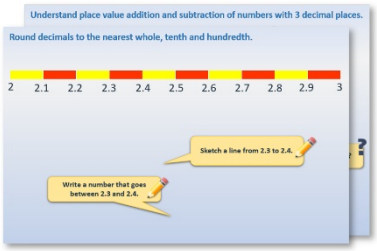
Year 3: Week 3, Day 3

Equivalent fractions and decimals

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.



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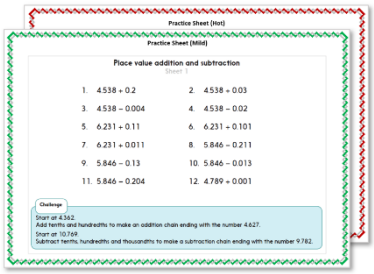
2. Tackle the questions on the **Practice Sheet**. There might be a choice of either Mild (easier) or Hot (harder)! Check the answers.



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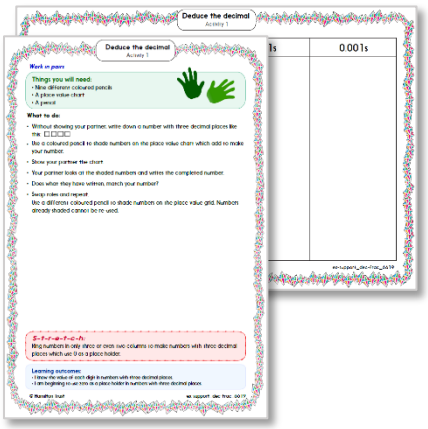
3. Finding it tricky? That's OK… have a go with a grown-up at **A Bit Stuck?**



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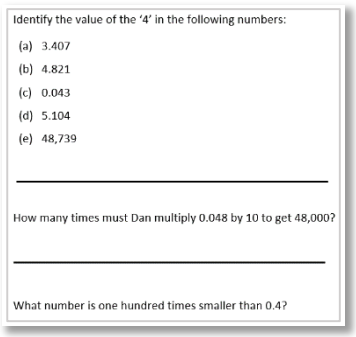
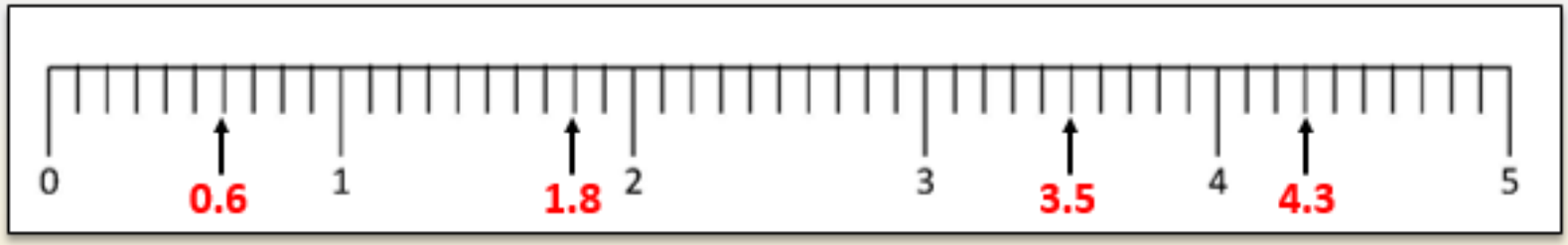
4. Have I mastered the topic? A few questions to **Check your understanding**. Fold the page to hide the answers!



Learning Reminders

Mark decimals on a number line.

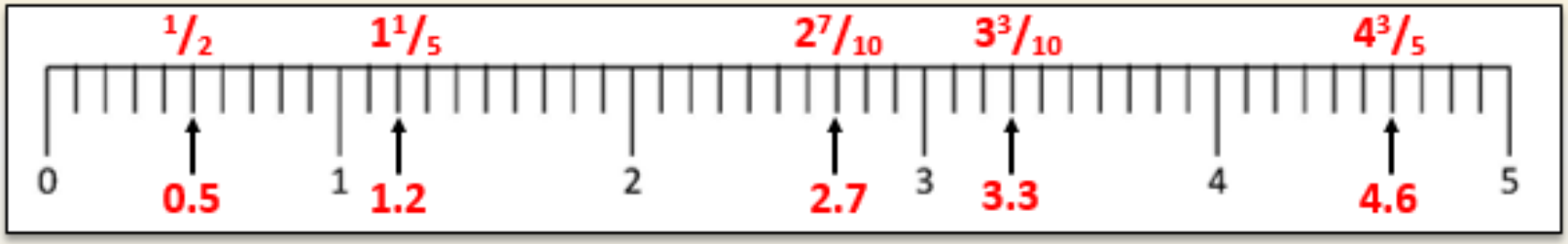


Count along the line in tenths....

