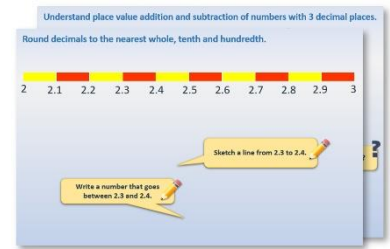


# Year 4: Week 1, Day 1

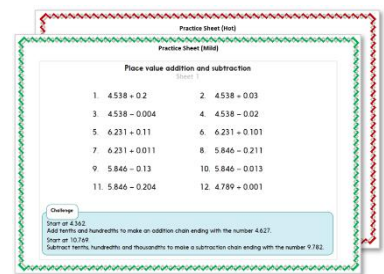
## Decimals on number lines

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

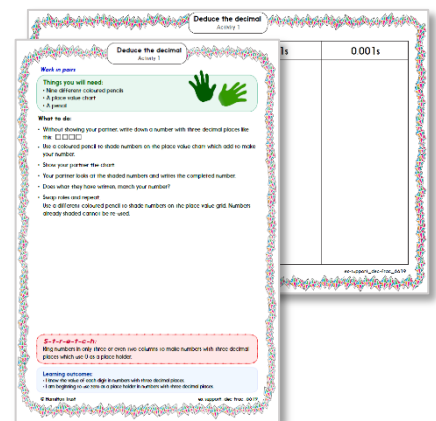
1. Start by reading through the **Learning Reminders**. They come from our *PowerPoint* slides.



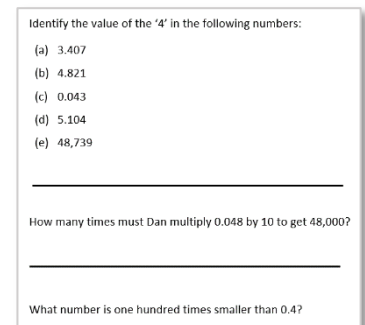
2. Tackle the questions on the **Practice Sheet**. There might be a choice of either **Mild** (easier) or **Hot** (harder)! Check the answers.



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



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



## Learning Reminders

Relate fractions to decimals ( $0.1 = \frac{1}{10}$ ,  $0.2 = \frac{1}{5}$ ).



What fraction on the counting stick is the arrow pointing to?  
What other ways can you write or say that?

$\frac{2}{10}$  as a fraction or  $\frac{1}{5}$  in its simplest form.

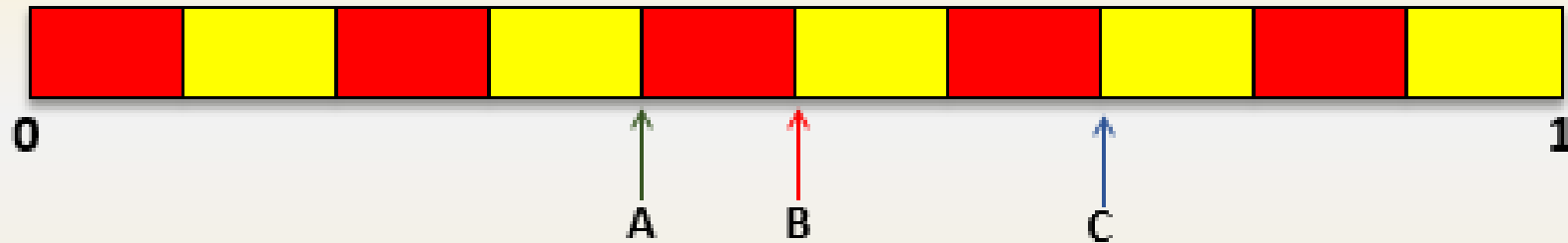
Or **0.2** as a decimal.

$$0.2 \equiv \frac{1}{5} \equiv \frac{2}{10}$$

They are each **equivalent**, different ways of saying the same amount!

## Learning Reminders

Relate fractions to decimals ( $0.1 = \frac{1}{10}$ ,  $0.2 = \frac{1}{5}$ ).



