# Sumdog's Alignment to Curriculum for Wales

## Scheme of Learning

# Contents

# Introduction

## Sumdog and Curriculum for Wales

Sumdog is an interactive maths platform designed for children aged 5 to 14. It combines engaging gameplay with high-quality, curriculum-aligned question content, helping pupils build fluency through regular practice. At the same time, it provides teachers with powerful assessment tools to diagnose learning gaps and target areas for improvement.

Fully aligned with the Curriculum for Wales, Sumdog offers teachers a structured scheme of learning mapped to the Descriptions of Learning and grouped into topics. Developed with input from Welsh teachers, this alignment allows teachers to set targeted, games-based practice tailored to their pupils' needs. Teachers can assign either in-game practice tasks or customisable, low-stakes tests using Sumdog's framework of skills aligned to the Curriculum for Wales.

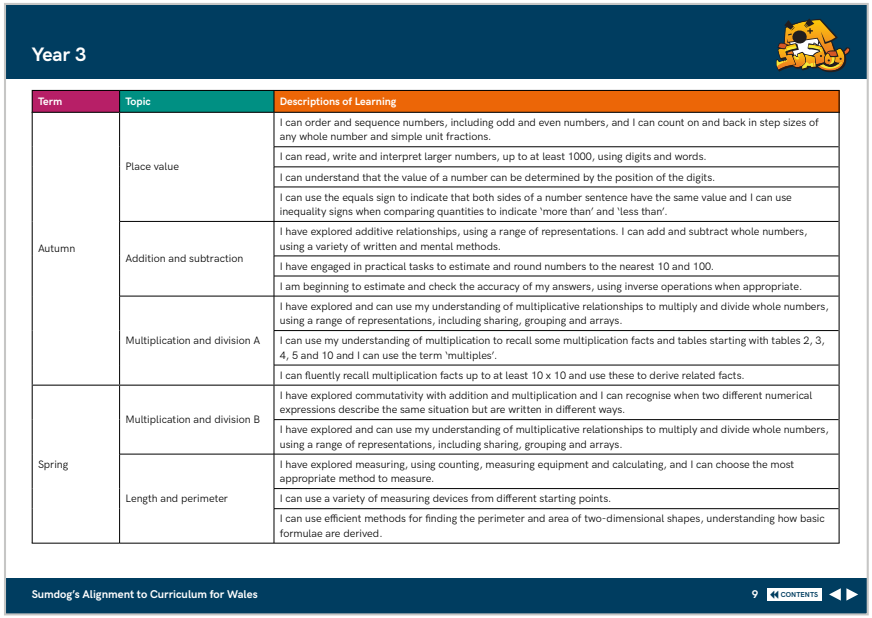
To keep pupils motivated, Sumdog rewards correct answers with coins, which they can use to customise their avatar, house, and garden. This engaging approach encourages continued learning and participation.

Sumdog has further strengthened its Curriculum for Wales scheme of learning by using the White Rose Maths progression framework as a guiding structure. This makes it easier for Welsh teachers who already incorporate White Rose Maths into their classrooms. To support seamless integration, Sumdog has adopted terms, topics, and skill names directly from White Rose Maths, ensuring consistency and familiarity for teachers.

By integrating Sumdog with the Curriculum for Wales, teachers can effectively assess essential numeracy skills and provide personalised support to learners of all abilities.

## Our Scheme of Learning

This document has been created to help you in setting up practice work on Sumdog, complementing your use of the Curriculum for Wales. It identifies which Descriptions of Learning are covered on Sumdog, and which are covered in each of the topics in the framework. In the following pages, the topics in the framework have been organised by year group and then by term, and the Descriptions of Learning covered by each topic are listed in the final column.



