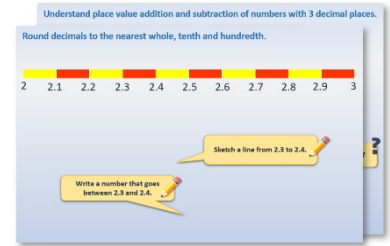


# Year 5: Week 2, Day 4

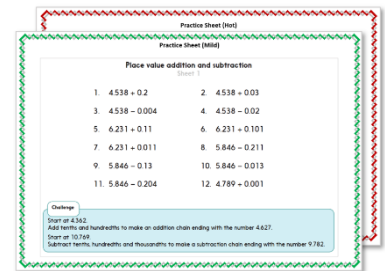
## Find unit fractions of amounts

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

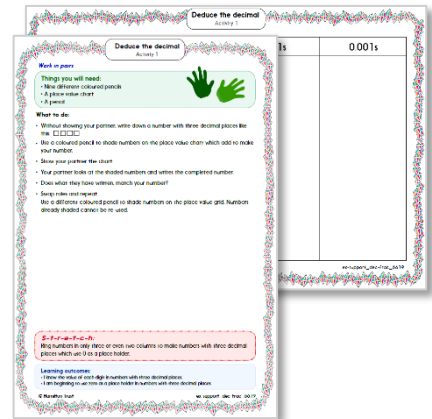
- Start by reading through the **Learning Reminders**. They come from our *PowerPoint* slides.



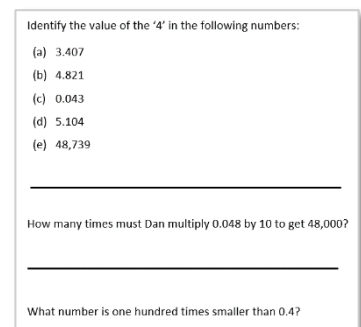
- Tackle the questions on the **Practice Sheet**. There might be a choice of either **Mild** (easier) or **Hot** (harder)! Check the answers.



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



- Have I mastered the topic? A few questions to **Check your understanding**. Fold the page to hide the answers!



## Learning Reminders

Use division strategies to find unit fractions of amounts.

There are 148 children in a school.  
The head teacher wants to split them into house teams.  
She doesn't mind how many teams there are, but there must be the same number of children in each team.

Can the children be split into **three** equal house teams?  
Let's try to find  $\frac{1}{3}$  of 148 by dividing 148 by 3...

Remember how to use the vertical division layout of chunking?  
Follow this example...

So, having a third of the children in each team won't work.  
We have found that 148 does NOT divide by 3.  
3 is not a factor of 148.

148		
? in team A	? in team B	? in team C

$$148 \div 3 =$$

$$\text{so, } \square \times 3 = 148 \quad \leftarrow \text{How many 3s are in 148?}$$

$$40 \times 3 = \underline{120} \quad \leftarrow 40 \times 3 = 120. \text{ How much left?}$$

$$28 \quad \leftarrow \text{How many 3s are in 28?}$$

$$9 \times 3 = \underline{27} \quad \leftarrow 9 \text{ and } 1 \text{ left over}$$

1

$$148 \div 3 = 49 \text{ r } 1$$

1 left over means that there *won't* be the same number of children in each team.

## Learning Reminders

Use division strategies to find unit fractions of amounts.

There are 148 children in a school.  
The head teacher wants to split them into house teams.  
She doesn't mind how many teams there are, but there must be the same number of children in each team.

We know that 148 can't be split into 5s. Why?

Find out if  $\frac{1}{4}$ ,  $\frac{1}{7}$  or  $\frac{1}{8}$  of the school could be in one team.

148			
?	?	?	?

$$148 \div 4 =$$

$$\square \times 4 = 148 \quad \leftarrow \text{How many 4s are in 148?}$$

$$30 \times 4 = \underline{120} \quad \leftarrow 30 \times 4 = 120. \text{ How much left?}$$

$$28 \quad \leftarrow \text{How many 4s are in 28?}$$

$$7 \times 4 = \underline{28}$$

$$0 \quad \leftarrow 7 \text{ and } 1 \text{ left over}$$

$$148 \div 4 = 37$$

0 left over means that there ARE the same number of children in each team.

## Practice Sheet Mild

### Find unit fractions of amounts

1.  $\frac{1}{5}$  of 150

2.  $\frac{1}{5}$  of 250

3.  $\frac{1}{3}$  of 240

4.  $\frac{1}{3}$  of 126

5.  $\frac{1}{4}$  of 248

6.  $\frac{1}{4}$  of 156

7.  $\frac{1}{6}$  of 126

8.  $\frac{1}{6}$  of 186

9.  $\frac{1}{8}$  of 248

10.  $\frac{1}{8}$  of 176

11.  $\frac{1}{7}$  of 147

12.  $\frac{1}{7}$  of 175

13.  $\frac{1}{9}$  of 279

14.  $\frac{1}{9}$  of 207

15.  $\frac{1}{6}$  of 144

16.  $\frac{1}{8}$  of 144

#### Challenge

What fraction of 125 is 25? What fraction of 182 is 26?

## Practice Sheet Hot

### Find unit fractions of amounts

**132    145    147    123    159    144    164    175**

Investigate which of these numbers can be divided equally into 3, 4, 5, 6, 7, 8 or 9 groups to give a whole number answer.

- Write the corresponding fraction statement, e.g.  $\frac{1}{6}$  of 132 is 22.
- Record your investigation on a large sheet of paper.
- Which numbers can be divided into more different-sized groups than other numbers? Why might that be?