What decimals are the letters pointing to? How else can we write these?

$$A. 0.4 \equiv \frac{4}{10} \equiv \frac{2}{5}$$

$$B. 0.5 \equiv \frac{5}{10} \equiv \frac{1}{2}$$

$$C. 0.7 \equiv \frac{7}{10}$$

## Learning Reminders

Relate 1-place decimals to cm and mm; Mark numbers with 1 decimal place on number lines; Round numbers with 1 decimal place to the nearest whole

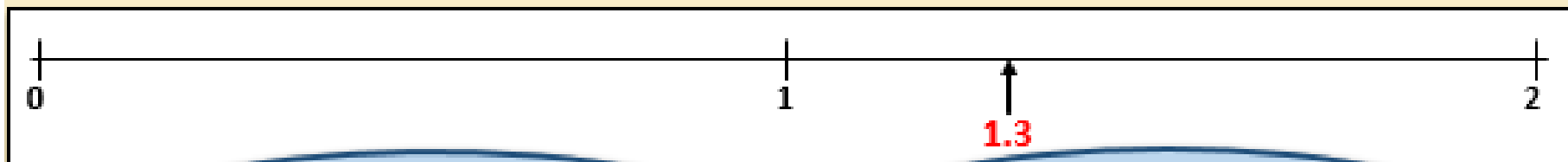


Measuring each other's fingernails to the nearest millimetre.



If a fingernail is **1cm 3mm** long we can also write that as **13mm**.

The **3** in **1.3cm** is  $\frac{3}{10}$  of a cm or **3mm**.  
What is this measurement to the nearest whole cm?



Let's mark 1.3 on this 0-2 line.

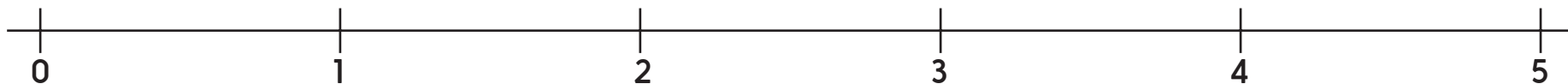
Is it closer to 1 or to 2?

## Practice Sheet Mild

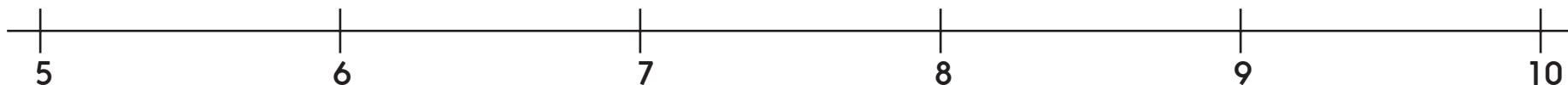
### Placing decimals on lines

Place these decimals on the line. Draw a line from each decimal to round to the nearest whole number. Remember that we round up numbers ending in 5.

1.5, 0.9, 3.2, 4.7, 2.4



7.5, 5.7, 9.9, 6.3, 8.8



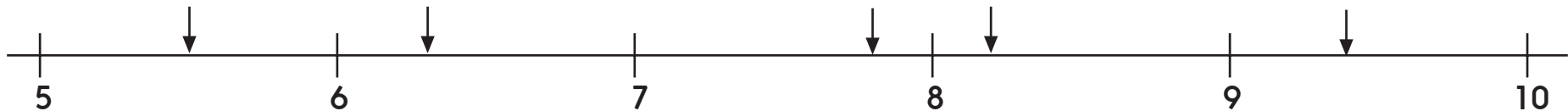
#### Challenge

Write two new numbers between 3 and 4, each with one decimal place. One number must round up, and the other must round down.

## Practice Sheet Hot

### Identifying decimals on lines

Label the mystery decimals. Draw a line from each decimal to round to the nearest whole number.