Year 3

| Term | Topic | Descriptions of Learning |
|---|---|---|
| Autumn | Place value | I can order and sequence numbers, including odd and even numbers, and I can count on and back in step sizes of any whole number and simple unit fractions. |
| | | I can read, write and interpret larger numbers, up to at least 1000, using digits and words. |
| | | I can understand that the value of a number can be determined by the position of the digits. |
| | | I can use the equals sign to indicate that both sides of a number sentence have the same value and I can use inequality signs when comparing quantities to indicate 'more than' and 'less than'. |
| | Addition and subtraction | I have explored additive relationships, using a range of representations. I can add and subtract whole numbers, using a variety of written and mental methods. |
| | | I have engaged in practical tasks to estimate and round numbers to the nearest 10 and 100. |
| | | I am beginning to estimate and check the accuracy of my answers, using inverse operations when appropriate. |
| | Multiplication and division A | I have explored and can use my understanding of multiplicative relationships to multiply and divide whole numbers, using a range of representations, including sharing, grouping and arrays. |
| | | I can use my understanding of multiplication to recall some multiplication facts and tables starting with tables 2, 3, 4, 5 and 10 and I can use the term 'multiples'. |
| | | I can fluently recall multiplication facts up to at least 10 x 10 and use these to derive related facts. |
| Spring | Multiplication and division B | I have explored commutativity with addition and multiplication and I can recognise when two different numerical expressions describe the same situation but are written in different ways. |
| | | I have explored and can use my understanding of multiplicative relationships to multiply and divide whole numbers, using a range of representations, including sharing, grouping and arrays. |
| | Length and perimeter | I have explored measuring, using counting, measuring equipment and calculating, and I can choose the most appropriate method to measure. |
| | | I can use a variety of measuring devices from different starting points. |
| | | I can use efficient methods for finding the perimeter and area of two-dimensional shapes, understanding how basic formulae are derived. |

# Year 1

| Term | Topic | Descriptions of Learning |
|---|---|---|
| Autumn | Place value (within 10) | I have experienced and explored numbers, including cardinal, ordinal and nominal numbers, in number-rich indoor and outdoor environments. |
| | | I can use my experience of the counting sequence of numbers and of one-to-one correspondence to count sets reliably. I can count objects that I can touch, and ones that I cannot. |
| | | I can notice, recognise and write numbers in a range of media, through a multisensory approach, from 0 to 10 and beyond. |
| | | I have experienced the counting sequence of numbers in different ways, reciting forwards and backwards, and starting at different points. |
| | | I can use mathematical language to describe quantities, and to make estimates and comparisons such as 'more than', 'less than' and 'equal to'. |
| | | I am beginning to recognise, copy, extend and generalise patterns and sequences around me. |
| | Addition and subtraction (within 10) | I have explored commutativity with addition and multiplication and I can recognise when two different numerical expressions describe the same situation but are written in different ways. |
| | | I can communicate how sets change when objects are added to and taken away from them. |
| | | I have explored forming a quantity in different ways, using combinations of objects or quantities. |
| | | I can use the equals sign to indicate that both sides of a number sentence have the same value and I can use inequality signs when comparing quantities to indicate 'more than' and 'less than'. |
| | | I can find missing numbers when number bonds and multiplication facts are not complete. |
| | Shape | I have explored two-dimensional and three-dimensional shapes and their properties in a range of contexts. |
| | | I have explored patterns of numbers and shape. I can recognise, copy and generate sequences of numbers and visual patterns. |
| Spring | Place value (within 20) | I have experienced the counting sequence of numbers in different ways, reciting forwards and backwards, and starting at different points. |
| | | I can understand that the value of a number can be determined by the position of the digits. |
| | | I can use mathematical language to describe quantities, and to make estimates and comparisons such as 'more than', 'less than' and 'equal to'. |

| Term | Topic | Descriptions of Learning |
|---|---|---|
| Spring | Place value (within 20) | I can order and sequence numbers, including odd and even numbers, and I can count on and back in step sizes of any whole number and simple unit fractions. |
| | | I am beginning to estimate and check the accuracy of my answers, using inverse operations when appropriate. |
| | Addition and subtraction (within 20) | I have explored additive relationships, using a range of representations. I can add and subtract whole numbers, using a variety of written and mental methods. |
| | | I have explored equivalent fractions and understand equivalent fraction relationships. |
| | | I can find missing numbers when number bonds and multiplication facts are not complete. |
| | Place value (within 50) | I can read, write and interpret larger numbers, up to at least 1000, using digits and words. |
| | | I am beginning to estimate and check the accuracy of my answers, using inverse operations when appropriate. |
| | | I can understand that the value of a number can be determined by the position of the digits. |
| | | I can order and sequence numbers, including odd and even numbers, and I can count on and back in step sizes of any whole number and simple unit fractions. |
| | Length and height | I can make estimates and comparisons with measures, such as 'shorter than', 'heavier than'. |
| | | I have used a variety of objects to measure. I am beginning to understand the need to repeat the same physical unit without any gaps when measuring. |
| | | I can estimate and measure, using non-standard units, before progressing onto standard units. |
| | Mass and volume | I can make estimates and comparisons with measures, such as 'shorter than', 'heavier than'. |
| | | I can estimate and measure, using non-standard units, before progressing onto standard units. |
| Summer | Multiplication and division | I can use my understanding of multiplication to recall some multiplication facts and tables starting with tables 2, 3, 4, 5 and 10 and I can use the term 'multiples'. |
| | | I can use my experience of the counting sequence of numbers and of one-to-one correspondence to count sets reliably. I can count objects that I can touch, and ones that I cannot. |
| | Fractions | I have experienced fractions in practical situations, using a variety of representations. |
| | | I am beginning to understand that unit fractions represent equal parts of a whole and are a way of describing quantities and relationships. |

