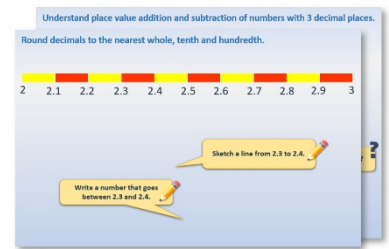


Week 10, Day 4

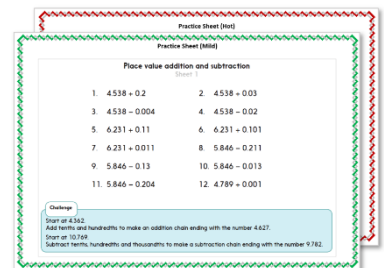
Find unit fractions of amounts

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

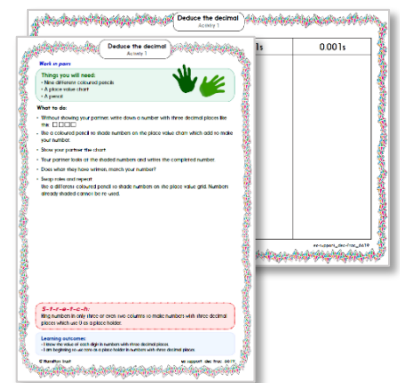
1. Start by reading through the **Learning Reminders**. They come from our *PowerPoint* slides.



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

Revise finding unit fractions of quantities using division facts.



How could you find
 $\frac{1}{2}$ of 12? $\frac{1}{3}$ of 12?
Or $\frac{1}{4}$? Or $\frac{1}{6}$? Or $\frac{1}{12}$?
What division facts do
they link to?

$$\frac{1}{2} \text{ of } 12 = 6; 12 \div 2 = 6$$

$$\frac{1}{3} \text{ of } 12 = 4; 12 \div 3 = 4$$

$$\frac{1}{4} \text{ of } 12 = 3; 12 \div 4 = 3$$

$$\frac{1}{6} \text{ of } 12 = 2; 12 \div 6 = 2$$

$$\frac{1}{12} \text{ of } 12 = 1; 12 \div 12 = 1$$

Now try to find $\frac{1}{5}$ of 12?
What happens? Check
with cubes/counters.

12 does not divide exactly
by 5, so we can't get the
same number in each group
without leaving some out.



Learning Reminders

Revise finding unit fractions of quantities using division facts.



Now try with 16 cubes.
What is $\frac{1}{2}$ of 16? What
other fractions of 16 can
you find? Which divisions
leave a remainder?

$$\frac{1}{2} \text{ of } 16 = 8; 16 \div 2 = 8$$

$$\frac{1}{4} \text{ of } 16 = 4; 16 \div 4 = 4$$

$$\frac{1}{8} \text{ of } 16 = 2; 16 \div 8 = 2$$

$$\frac{1}{16} \text{ of } 16 = 1; 16 \div 16 = 1$$

Dividing 16 by 3, 5, 6, 7,
9 or 10 all left a
remainder!



Practice Sheet Mild

Finding unit fractions

Solve the following using cubes or counters to help check your answers:

1. $\frac{1}{2}$ of 8

2. $\frac{1}{3}$ of 9

3. $\frac{1}{3}$ of 15

4. $\frac{1}{4}$ of 20

5. $\frac{1}{2}$ of 18

6. $\frac{1}{3}$ of 18

7. $\frac{1}{5}$ of 15

8. $\frac{1}{2}$ of 14

9. $\frac{1}{3}$ of 21

10. $\frac{1}{5}$ of 25

Practice Sheet Hot

Finding unit fractions

Solve the following:

1. $\frac{1}{2}$ of 24

2. $\frac{1}{4}$ of 24

3. $\frac{1}{8}$ of 24

4. $\frac{1}{2}$ of 40

5. $\frac{1}{4}$ of 40

6. $\frac{1}{5}$ of 40

7. $\frac{1}{10}$ of 40

8. $\frac{1}{3}$ of 18

9. $\frac{1}{5}$ of 25

10. $\frac{1}{4}$ of 28

11. $\frac{1}{2}$ of 22

12. $\frac{1}{3}$ of 27

Challenge

1. $\frac{1}{2}$ of 80

2. $\frac{1}{4}$ of 80

3. $\frac{1}{8}$ of 80

4. $\frac{1}{10}$ of 80

Practice Sheet Answers

Practice Sheet (Mild)