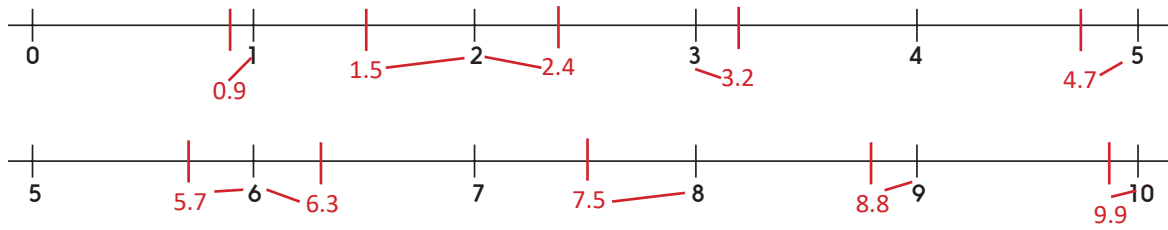


#### Challenge

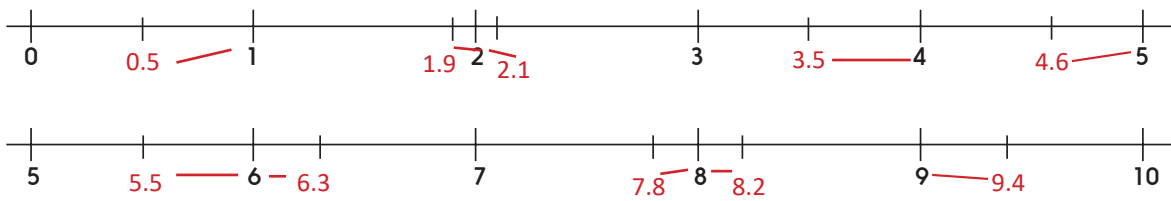
Write a different number with one decimal place which rounds up to 5. Write a different number with one decimal place which rounds down to 5.

## Practice Sheets Answers

### Placing decimals on lines (mild)



### Identifying decimals on lines (hot)



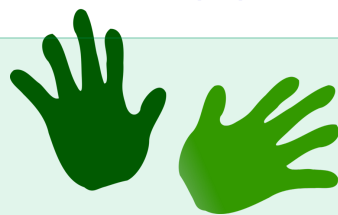
## A Bit Stuck?

### Decimals are a snip

*Work in pairs, but stick your fraction strips into your own book/on paper*

#### Things you will need:

- Tenth strips
- Scissors
- Glue sticks



#### What to do:

- Choose at least three numbers less than 1 and at least three numbers more than 1 to show using your tenths strips.
- Look at each number written in the table below.
- Write the number and stick the strips by the side.

| 1s | • | 0.1s |
|----|---|------|
| 0  | • | 2    |
| 0  | • | 7    |
| 1  | • | 2    |
| 2  | • | 1    |
| 2  | • | 4    |
| 1  | • | 8    |
| 0  | • | 6    |
| 1  | • | 5    |
| 2  | • | 3    |