| Term | Topic | Descriptions of Learning |
|---|---|---|
| Summer | Position and direction | I can describe and quantify the position of objects in relation to other objects. |
| | | I have experienced and explored numbers, including cardinal, ordinal and nominal numbers, in number-rich indoor and outdoor environments. |
| | Place value (within 100) | I can read, write and interpret larger numbers, up to at least 1000, using digits and words. |
| | | I can understand that the value of a number can be determined by the position of the digits. |
| | | I can communicate how sets change when objects are added to and taken away from them. |
| | | I can use mathematical language to describe quantities, and to make estimates and comparisons such as 'more than', 'less than' and 'equal to'. |
| | Money | I can understand the equivalence and value of coins and notes to make appropriate transactions in role play. |
| | Time | I can understand and apply the language of time in relation to my daily life. |
| | | I am beginning to tell the time using a variety of devices. I have explored and used different ways of showing the passing of time, including calendars, timelines, simple timetables and schedules. |

# Year 2

| Term | Topic | Descriptions of Learning |
|---|---|---|
| Autumn | Place value | I can use mathematical language to describe quantities, and to make estimates and comparisons such as 'more than', 'less than' and 'equal to'. |
| | | I can understand that the value of a number can be determined by the position of the digits. |
| | | I can read, write and interpret larger numbers, up to at least 1000, using digits and words. |
| | | I can order and sequence numbers, including odd and even numbers, and I can count on and back in step sizes of any whole number and simple unit fractions. |
| | | I can communicate how sets change when objects are added to and taken away from them. |
| | Addition and subtraction | I have explored patterns of numbers and shape. I can recognise, copy and generate sequences of numbers and visual patterns. |
| | | I have explored additive relationships, using a range of representations. I can add and subtract whole numbers, using a variety of written and mental methods. |
| | | I have engaged in practical tasks to estimate and round numbers to the nearest 10 and 100. |
| | | I can order and sequence numbers, including odd and even numbers, and I can count on and back in step sizes of any whole number and simple unit fractions. |
| | | I can use the equals sign to indicate that both sides of a number sentence have the same value and I can use inequality signs when comparing quantities to indicate 'more than' and 'less than'. |
| | | I can find missing numbers when number bonds and multiplication facts are not complete. |
| | Shape | I have explored two-dimensional and three-dimensional shapes and their properties in a range of contexts. |
| | | I have explored reflective symmetry in a range of contexts and I can discuss it as a property of shapes and images. |
| Spring | Money | I can understand the equivalence and value of coins and notes to make appropriate transactions in role play. |
| | Multiplication and division | I can use the equals sign to indicate that both sides of a number sentence have the same value and I can use inequality signs when comparing quantities to indicate 'more than' and 'less than'. |
| | | I have explored commutativity with addition and multiplication and I can recognise when two different numerical expressions describe the same situation but are written in different ways. |

| Term | Topic | Descriptions of Learning |
|---|---|---|
| Spring | Multiplication and division | I have explored and can use my understanding of multiplicative relationships to multiply and divide whole numbers, using a range of representations, including sharing, grouping and arrays. |
| | | I can use my understanding of multiplication to recall some multiplication facts and tables starting with tables 2, 3, 4, 5 and 10 and I can use the term 'multiples'. |
| | | I am beginning to understand that unit fractions represent equal parts of a whole and are a way of describing quantities and relationships. |
| | | I can order and sequence numbers, including odd and even numbers, and I can count on and back in step sizes of any whole number and simple unit fractions. |
| | Length and height | I have explored measuring, using counting, measuring equipment and calculating, and I can choose the most appropriate method to measure. |
| | | I can use a variety of measuring devices from different starting points. |
| | Mass, capacity and temperature | I can estimate and measure length, capacity, mass, temperature and time, using appropriate standard units. |
| | | I have explored measuring, using counting, measuring equipment and calculating, and I can choose the most appropriate method to measure. |
| Summer | Fractions | I have explored reflective symmetry in a range of contexts and I can discuss it as a property of shapes and images. |
| | Time | I am beginning to tell the time using a variety of devices. I have explored and used different ways of showing the passing of time, including calendars, timelines, simple timetables and schedules. |
| | Statistics | I am beginning to record and represent data in a variety of ways, including the use of tally charts, frequency tables and block graphs, when appropriate axes and scales are provided. |
| | | I am beginning to interpret and analyse simple graphs, charts and data. |

