



What should I already know?

- How to count up and down in hundredths; recognise that hundredths arise when dividing an object by one hundred and dividing tenths by ten.
- How to recognise and write decimal equivalents of any number of tenths or hundredths
- How to recognise and write decimal equivalents to $\frac{1}{4}$, $\frac{1}{2}$ and $\frac{3}{4}$
- How to find the effect of dividing a one- or two-digit number by 10 and 100, identifying the value of the digits in the answer as ones, tenths and hundredths
- How to round decimals with one decimal place to the nearest whole number
- How to compare numbers with the same number of decimal places up to two decimal places
- How to solve simple measure and money problems involving decimals up to two decimal places.

What will I know by the end of the unit?

- How to add decimals within 1
- How to subtract decimals within 1
- Know complements to 1
- How to add decimals –crossing the whole
- How to add decimals with the same number of decimal places
- How to subtract decimals with the same number of decimal places
- How to add decimals with a different number of decimal places
- How to subtract decimals with a different number of decimal places
- How to add and subtract wholes and decimals
- How to understand Decimal sequences
- Multiplying decimals by 10, 100 and 1,000
- Dividing decimals by 10, 100 and 1,000

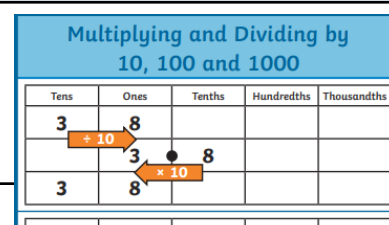
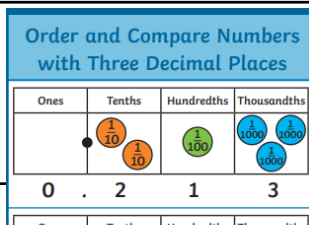
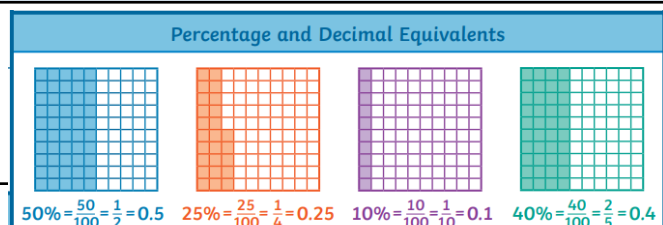
Vocabulary

Tenths	Decimal hundredths	Part-whole model	Decimal point
Hundredths	Decimal equivalents	Rounding	Place value
Decimal tenths			

Investigate/Homework tasks

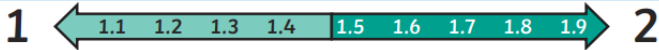
- Homework will be set by your teacher using google classroom
- You should complete at least 30 minutes of maths tasks using the website and log in provided by your teacher. Please attend help sessions if you do not have access to the internet at home
- Additional work you could complete:
 - Find out more about the meaning of the vocabulary list using <http://www.amathsdictionaryforkids.com/>
- To challenge yourself: Answer the key questions to deepen your knowledge

Key Information/Diagrams





Rounding Decimals



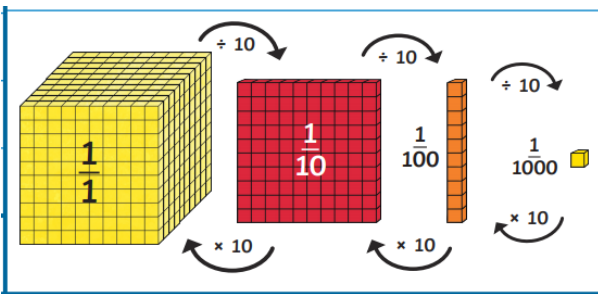
If the tenths digit is 1, 2, 3 or 4, we round down to the nearest whole number.

If the tenths digit is 5, 6, 7, 8 or 9, we round up to the nearest whole number.

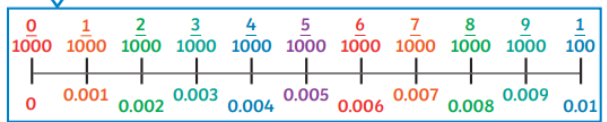
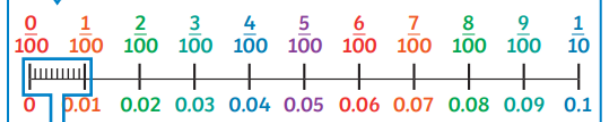
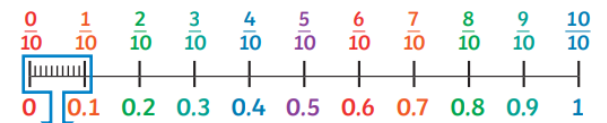


If the hundredths digit is 1, 2, 3 or 4, we round down to the nearest tenth.

If the hundredths digit is 5, 6, 7, 8 or 9, we round up to the nearest tenth.



Tenths, Hundredths and Thousandths



Adding and Subtracting Decimals

$$0.8 + 0.001 = 0.801$$

$$1.031 - 0.23 = 0.801$$

$$0.4005 + 0.4005 = 0.801$$

Decimal Numbers as Fractions

$$0.71 = \frac{71}{100} = \frac{7}{10} + \frac{1}{100}$$

$$0.37 = \frac{37}{100} = \frac{3}{10} + \frac{7}{100}$$

Key Questions

What is the number represented on the place value chart?
 What is one tenth less than one?
 What is one hundredth less than one?
 Show me how you know.
 If I'm taking away tenths, which digit will be affected? Is this always the case?
 How many hundredths can I take away before the tenths place is affected?
 Why is it important to line up the columns?
 What happens when there are a total of ten counters in a place value column?
 Why is the position of the decimal point important?

What happens when you need to subtract a greater digit from a smaller digit e.g. 3 hundredths subtract 4 hundredths?
 How many tenths are equivalent to one hundredth?
 Do we only ever make one exchange in a subtraction calculation?
 Which of these numbers will need exchanging?
 Can you predict what the answer might be?
 How could you check your answer?
 What is a whole number/integer?
 Where can we add a decimal point to the number 143 so that its value stays the same?
 What's the same and what's different about 10 and 10.0?
 Can you use different methods? (Number line, column subtraction, mentally).
 Which is most efficient for this calculation? Explain why.