12} = \square + \square = \square$


d) $7 \times 3\frac{1}{5} = \square + \square = \square$

e) $4\frac{2}{9} \times 8 = \square + \square = \square$

f) $11 \times 4\frac{3}{10} = \square + \square = \square$

5

$5 \times 3\frac{2}{11}$ is equal to
 $3 \times 5\frac{2}{11}$



Do you agree with Ron? _____

Explain why.

6 Eva drinks $3\frac{1}{3}$ litres of water a day.
 How many litres of water does she drink in a week?

l

7 Here is a recipe for a birthday cake.



Butter $1\frac{3}{8}$ kg
 Sugar $1\frac{5}{16}$ kg
 Self-raising flour $2\frac{1}{4}$ kg
 6 eggs

a) How much flour is needed for 3 birthday cakes?

kg

b) Dora makes 4 birthday cakes.
 How much more butter does she use than sugar?

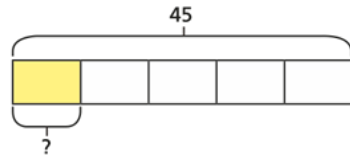
kg

Fractions of an amount

1 Annie and Mo are finding fractions of amounts.

a) Annie is trying to find $\frac{1}{5}$ of 45

She draws this bar model.

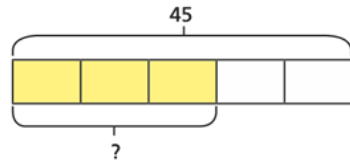


How does the bar model represent the calculation?

What is $\frac{1}{5}$ of 45?



b) Mo is trying to find $\frac{3}{5}$ of 45



How does the bar model represent the calculation?

What is $\frac{3}{5}$ of 45?



c) What is the same and what is different about Mo and Annie's questions?



2 Complete the calculations.

a) $\frac{1}{3}$ of 27 = b) $\frac{1}{3}$ of 72 = c) $\frac{1}{3}$ of 90 =

$\frac{2}{3}$ of 27 = $\frac{1}{6}$ of 72 = $\frac{2}{6}$ of 90 =

$\frac{3}{3}$ of 27 = $\frac{1}{12}$ of 72 = $\frac{3}{9}$ of 90 =

What patterns do you notice?

3 Match the calculations to the correct amounts.

| | |
|---------------------|----|
| $\frac{5}{8}$ of 48 | 32 |
| $\frac{2}{3}$ of 48 | 40 |
| $\frac{5}{6}$ of 48 | 30 |
| $\frac{3}{4}$ of 48 | 36 |



4 Write $<$, $>$ or $=$ to compare the calculations.

- a) $\frac{5}{7}$ of 56 $\frac{5}{8}$ of 56 c) $\frac{2}{3}$ of 63 $\frac{5}{8}$ of 64
- b) $\frac{4}{7}$ of 56 $\frac{5}{8}$ of 56 d) $\frac{7}{10}$ of 350 $\frac{5}{7}$ of 350

5 165 children and adults go on a school trip.
Two thirds of the people are children.

a) How many adults are on the school trip?

b) $\frac{3}{5}$ of the children are boys.

How many boys are on the school trip?

c) $\frac{7}{10}$ of the children have an apple for lunch.





How many children do **not** have an apple for lunch?

6 Tick the odd one out.

| | | | |
|---------------------|----------------------|---------------------|----------------------|
| $\frac{3}{4}$ of 80 | $\frac{3}{8}$ of 160 | $\frac{2}{3}$ of 90 | $\frac{3}{4}$ of 100 |
|---------------------|----------------------|---------------------|----------------------|

Explain your choice.

7 320 people were asked about their favourite flavour of ice cream.
Here is a pictogram showing the results.

| | |
|----------------|---|
| vanilla |  |
| strawberry |  |
| chocolate |  |
| mint choc chip |  |

a) How many people chose mint choc chip?

b) How many more people chose vanilla than chocolate?



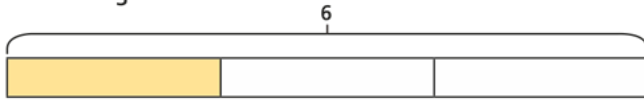
Fractions as operators

- 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.

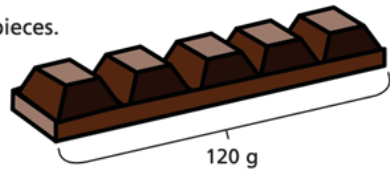
a) $\frac{5}{6} \times 12 = \frac{\square}{\square}$ of 12 = \square

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

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

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

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)



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

Annie

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.