# Year 3

| Term | Topic | Descriptions of Learning |
|---|---|---|
| Autumn | Place value | I can order and sequence numbers, including odd and even numbers, and I can count on and back in step sizes of any whole number and simple unit fractions. |
| | | I can read, write and interpret larger numbers, up to at least 1000, using digits and words. |
| | | I can understand that the value of a number can be determined by the position of the digits. |
| | | I can use the equals sign to indicate that both sides of a number sentence have the same value and I can use inequality signs when comparing quantities to indicate 'more than' and 'less than'. |
| | Addition and subtraction | I have explored additive relationships, using a range of representations. I can add and subtract whole numbers, using a variety of written and mental methods. |
| | | I have engaged in practical tasks to estimate and round numbers to the nearest 10 and 100. |
| | | I am beginning to estimate and check the accuracy of my answers, using inverse operations when appropriate. |
| | Multiplication and division A | I have explored and can use my understanding of multiplicative relationships to multiply and divide whole numbers, using a range of representations, including sharing, grouping and arrays. |
| | | I can use my understanding of multiplication to recall some multiplication facts and tables starting with tables 2, 3, 4, 5 and 10 and I can use the term 'multiples'. |
| | | I can fluently recall multiplication facts up to at least 10 x 10 and use these to derive related facts. |
| Spring | Multiplication and division B | I have explored commutativity with addition and multiplication and I can recognise when two different numerical expressions describe the same situation but are written in different ways. |
| | | I have explored and can use my understanding of multiplicative relationships to multiply and divide whole numbers, using a range of representations, including sharing, grouping and arrays. |
| | Length and perimeter | I have explored measuring, using counting, measuring equipment and calculating, and I can choose the most appropriate method to measure. |
| | | I can use a variety of measuring devices from different starting points. |
| | | I can use efficient methods for finding the perimeter and area of two-dimensional shapes, understanding how basic formulae are derived. |

| Term | Topic | Descriptions of Learning |
|---|---|---|
| Spring | Fractions A | I have experienced fractions in practical situations, using a variety of representations. |
| | | I have explored equivalent fractions and understand equivalent fraction relationships. |
| | | I am beginning to understand that unit fractions represent equal parts of a whole and are a way of describing quantities and relationships. |
| | Mass and capacity | I can estimate and measure, using non-standard units, before progressing onto standard units. |
| | | I have explored additive relationships, using a range of representations. I can add and subtract whole numbers, using a variety of written and mental methods. |
| | | I can estimate and measure length, capacity, mass, temperature and time, using appropriate standard units. |
| Summer | Fractions B | I am beginning to understand that unit fractions represent equal parts of a whole and are a way of describing quantities and relationships. |
| | | I have experienced fractions in practical situations, using a variety of representations. |
| | | I can demonstrate my understanding that a fraction can be used as an operator or to represent division. I can understand the inverse relation between the denominator of a fraction and its value. |
| | Money | I can understand the equivalence and value of coins and notes to make appropriate transactions in role play. |
| | Time | I am beginning to tell the time using a variety of devices. I have explored and used different ways of showing the passing of time, including calendars, timelines, simple timetables and schedules. |
| | | I can estimate and measure, using non-standard units, before progressing onto standard units. |
| | Shape | I have explored the concept of rotation and I am beginning to use simple fractions of a complete rotation to describe turns. |
| | | I can demonstrate my understanding of angle as a measure of rotation and I can recognise, name and describe types of angles. |
| | | I have explored two-dimensional and three-dimensional shapes and their properties in a range of contexts. |
| | Statistics | I am beginning to interpret and analyse simple graphs, charts and data. |
| | | I am beginning to record and represent data in a variety of ways, including the use of tally charts, frequency tables and block graphs, when appropriate axes and scales are provided. |