Write the decimal each arrow is pointing to.

Learning Reminders

Mark equivalent fractions and decimals on a number line.

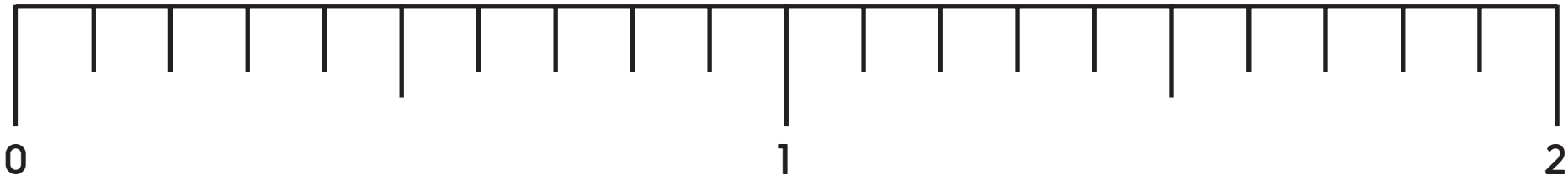


Remember we can write **equivalent fractions** for each decimal, for example $0.1 \equiv \frac{1}{10}$.

Write the **decimal** and the **equivalent fraction** the arrow is pointing to. If possible, write the fraction in its **simplest form.**

Practice Sheet

Practice for everyone decimals and fractions



Label these decimals below the line.

0.1 0.5 0.7 1.2 1.9

Label the equivalent fractions above the line.

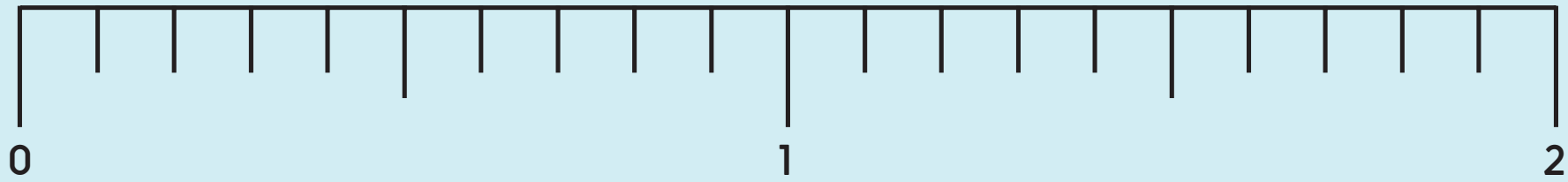
Label these fractions above the line.

$\frac{3}{10}$ $\frac{9}{10}$ $1\frac{1}{2}$ $1\frac{1}{10}$ $1\frac{7}{10}$

Label the equivalent decimals below the line.

Challenge

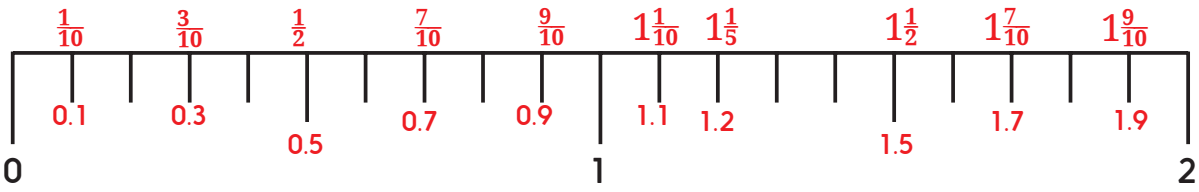
Mark on $\frac{1}{5}$s and the equivalent decimals.



Can you use the line to find $1\frac{1}{2} - \frac{2}{5}$? (HINT: Remember Frog!)