1. $\frac{1}{2}$ of 8 is 4
2. $\frac{1}{3}$ of 9 is 3
3. $\frac{1}{3}$ of 15 is 5
4. $\frac{1}{4}$ of 20 is 5
5. $\frac{1}{2}$ of 18 is 9
6. $\frac{1}{3}$ of 18 is 6
7. $\frac{1}{5}$ of 15 is 3
8. $\frac{1}{2}$ of 14 is 7
9. $\frac{1}{3}$ of 21 is 7
10. $\frac{1}{5}$ of 25 is 5

Practice Sheet (Hot)

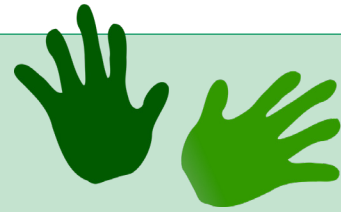
1. $\frac{1}{2}$ of 24 is 12
2. $\frac{1}{4}$ of 24 is 6
3. $\frac{1}{8}$ of 24 is 3
4. $\frac{1}{2}$ of 40 is 20
5. $\frac{1}{4}$ of 40 is 10
6. $\frac{1}{5}$ of 40 is 8
7. $\frac{1}{10}$ of 40 is 4
8. $\frac{1}{3}$ of 18 is 6
9. $\frac{1}{5}$ of 25 is 5
10. $\frac{1}{4}$ of 28 is 7
11. $\frac{1}{2}$ of 22 is 11
12. $\frac{1}{3}$ of 27 is 9

A Bit Stuck? Decorate the cake

Work in pairs

Things you will need:

- Cake outlines
- Counters (e.g. Smarties)
- Recording sheet
- Coloured pencils



What to do:



- Choose a number.
- Split this number of Smarties (counters) between the four quarters of the big cake divided into quarters.
- Draw the Smarties on a blank cake divided into quarters on the recording sheet.
- Repeat twice more.



- Choose a number.
- Split this number of counters between the thirds of the big cake divided into three equal parts.
- Draw the Smarties on a blank cake divided into thirds on the recording sheet.
- Repeat at least twice more with different numbers.

S-t-r-e-t-c-h:

$\frac{1}{2}$ of 8 is

$\frac{1}{4}$ of 8 is

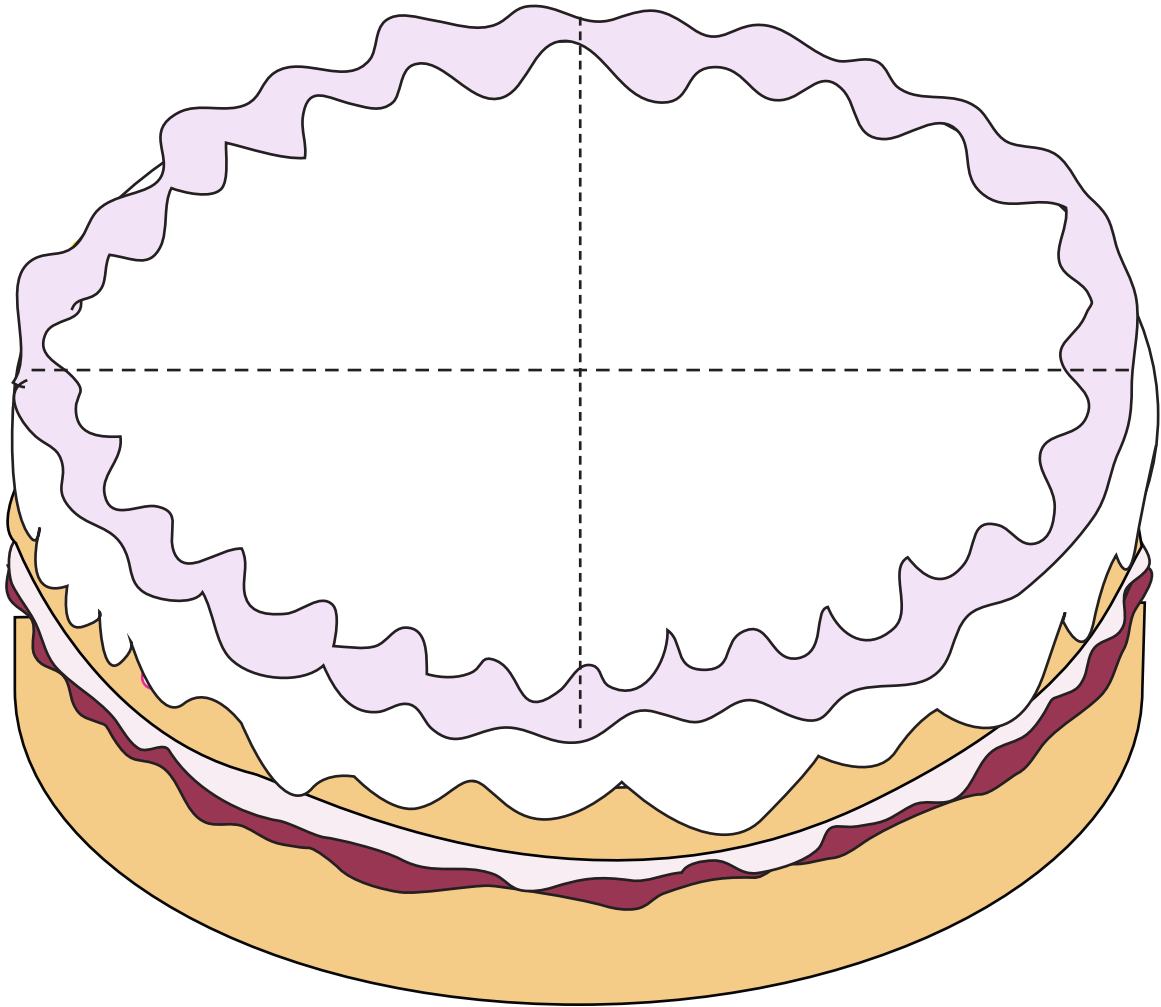