# Year 4

| Term | Topic | Descriptions of Learning |
|---|---|---|
| Autumn | Place value | I can use a range of representations to develop and secure my understanding that the value of a digit is related to its position. I can read, record and interpret numbers, using figures and words up to at least one million. |
| | | I can order and sequence numbers, including odd and even numbers, and I can count on and back in step sizes of any whole number and simple unit fractions. |
| | | I can use a range of representations to extend my understanding of the number system to include negative values, decimals and fractions. I can accurately place integers, decimals and fractional quantities on a number line. I can apply my understanding of number value to round and approximate appropriately. |
| | | I have engaged in practical tasks to estimate and round numbers to the nearest 10 and 100. |
| | Addition and subtraction | I can use the four arithmetic operations confidently, efficiently and accurately with integers and decimals, and I can combine these using distributive, associative and commutative laws where appropriate. |
| | | I can verify calculations and statements about number by inverse reasoning and approximation methods. |
| | Area | I have extended my understanding of multiplicative reasoning to include the concept and application of ratio, proportion and scale. |
| | Multiplication and division A | I can fluently recall multiplication facts up to at least 10 x 10 and use these to derive related facts. |
| | | I can use my understanding of multiplication to recall some multiplication facts and tables starting with tables 2, 3, 4, 5 and 10 and I can use the term 'multiples'. |
| Spring | Multiplication and division B | I have experienced and explored simple multiplicative relationships that allow me to discuss the properties of number, including factors, multiples, prime and square numbers. |
| | | I have explored and can use my understanding of multiplicative relationships to multiply and divide whole numbers, using a range of representations, including sharing, grouping and arrays. |
| | | I can use the four arithmetic operations confidently, efficiently and accurately with integers and decimals, and I can combine these using distributive, associative and commutative laws where appropriate. |
| | | I can fluently recall multiplication facts up to at least 10 x 10 and use these to derive related facts. |
| | Length and perimeter | I can estimate and measure length, capacity, mass, temperature and time, using appropriate standard units. |
| | | I can convert between standard units, including applying my understanding of place value to convert between metric units. |

| Term | Topic | Descriptions of Learning |
|---|---|---|
| Spring | Length and perimeter | I have developed an understanding of the ways in which co-ordinates are used to solve problems involving position, length and shape. |
| | Fractions | I have experienced fractions in practical situations, using a variety of representations. |
| | | I am beginning to understand that unit fractions represent equal parts of a whole and are a way of describing quantities and relationships. |
| | | I can use a range of representations to extend my understanding of the number system to include negative values, decimals and fractions. I can accurately place integers, decimals and fractional quantities on a number line. I can apply my understanding of number value to round and approximate appropriately. |
| | | I can demonstrate my understanding that non-integer quantities can be represented using fractions (including fractions greater than 1), decimals and percentages. I can use my knowledge of equivalence to compare the size of simple fractions, decimals and percentages and I can convert between representations. |
| | | I can demonstrate my understanding that a fraction can be used as an operator or to represent division. I can understand the inverse relation between the denominator of a fraction and its value. |
| | Decimals A | I can demonstrate my understanding that non-integer quantities can be represented using fractions (including fractions greater than 1), decimals and percentages. I can use my knowledge of equivalence to compare the size of simple fractions, decimals and percentages and I can convert between representations. |
| | | I can use a range of representations to develop and secure my understanding that the value of a digit is related to its position. I can read, record and interpret numbers, using figures and words up to at least one million. |
| | | I can use a range of representations to extend my understanding of the number system to include negative values, decimals and fractions. I can accurately place integers, decimals and fractional quantities on a number line. I can apply my understanding of number value to round and approximate appropriately. |
| | | I have explored and can use my understanding of multiplicative relationships to multiply and divide whole numbers, using a range of representations, including sharing, grouping and arrays. |
| | | I can use the four arithmetic operations confidently, efficiently and accurately with integers and decimals, and I can combine these using distributive, associative and commutative laws where appropriate. |

