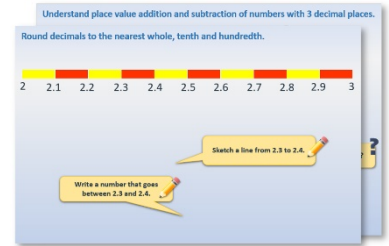


Week 8, Day 5

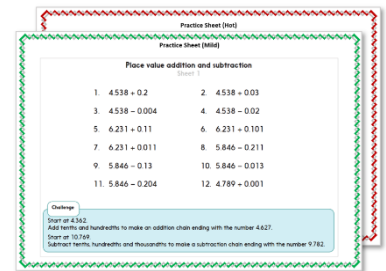
Find non-unit fractions of quantities (2)

Each day covers one maths topic. It should take you about 1 hour or just a little more.

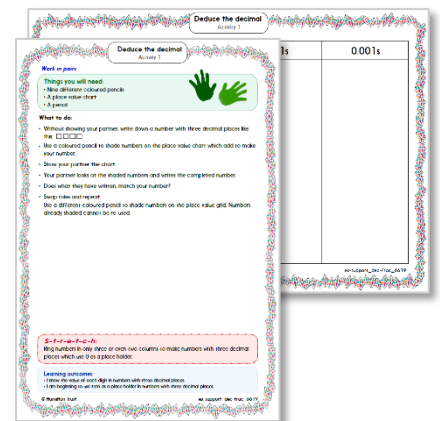
1. Start by reading through the **Learning Reminders**. They come from our *PowerPoint* slides.



2. Tackle the questions on the **Practice Sheet**. There might be a choice of either **Mild** (easier) or **Hot** (harder)! Check the answers.



3. Finding it tricky? That's OK... have a go with a grown-up at **A Bit Stuck?**



4. Think you've cracked it? Whizzed through the Practice Sheets? Have a go at the **Investigation**...

Learning Reminders

Find non-unit fractions of quantities using division facts and multiplication.

We can use this bar model to find **fifths of 20**.

How much is $\frac{1}{5}$ of 20?

$$5 \times \square = 20$$

Five **4s** are 20!

20				
4	4	4	4	4

How much is $\frac{2}{5}$ of 20? **8**

$\frac{3}{5}$ of 20? **12**

$\frac{4}{5}$ of 20? **16**

$\frac{5}{5}$ of 20? **20**

Learning Reminders

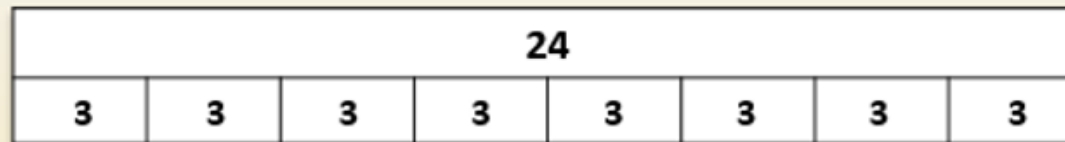
Find non-unit fractions of quantities using division facts and multiplication.

We can use this bar model to find **eighths of 24**.

How much is $\frac{1}{8}$ of 24?

$$8 \times \square = 24$$

Eight **3s** are 24!



How much is $\frac{2}{8}$ of 24? **6**

$\frac{3}{8}$ of 24? **9**

$\frac{4}{8}, \frac{5}{8}, \frac{6}{8}, \frac{7}{8},$
 $\frac{8}{8}$, of 24?

Which times table helped find those?

Practice Sheet Mild

Find non-unit fractions of numbers

$\frac{1}{5}$ of 45 is 9. What is $\frac{3}{5}$ of 45?

$\frac{1}{4}$ of 32 is 8. What is $\frac{3}{4}$ of 32?

$\frac{1}{3}$ of 27 is 9. What is $\frac{2}{3}$ of 27?

$\frac{1}{8}$ of 24 is 3. What is $\frac{5}{8}$ of 24?

$\frac{1}{5}$ of 30 is . What is $\frac{2}{5}$ of 30?

$\frac{1}{4}$ of 24 is . What is $\frac{3}{4}$ of 24?