$\frac{1}{2}$ of 16 is

$\frac{1}{4}$ of 16 is

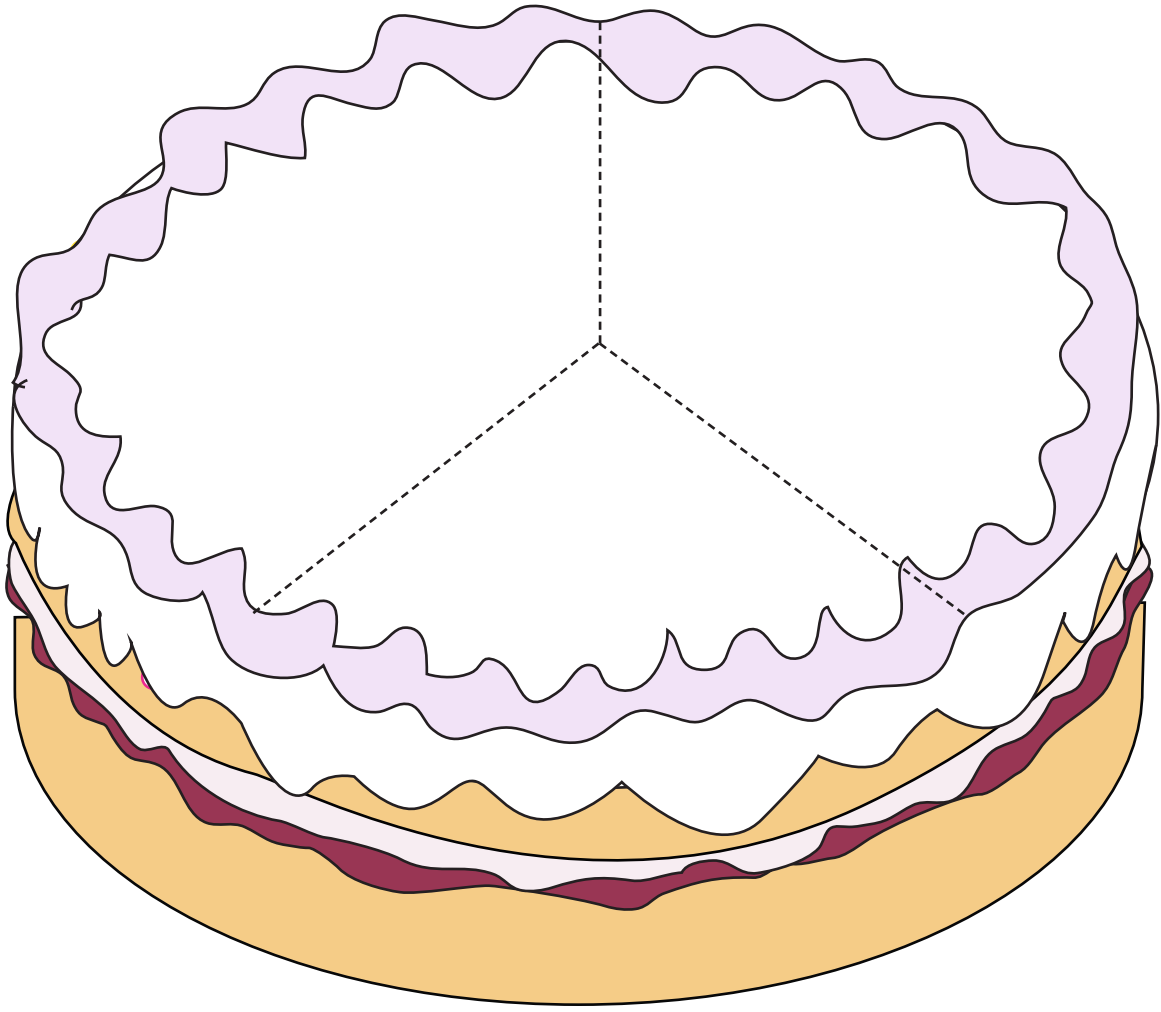
Learning outcomes:

- I understand that halves and quarters are equal parts of a whole.
- I can find $\frac{1}{2}$ and $\frac{1}{4}$ of numbers (whole number answers).
- I am beginning to understand that I can halve twice to find $\frac{1}{4}$.

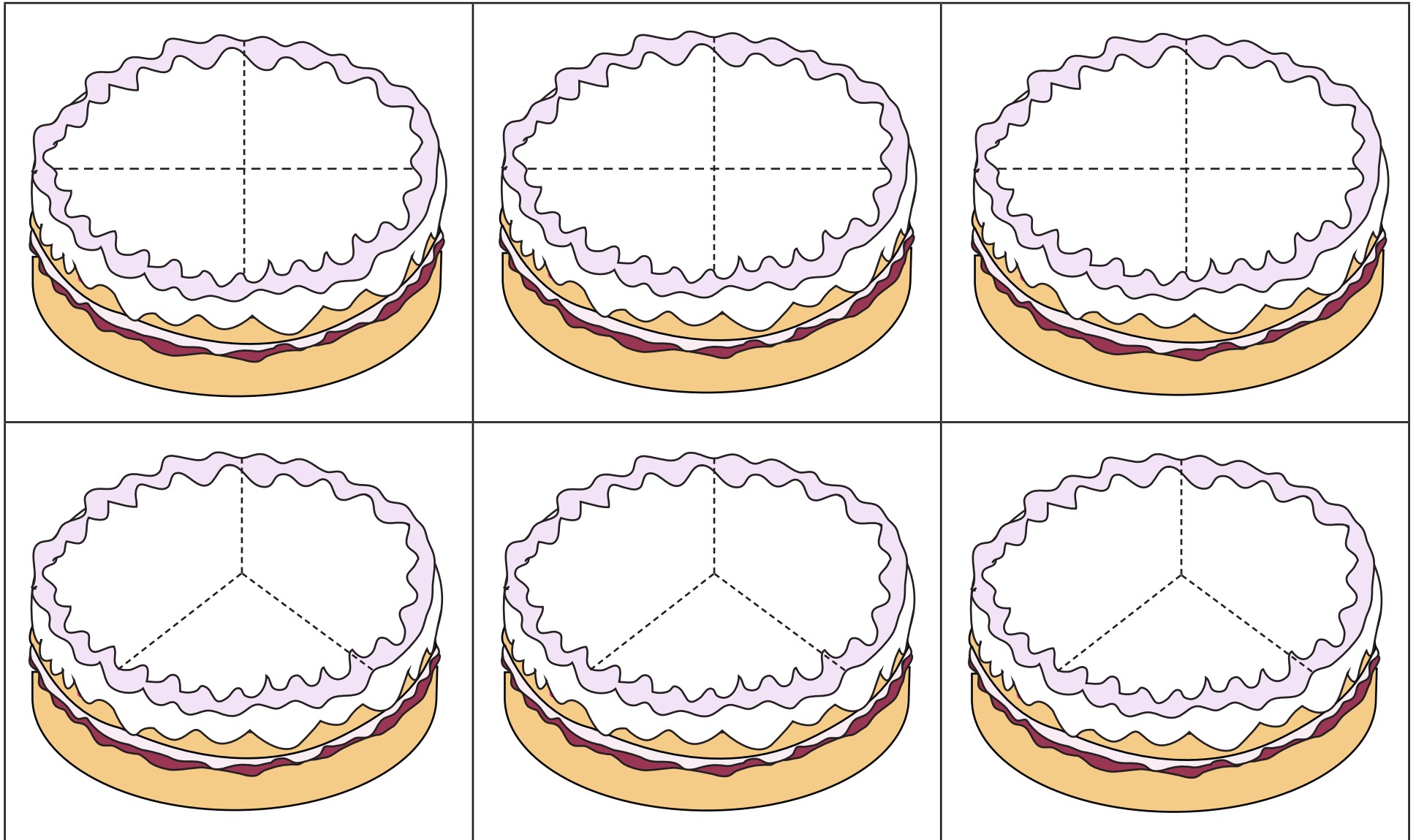
A Bit Stuck?
Decorate the cake



A Bit Stuck?
Decorate the cake



A Bit Stuck?
Decorate the cake



Investigation Fraction facts

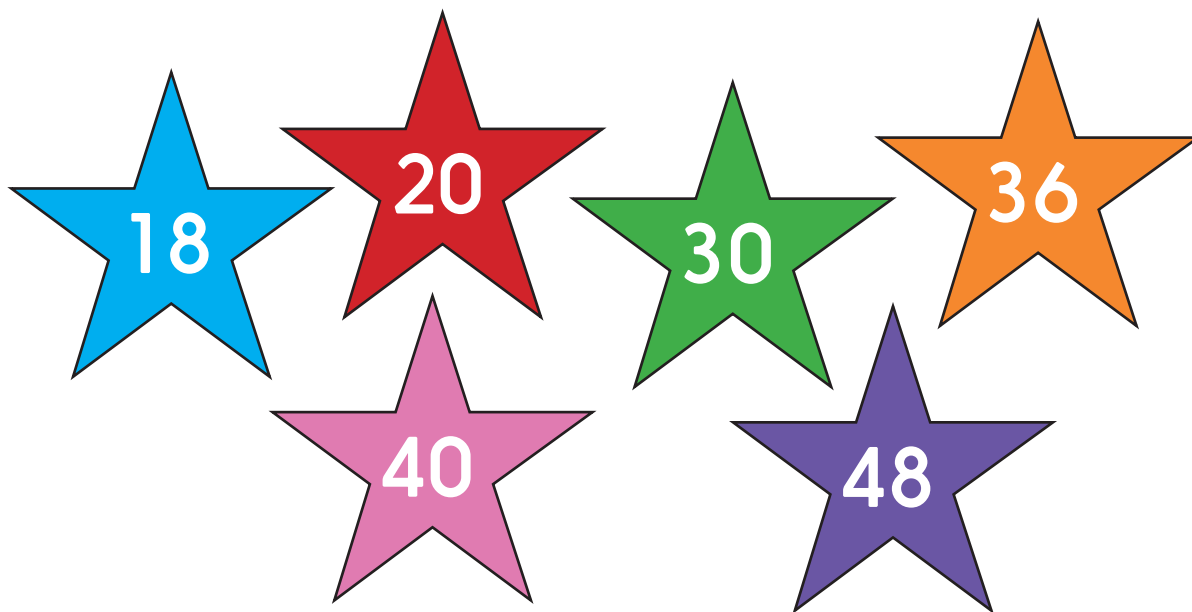


Find as many different unit fractions of 24 as you can, making a list of them. Each answer must be a whole number.

Can you find all seven?

Repeat with your choice of at least three of these numbers:

24
 $\frac{1}{2}$ of 24 is 12
 $\frac{1}{3}$ of 24 is...



Which of the numbers you chose had most fraction facts?
Can you explain why you think that is?