| Term | Topic | Descriptions of Learning |
|---|---|---|
| Summer | Decimals B | I can use the four arithmetic operations confidently, efficiently and accurately with integers and decimals, and I can combine these using distributive, associative and commutative laws where appropriate. |
| | | I can use a range of representations to develop and secure my understanding that the value of a digit is related to its position. I can read, record and interpret numbers, using figures and words up to at least one million. |
| | | I can use a range of representations to extend my understanding of the number system to include negative values, decimals and fractions. I can accurately place integers, decimals and fractional quantities on a number line. I can apply my understanding of number value to round and approximate appropriately. |
| | | I can demonstrate my understanding that non-integer quantities can be represented using fractions (including fractions greater than 1), decimals and percentages. I can use my knowledge of equivalence to compare the size of simple fractions, decimals and percentages and I can convert between representations. |
| | Money | I can demonstrate an understanding of income and expenditure, and I can apply calculations to explore profit and loss. |
| | Time | I can read analogue and digital clocks accurately and I can make interpretations and perform calculations involving time. |
| | Shape | I can demonstrate my understanding of angle as a measure of rotation and I can recognise, name and describe types of angles. |
| | | I can explore and consolidate my understanding of the properties of two-dimensional shapes to include the number of sides and symmetry. |
| | | I have explored reflective symmetry in a range of contexts and I can discuss it as a property of shapes and images. |
| | Statistics | I am beginning to interpret and analyse simple graphs, charts and data. |
| | Position and direction | I have developed an understanding of the ways in which co-ordinates are used to solve problems involving position, length and shape. |

# Year 5

| Term | Topic | Descriptions of Learning |
|---|---|---|
| Autumn | Place value | I can use a range of representations to develop and secure my understanding that the value of a digit is related to its position. I can read, record and interpret numbers, using figures and words up to at least one million. |
| | | I can use a range of representations to extend my understanding of the number system to include negative values, decimals and fractions. I can accurately place integers, decimals and fractional quantities on a number line. I can apply my understanding of number value to round and approximate appropriately. |
| | Addition and subtraction | I can use the four arithmetic operations confidently, efficiently and accurately with integers and decimals, and I can combine these using distributive, associative and commutative laws where appropriate. |
| | | I can use a range of representations to extend my understanding of the number system to include negative values, decimals and fractions. I can accurately place integers, decimals and fractional quantities on a number line. I can apply my understanding of number value to round and approximate appropriately. |
| | | I can verify calculations and statements about number by inverse reasoning and approximation methods. |
| | Multiplication and division A | I have experienced and explored simple multiplicative relationships that allow me to discuss the properties of number, including factors, multiples, prime and square numbers. |
| | | I have derived and can apply the rules of indices, using integer exponents. |
| | | I can use the four arithmetic operations confidently, efficiently and accurately with integers and decimals, and I can combine these using distributive, associative and commutative laws where appropriate. |
| | Fractions A | I can demonstrate my understanding that non-integer quantities can be represented using fractions (including fractions greater than 1), decimals and percentages. I can use my knowledge of equivalence to compare the size of simple fractions, decimals and percentages and I can convert between representations. |
| | | I can demonstrate my understanding that a fraction can be used as an operator or to represent division. I can understand the inverse relation between the denominator of a fraction and its value. |
| Spring | Multiplication and division B | I can use the four arithmetic operations confidently, efficiently and accurately with integers and decimals, and I can combine these using distributive, associative and commutative laws where appropriate. |
| | Fractions B | I can demonstrate my understanding that a fraction can be used as an operator or to represent division. I can understand the inverse relation between the denominator of a fraction and its value. |
| | | I can demonstrate my understanding that non-integer quantities can be represented using fractions (including fractions greater than 1), decimals and percentages. I can use my knowledge of equivalence to compare the size of simple fractions, decimals and percentages and I can convert between representations. |

| Term | Topic | Descriptions of Learning |
|---|---|---|
| Spring | Decimals & percentages | I can use a range of representations to extend my understanding of the number system to include negative values, decimals and fractions. I can accurately place integers, decimals and fractional quantities on a number line. I can apply my understanding of number value to round and approximate appropriately. |
| | | I can demonstrate my understanding that non-integer quantities can be represented using fractions (including fractions greater than 1), decimals and percentages. I can use my knowledge of equivalence to compare the size of simple fractions, decimals and percentages and I can convert between representations. |
| | | I can use the four arithmetic operations confidently, efficiently and accurately with integers and decimals, and I can combine these using distributive, associative and commutative laws where appropriate. |
| | | I can use a range of representations to develop and secure my understanding that the value of a digit is related to its position. I can read, record and interpret numbers, using figures and words up to at least one million. |
| | Perimeter and area | I can use efficient methods for finding the perimeter and area of two-dimensional shapes, understanding how basic formulae are derived. |
| | Statistics | I can use different scales to extract and interpret information from a range of diagrams, tables and graphs, including pie charts with simple fractions and proportions. I can recognise any trends that are seen. |
| Summer | Shape | I can demonstrate my understanding of angle as a measure of rotation and I can recognise, name and describe types of angles. |
| | | I can explore and consolidate my understanding of the properties of two-dimensional shapes to include the number of sides and symmetry. |
| | Position and direction | I can use a variety of approaches to investigate, predict and demonstrate the effect of transformations on two-dimensional shapes. |
| | Decimals | I can use the four arithmetic operations confidently, efficiently and accurately with integers and decimals, and I can combine these using distributive, associative and commutative laws where appropriate. |
| | | I can use a range of representations to extend my understanding of the number system to include negative values, decimals and fractions. I can accurately place integers, decimals and fractional quantities on a number line. I can apply my understanding of number value to round and approximate appropriately. |
| | | I can verify calculations and statements about number by inverse reasoning and approximation methods. |

