Yr 4 Decimals and Fractions Unit 4 (4519)

Additional teacher instructions for practice sheets

These notes indicate which practice sheets are most appropriate for which groups.

Day 1 Tenths Sheet 1
Working towards ARE / Working at ARE / Greater Depth
Greater Depth also work out what needs to be added to each decimal to make 1. They write an addition for each picture, e.g. 0.1 + 0.9 = 1 for the first picture. An example is given.

Day 2 Placing decimals on lines Sheet 1
Working towards ARE / Working at ARE
Working at ARE complete the challenge.

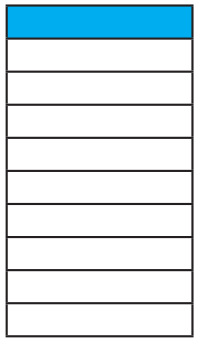
Day 2 Identifying decimals on lines Sheet 2
Greater Depth

Day 3 Comparing numbers with one decimal place Sheet 1
Working towards ARE / Working at ARE / Greater Depth
Working towards ARE use a number line to help.
Most children should aim to attempt the challenge.

Tenths

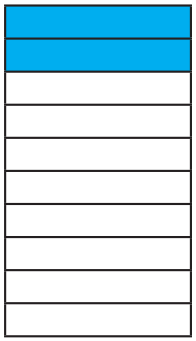
Sheet 1

Fill in the missing fractions and decimals and provide any equivalents.



0.1 ≡ ☐

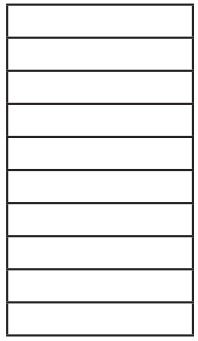
e.g. 0.1 + ☐ = 1



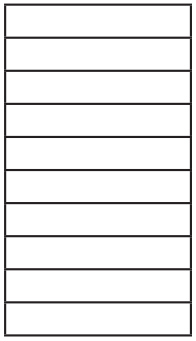
Hint: It's in the 'equivalent' symbol!

0.2 ≡ ☐ ≡ ☐

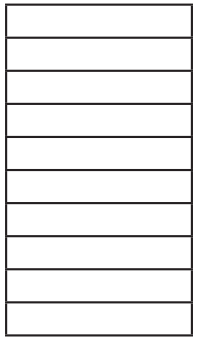
☐ ≡ ☐



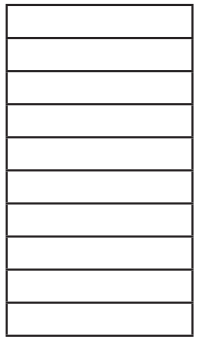
☐ ≡ $\frac{4}{10}$ ≡ ☐



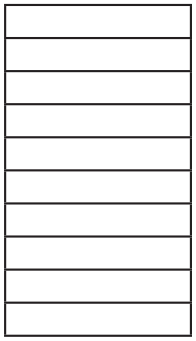
0.5 ≡ ☐ ≡ ☐



☐ ≡ ☐ ≡ $\frac{3}{5}$



0.7 ≡ ☐



☐ ≡ $\frac{8}{10}$ ≡ ☐

☐ ≡ ☐

Placing decimals on lines

Sheet 1

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

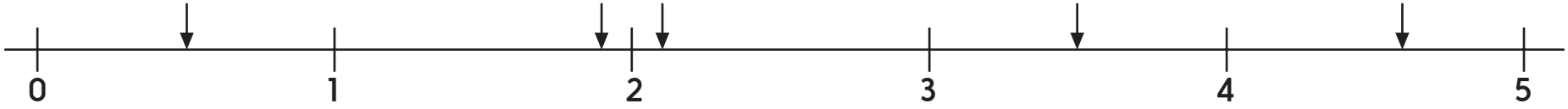
Challenge

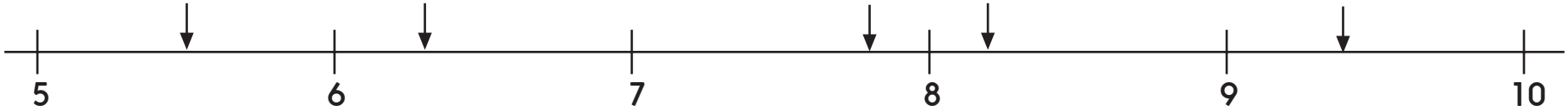
Write two new numbers between 3 and 4, each with one decimal place.
One number must round **up**, and the other must round **down**.

Identifying decimals on lines

Sheet 2

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.

Comparing numbers with one decimal place

Sheet 1

Write < or > between each pair of numbers.

4.6 7.1 2.8 2.5 4.5 5.4 7.2 2.7

Now write all eight numbers in order, smallest first.