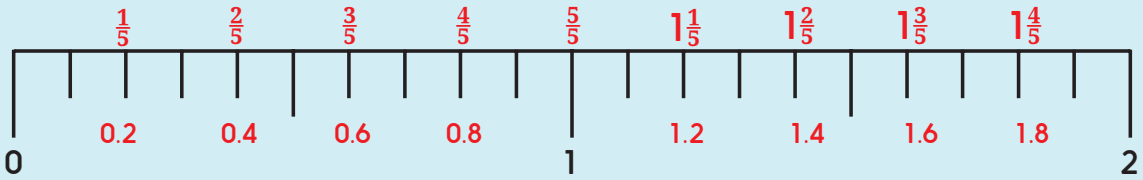
Practice Sheet Answers

Decimals and fractions practice

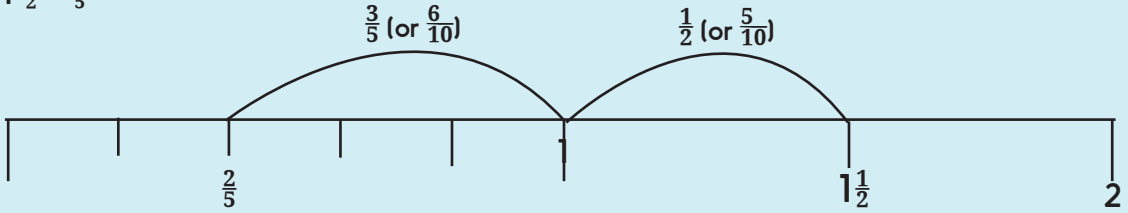


Challenge

Mark on $\frac{1}{5}$s and the equivalent decimals.



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



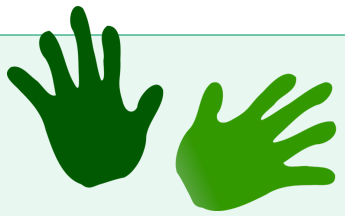
So, $1\frac{1}{2} - \frac{2}{5} = \frac{11}{10} = 1\frac{1}{10}$

A Bit Stuck?
Sticky tenths

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

Things you will need:

- Tenths strips
- Scissors
- Glue sticks
- A pencil



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.
- Write the number and stick the strips by the side.
- Each time, write the number in the place value grid below.
  Remember to draw the decimal point each time.

1.1, 0.8, 1.6, 2.1, 1.2, 0.1, 0.3, 2.5, 0.5, 2.2

1s	•	0.1s $\frac{1}{10}$s

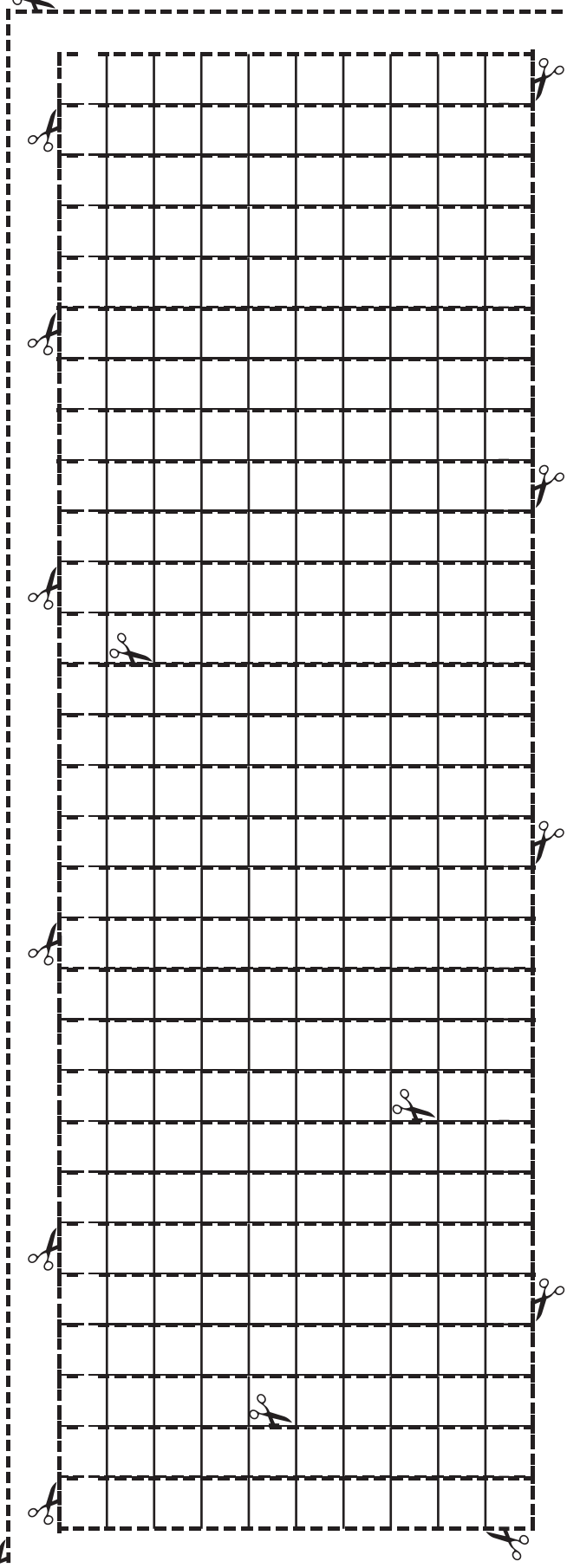
S-t-r-e-t-c-h:

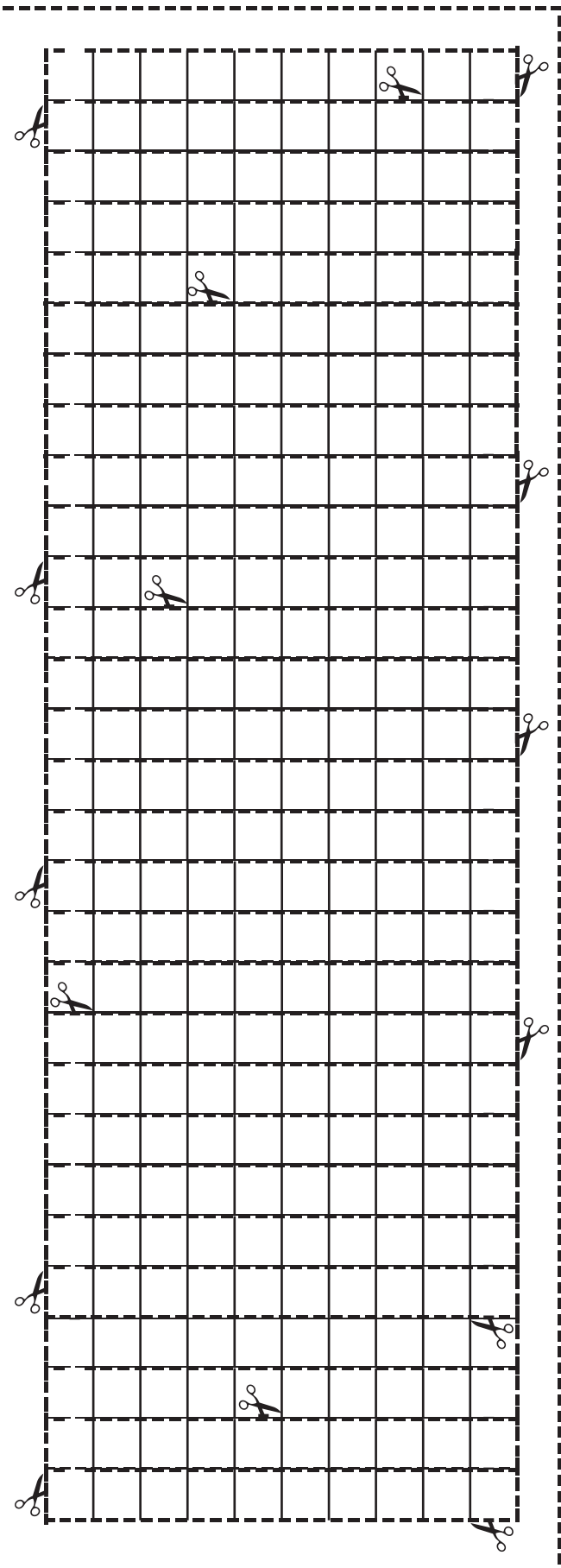
Write all your numbers in order from smallest to largest.

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?
Sticky tenths





Check your understanding: *Questions*

Always true, sometimes true or false?

- One half is zero point five
- A number of fifths can be written as an equivalent number of tenths
- A number of tenths can be written as an equivalent number of fifths
- $^4/_5$ is less than $^4/_{10}$
- Counting in tenths is the same as counting in 0.1s
- If I count on in steps of 0.1, the number after *zero point nine* is *zero point ten.*

Fold here to hide answers:

Check your understanding: *Answers*

Always true, sometimes true or false?

- One half is zero point five Always true.
- A number of fifths can be written as an equivalent number of tenths Always true e.g. $^1/_5 = {}^2/_{10}$, $^2/_5 = {}^4/_{10}$ etc.
- A number of tenths can be written as an equivalent number of fifths Sometimes – if the numerator is even (see above), however, if the numerator is odd then there is no equivalent number of fifths.
- $^4/_5$ is less than $^4/_{10}$ False - it is equivalent to $^8/_{10,}$ which is greater.
- Counting in tenths is the same as counting in 0.1s True.
- If I count on in steps of 0.1, the number after *zero point nine* is *zero point ten.* False –it is 1.