| Term | Topic | Descriptions of Learning |
|---|---|---|
| Summer | Negative numbers | I can use a range of representations to extend my understanding of the number system to include negative values, decimals and fractions. I can accurately place integers, decimals and fractional quantities on a number line. I can apply my understanding of number value to round and approximate appropriately. |
| | Converting units | I can convert between standard units, including applying my understanding of place value to convert between metric units. |
| | | I can read analogue and digital clocks accurately and I can make interpretations and perform calculations involving time. |
| | Volume | I can estimate and measure length, capacity, mass, temperature and time, using appropriate standard units. |

# Year 6

| Term | Topic | Descriptions of Learning |
|---|---|---|
| Autumn | Place value | I can use a range of representations to develop and secure my understanding that the value of a digit is related to its position. I can read, record and interpret numbers, using figures and words up to at least one million. |
| | | I can use a range of representations to extend my understanding of the number system to include negative values, decimals and fractions. I can accurately place integers, decimals and fractional quantities on a number line. I can apply my understanding of number value to round and approximate appropriately. |
| | Addition, subtraction, multiplication and division | I can use the four arithmetic operations confidently, efficiently and accurately with integers and decimals, and I can combine these using distributive, associative and commutative laws where appropriate. |
| | | I have experienced and explored simple multiplicative relationships that allow me to discuss the properties of number, including factors, multiples, prime and square numbers. |
| | | I have extended my understanding of multiplicative reasoning to include the concept and application of ratio, proportion and scale. |
| | | I can fluently and accurately apply the four arithmetic operations in the correct order with integers, decimals and fractions, consolidating my understanding of reciprocals when dividing fractions. |
| | | I can fluently recall multiplication facts up to at least 10 x 10 and use these to derive related facts. |
| | Fractions A | I can demonstrate my understanding that non-integer quantities can be represented using fractions (including fractions greater than 1), decimals and percentages. I can use my knowledge of equivalence to compare the size of simple fractions, decimals and percentages and I can convert between representations. |
| | | I can fluently and accurately apply the four arithmetic operations in the correct order with integers, decimals and fractions, consolidating my understanding of reciprocals when dividing fractions. |
| | | I can use the four arithmetic operations confidently, efficiently and accurately with integers and decimals, and I can combine these using distributive, associative and commutative laws where appropriate. |
| | Fractions B | I can fluently and accurately apply the four arithmetic operations in the correct order with integers, decimals and fractions, consolidating my understanding of reciprocals when dividing fractions. |
| | | I can demonstrate my understanding that non-integer quantities can be represented using fractions (including fractions greater than 1), decimals and percentages. I can use my knowledge of equivalence to compare the size of simple fractions, decimals and percentages and I can convert between representations. |