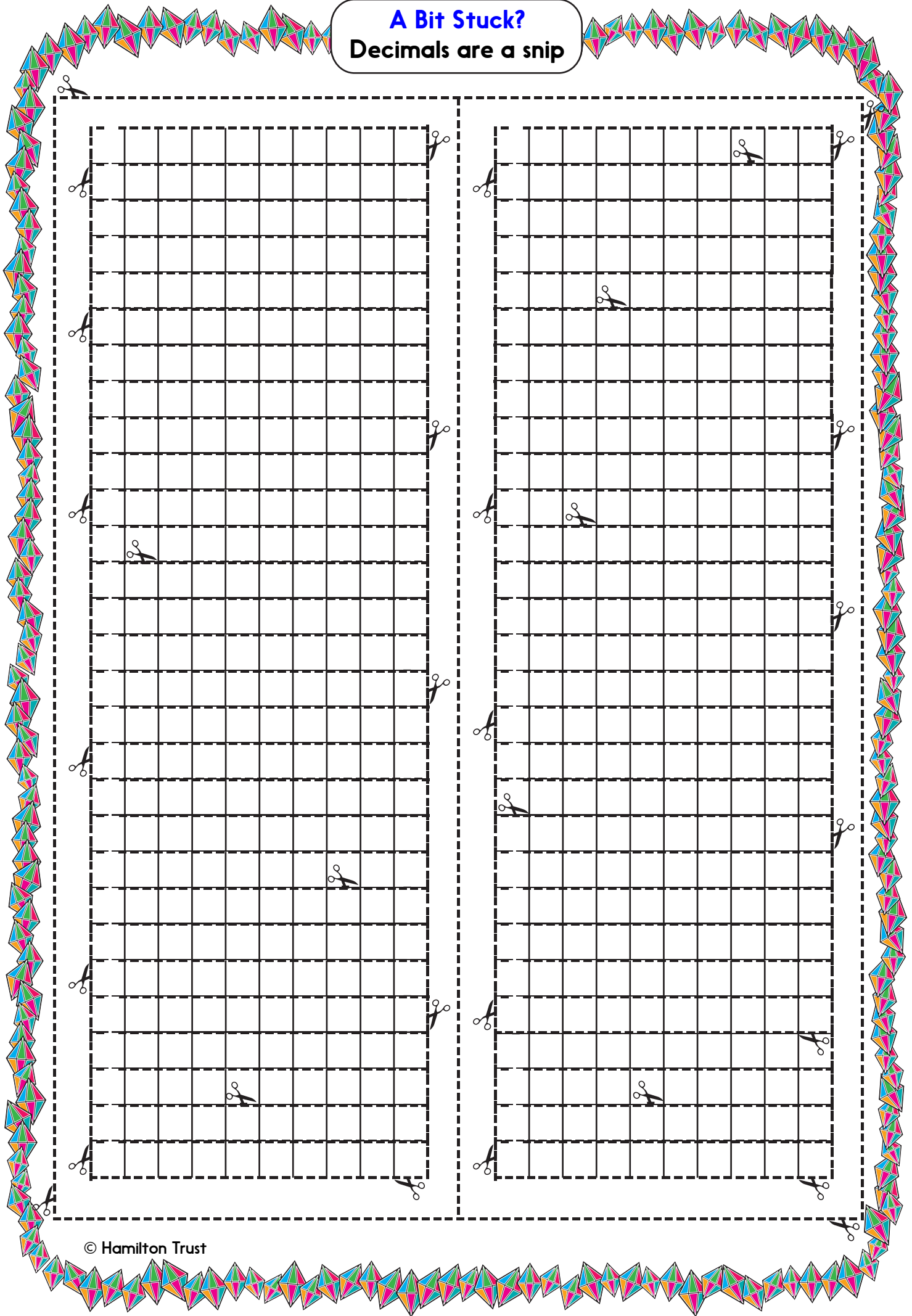
#### ***S-t-r-e-t-c-h:***

Write all your numbers in order from smallest to largest.

#### Learning outcomes:

- I can understand the value of each digit in numbers with one decimal place.
- I am beginning to order numbers with one decimal place.

**A Bit Stuck?**  
**Decimals are a snip**



## Check your understanding

### Questions

Write each number as a decimal:

- (i) One and four tenths
  - (ii)  $\frac{6}{10}$
  - (iii)  $10\frac{2}{10}$  (ten and two tenths)
  - (iv) One half
  - (v) One fifth
- 

Billy measured his mobile phone.

These were its dimensions:

Length = 12cm and 8mm

Width = 64mm

Thickness = 8mm

Write these as numbers of centimetres, with a decimal place if necessary.

Write four numbers with one decimal place between 3 and 4. Two should be closer to 3 and then 4 and two should be closer to 4 than 3.

Fold here to hide answers

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## Check your understanding

### Answers

Write each number as a decimal:

- (i) One and four tenths **1.4**
- (ii)  $\frac{6}{10}$  **0.6**
- (iii)  $10\frac{2}{10}$  (ten and two tenths) **10.2**
- (iv) One half **0.5**
- (v) One fifth **0.2**

Check on a fraction/decimal number line.

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Billy measured his mobile phone.

These were its dimensions:

Length = 12cm and 8mm **12cm and 0.8cm**

Width = 64mm **6.4cm**

Thickness = 8mm **0.8cm**

Write these as numbers of centimetres, with a decimal place if necessary.

Write four numbers with one decimal place between 3 and 4. Two should be closer to 3 and then 4 and two should be closer to 4 than 3. **E.g. 3.2 and 3.4, and 3.6 and 3.9.**