# Scheme of Learning: Year 9 Spring Term

Topic Sequence: Reasoning with Numbers			
6	1	8	
Numbers	Using Percentages	Maths and Money	

## **Topic Overview:**

Students practice their number skills in various financial contexts in this block. The language of financial mathematics, already introduced in Years 7 and 8 is further developed. Simple ideas of tax and wages are introduced, and the percentages studied in the last block are applied in various contexts including simple and compound interest.

#### **Lesson Sequence:**

#### Solve problems with bills and bank statements

Students should be familiar with the language of financial mathematics from their learning in previous years. They will practice using a calculator and non – calculator skills as appropriate.

### Calculate simple interest

Students will use both calculator and non – calculator methods to find simple interest. They will need to read questions carefully to determine whether they are finding the interest or the total value of an investment.

#### Calculate compound interest

Students will see that the interest is added to the current value of the investment at the end of each year and so next year's interest is greater. They will calculate the total compound interest as well as the total value of an investment.

#### Solve problems with Value Added Tax

Students will find out what value added tax (VAT) is, as well as the current rate. Students will then practice both increasing by a percentage and finding the original amount within this context.

#### Calculate wages and taxes

Students will be shown the similarities and differences between wages and salary. The meaning and workings of tax thresholds will be explained and modelled.

#### Solve problems with exchange rates

Students have seen exchange rates in previous learning in year 8 so this small step gives plenty of chance to build on these skills. Students will be encouraged to estimate their answers before calculating to ensure they have a sensible result from using a calculator.

#### Solve unit pricing problems

This small step focuses on the use of the unitary method where students find the cost of one item or the amount of an item that can be bought for £1 or 1p as appropriate.

Sequence of Lessons:		Topic Resources	
1	1 Solve problems with bills and bank statements	Knowledge Maps	Percentages
50		Assessment:	
2	Calculate simple interest	Knowledge:	End of Topic test
3	Calculate compound interest	Application of Knowledge:	Termly mixed topic assessment
4	Solve problems with Value Added Tax		
5	Calculate wages and taxes	Supportive Reading:	
6	Solve problems with exchange rates		Sparx Maths: <u>www.sparxmaths.co.uk</u> Corbettmaths: www.corbettmaths.com AQA Revision Guide
7	Solve unit pricing problems		