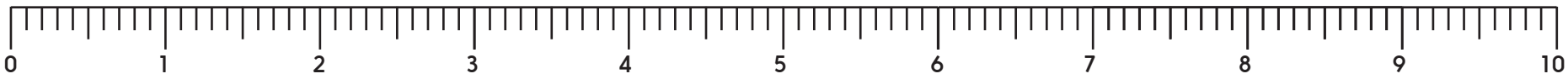
Use the digits to make a pair of numbers in the correct order.

□.□ > □.□ □.□ > □.□ □.□ < □.□ □.□ > □.□

1, 2, 3, 4 4, 5, 2, 7 3, 5, 7, 8 9, 7, 5, 3

Write a number between each pair of numbers so that the three numbers are in order, smallest to largest or vice versa.

3.4 □.□ 5.1 8.4 □.□ 7.8 5.7 □.□ 6.2 3.9 □.□ 4.1



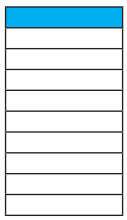
Challenge

Drew says '7.9 is larger than 9 because it has more digits.' Do you agree with him?

Decimals and fractions

Answers

Day 1 Tenths Sheet 1



0.1 ≡ $\frac{1}{10}$

0.1 + 0.9 = 1

0.2 ≡ $\frac{2}{10}$ ≡ $\frac{1}{5}$

0.2 + 0.8 = 1

0.3 ≡ $\frac{3}{10}$

0.3 + 0.7 = 1

0.4 ≡ $\frac{4}{10}$ ≡ $\frac{2}{5}$

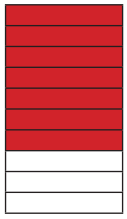
0.4 + 0.6 = 1

0.5 ≡ $\frac{5}{10}$ ≡ $\frac{1}{2}$

0.5 + 0.5 = 1

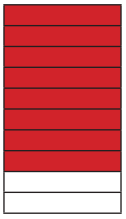
0.6 ≡ $\frac{6}{10}$ ≡ $\frac{3}{5}$

0.6 + 0.4 = 1



0.7 ≡ $\frac{7}{10}$

0.7 + 0.3 = 1



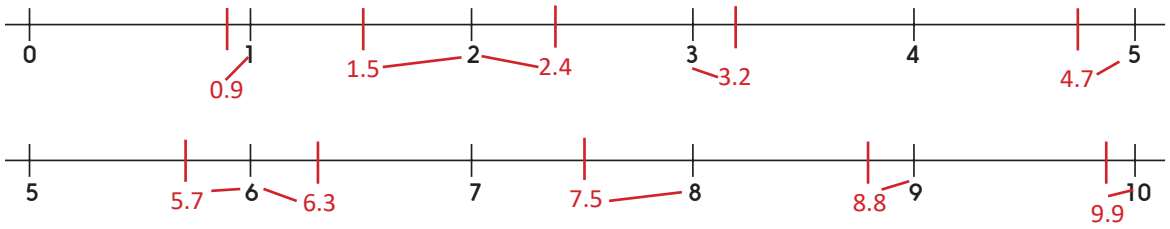
0.8 ≡ $\frac{8}{10}$ ≡ $\frac{4}{5}$

0.8 + 0.2 = 1

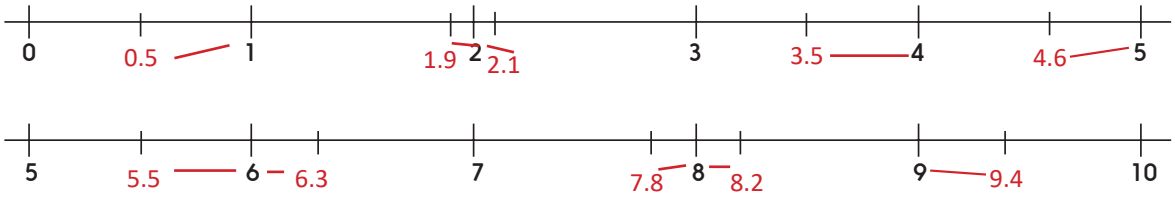
0.9 ≡ $\frac{9}{10}$

0.9 + 0.1 = 1

Day 2 Placing decimals on lines Sheet 1



Day 2 Identifying decimals on lines Sheet 2



Day 3 Comparing numbers with one decimal place Sheet 1

4.6 < 7.1 2.8 > 2.5 4.5 < 5.4 7.2 > 2.7

2.5 2.7 2.8 4.5 4.6 5.4 7.1 7.2

There are a number of possible answers for these inequalities, e.g.

3.4 > 1.2 2.7 < 4.5 5.3 < 7.8 5.3 < 9.7

e.g.

3.4 [4].[3] 5.1 2.3 [4].[3] 6.2

5.7 [5].[9] 6.2 3.9 [4].[0] 4.1

Decimals and fractions

Answers

Day 3 Comparing numbers with one decimal place Sheet 1 (continued)

Challenge

No, we don't agree with Drew. Look for an explanation that shows understanding of the place value of the digits, i.e. that the 7 in 7.9 is with 7 ones, compared with the 9 ones in '9'. If placed on the number line, 9 is further to the right, making it the larger number.