$\frac{1}{3}$ of 24 is . What is $\frac{2}{3}$ of 24?

$\frac{1}{8}$ of 40 is . What is $\frac{6}{8}$ of 40?

Challenge

Find the mystery fractions/numbers:

of 22 = 11

$\frac{\text{□}}{3}$ of 30 = 20

$\frac{5}{\text{□}}$ of 32 = 20

Practice Sheet Hot

Find non-unit fractions of numbers

$\frac{1}{5}$ of 45 is . What is $\frac{3}{5}$ of 45?

$\frac{1}{4}$ of 32 is . What is $\frac{3}{4}$ of 32?

$\frac{1}{3}$ of 27 is . What is $\frac{2}{3}$ of 27?

$\frac{1}{8}$ of 24 is . What is $\frac{5}{8}$ of 24?

$\frac{1}{5}$ of 30 is . What is $\frac{2}{5}$ of 30?

$\frac{1}{4}$ of 24 is . What is $\frac{3}{4}$ of 24?

$\frac{1}{3}$ of 24 is . What is $\frac{2}{3}$ of 24?

$\frac{1}{8}$ of 40 is . What is $\frac{6}{8}$ of 40?

Challenge

My sister ate $\frac{3}{4}$ of my bag of 16 sweets.
How many did she eat?

My brother will give me $\frac{3}{8}$ of his pocket
money if I tidy his bedroom.
He has 80p, how much will he give me?

Practice Sheets Answers

Find non-unit fractions of numbers (mild)

$\frac{1}{5}$ of 45 is 9. What is $\frac{3}{5}$ of 45? **27**

$\frac{1}{4}$ of 32 is 8. What is $\frac{3}{4}$ of 32? **24**

$\frac{1}{3}$ of 27 is 9. What is $\frac{2}{3}$ of 27? **18**

$\frac{1}{8}$ of 24 is 3. What is $\frac{5}{8}$ of 24? **15**

$\frac{1}{5}$ of 30 is **6**. What is $\frac{2}{5}$ of 30? **12**

$\frac{1}{4}$ of 24 is **6**. What is $\frac{3}{4}$ of 24? **18**

$\frac{1}{3}$ of 24 is **8**. What is $\frac{2}{3}$ of 24? **16**

$\frac{1}{8}$ of 40 is **5**. What is $\frac{6}{8}$ of 40? **30**

Challenge

Find the mystery fractions/numbers:

$$\frac{1}{2} \text{ of } 22 = 11$$

$$\frac{1}{3} \text{ of } 30 = 20$$

$$\frac{5}{8} \text{ of } 32 = 20$$

Find non-unit fractions of numbers (hot)

$\frac{1}{5}$ of 45 is **9**. What is $\frac{3}{5}$ of 45? **27**

$\frac{1}{4}$ of 32 is **8**. What is $\frac{3}{4}$ of 32? **24**

$\frac{1}{3}$ of 27 is **9**. What is $\frac{2}{3}$ of 27? **18**

$\frac{1}{8}$ of 24 is **3**. What is $\frac{5}{8}$ of 24? **15**

$\frac{1}{5}$ of 30 is **6**. What is $\frac{2}{5}$ of 30? **12**

$\frac{1}{4}$ of 24 is **6**. What is $\frac{3}{4}$ of 24? **18**

$\frac{1}{3}$ of 24 is **8**. What is $\frac{2}{3}$ of 24? **16**

$\frac{1}{8}$ of 40 is **5**. What is $\frac{6}{8}$ of 40? **30**

Challenge

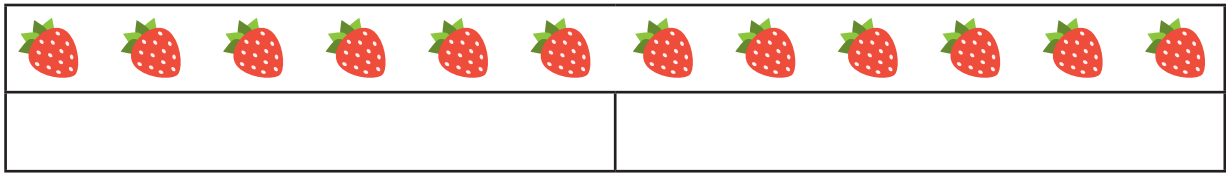
Your sister ate $\frac{3}{4}$ of 16 sweets, she ate **12** sweets.

