Edward Peake Church of England Middle School		
Topic: Fractions and Percentages	**Year: 7**	**NC Strand: Number**

What should I already know?

- How to use common factors to simplify fractions; use common multiples to express fractions in the same denomination
- How to compare and order fractions, including fractions > 1
- How to add and subtract fractions with different denominators and mixed numbers, using the concept of equivalent fractions
- How to divide proper fractions by whole numbers
- How to associate a fraction with division and calculate decimal fraction equivalents [for example, 0.375] for a simple fraction

What will I know by the end of the unit?

- How to find a fraction of a given amount
- How to use a given to find the whole and/or other given fractions
- How to find a percentage of a given amount using mental methods
- How to find a percentage of a given amount using a calculator
- How to solve problems with fractions greater than 1 and percentages greater than 100%

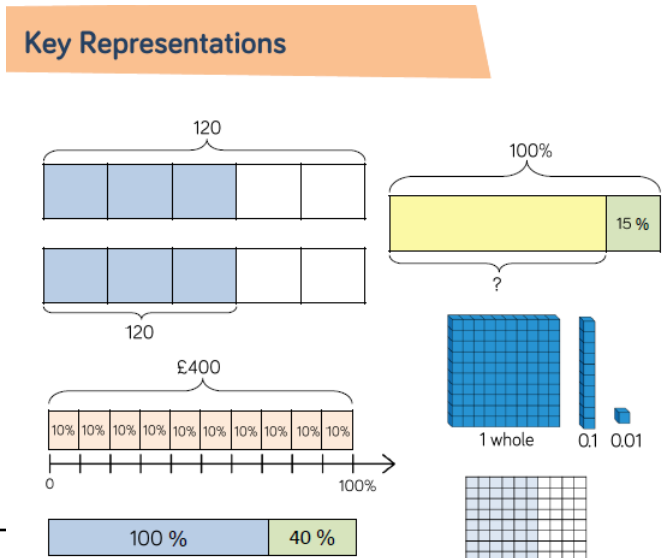
Vocabulary

Fraction	Denominator	Place Value	Decimal
Equivalent	Whole	Percent	Convert
Numerator	Original	Percentage	Equivalent

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



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Key Questions		
How do you work out $\frac{3}{5}$ of a number? Draw a diagram to explain why your method works. What's the same and what's different about these two questions? $\frac{2}{3}$ of 60 = ☐ $\frac{2}{3}$ of ☐ = 60 Why is one third of 90 equal to two-thirds of 45?	How can I work out a number if I know a fraction of the number? What's different about these questions? ▪ What number is half of 12? ▪ 12 is half of what number?	Why is it that you divide by 10 to find 10% of a number, but you don't divide by 20 to find 20% of a number? If you know 10% of a number, what other percentages can you easily work out? Find as many ways as you can to work out 60% of 45
When is it easier to use a mental method rather than a calculator? How do you know how to interpret the display on a calculator? What does the % button on your calculator do?	Can 110% of the class be absent on one day? If the price of an item increases by 60%, what percentage is the new price of the old price? Can a price increase/decrease by 180% or 200%?	