Your brother will give you $\frac{3}{8}$ of 80, he will give you **30p**.

A Bit Stuck?

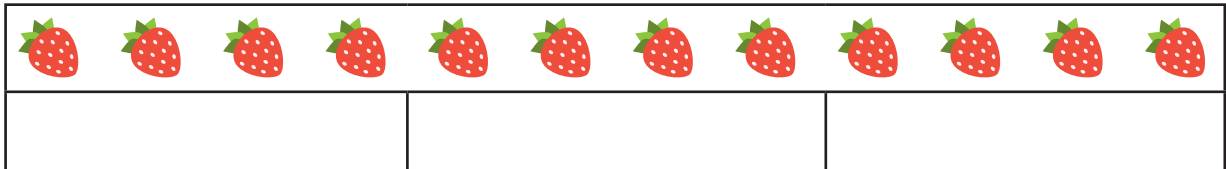
A dozen strawberries

1. Draw or write the correct amounts of strawberries in each half:



$\frac{1}{2}$ of 12 is

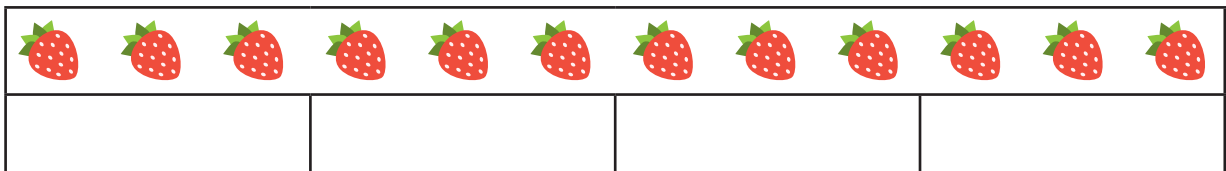
2. Draw or write the correct amounts of strawberries in each third:



$\frac{1}{3}$ of 12 is

$\frac{2}{3}$ of 12 is

3. Draw or write the correct amounts of strawberries in each quarter:

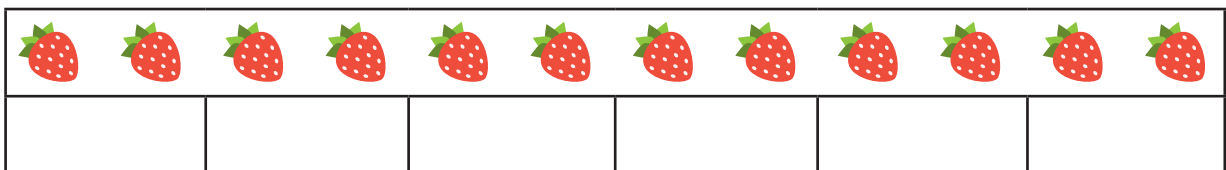


$\frac{1}{4}$ of 12 is

$\frac{2}{4}$ of 12 is

$\frac{3}{4}$ of 12 is

4. Draw or write the correct amounts of strawberries in each sixth:



$\frac{1}{6}$ of 12 is

$\frac{2}{6}$ of 12 is

$\frac{3}{6}$ of 12 is

$\frac{4}{6}$ of 12 is

$\frac{5}{6}$ of 12 is

Investigation Model fractions

- We can draw a bar model to show $3 \times 8 = 24$:



$\frac{1}{3}$ of 24 is

 $\frac{2}{3}$ of 24 is

- We can draw a bar model to show $8 \times 3 = 24$:



$\frac{1}{8}$ of 24 is
 $\frac{3}{8}$ of 24 is
 $\frac{5}{8}$ of 24 is
 $\frac{7}{8}$ of 24 is

- What other bar models can you draw for 24?
Each of the small bars underneath needs to be the same size in each model.



- What other fractions can you find of 24?

BIG Challenge

Draw as many different bar models as possible, with 40 at the top and equal smaller bars underneath.

Write as many fractions of 40 as you can.