| Term | Topic | Descriptions of Learning |
|---|---|---|
| Autumn | Converting units | I can estimate and measure length, capacity, mass, temperature and time, using appropriate standard units. |
| | | I can convert between standard units, including applying my understanding of place value to convert between metric units. |
| | | I can use the four arithmetic operations confidently, efficiently and accurately with integers and decimals, and I can combine these using distributive, associative and commutative laws where appropriate. |
| Spring | Ratio | I can fluently recall multiplication facts up to at least 10 x 10 and use these to derive related facts. |
| | | I have extended my understanding of multiplicative reasoning to include the concept and application of ratio, proportion and scale. |
| | Algebra | I can demonstrate an understanding of the idea of input, application of a rule (including inverse operations) and output, using a function machine or other appropriate methods, and I have applied this idea to solve problems. |
| | | I can use commutativity, distributivity and associativity to explore equality and inequality of expressions. |
| | | I can model problems, using expressions and equations involving symbols or words to represent unknown values, adopting the conventions of algebra. I can use inverse operations to find unknown values in simple equations. |
| | | I can use equations and inequalities in the first degree to represent and model real-life situations and solve problems, using a range of representations. |
| | Decimals | I can use a range of representations to develop and secure my understanding that the value of a digit is related to its position. I can read, record and interpret numbers, using figures and words up to at least one million. |
| | | I can use a range of representations to extend my understanding of the number system to include negative values, decimals and fractions. I can accurately place integers, decimals and fractional quantities on a number line. I can apply my understanding of number value to round and approximate appropriately. |
| | | I can use the four arithmetic operations confidently, efficiently and accurately with integers and decimals, and I can combine these using distributive, associative and commutative laws where appropriate. |
| | Fractions, decimals and percentages | I can demonstrate my understanding that non-integer quantities can be represented using fractions (including fractions greater than 1), decimals and percentages. I can use my knowledge of equivalence to compare the size of simple fractions, decimals and percentages and I can convert between representations. |

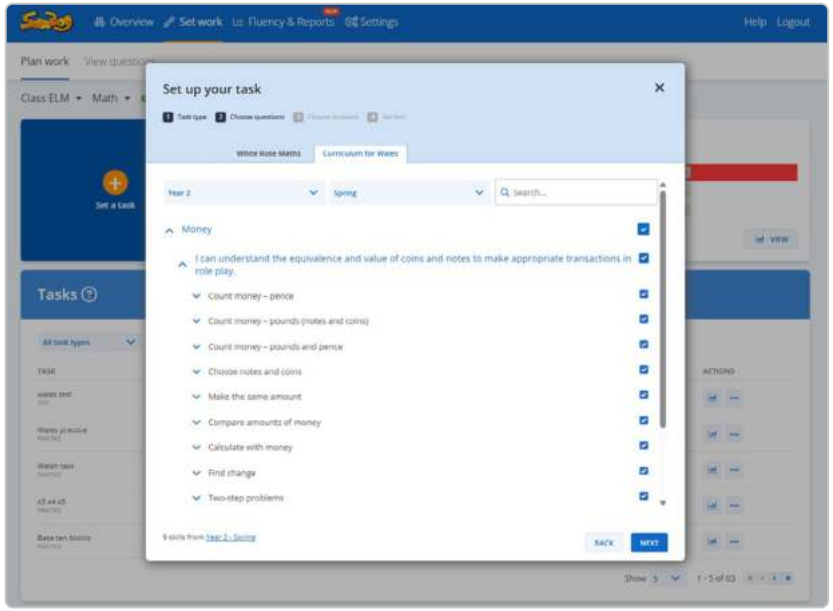
| Term | Topic | Descriptions of Learning |
|---|---|---|
| Spring | Area, perimeter and volume | I have extended my understanding of multiplicative reasoning to include the concept and application of ratio, proportion and scale. |
| | | I have derived and can apply the rules of indices, using integer exponents. |
| | | I can estimate and measure length, capacity, mass, temperature and time, using appropriate standard units. |
| | Statistics | I can use different scales to extract and interpret information from a range of diagrams, tables and graphs, including pie charts with simple fractions and proportions. I can recognise any trends that are seen. |
| | | I can make informed choices about how to organise and represent data, using a wide range of graphs and charts, including pie charts, frequency diagrams and frequency polygons. |
| | | I can find and use the mean of a simple set of data to explain how the statistics do, or do not, support an argument. I can recognise how anomalies affect the mean. |
| Summer | Shape | I can demonstrate my understanding of angle as a measure of rotation and I can recognise, name and describe types of angles. |
| | | I can explore and calculate the areas and perimeters of simple and compound two-dimensional shapes, including circles, and I have demonstrated an understanding of pi (π) as the ratio of the circumference of a circle to its diameter. I can apply my understanding of area to be able to calculate the surface area of simple prisms. |
| | | I can relate a three-dimensional shape to its two-dimensional nets. |
| | Position and direction | I have developed an understanding of the ways in which co-ordinates are used to solve problems involving position, length and shape. |
| | | I can use a variety of approaches to investigate, predict and demonstrate the effect of transformations on two-dimensional shapes. |

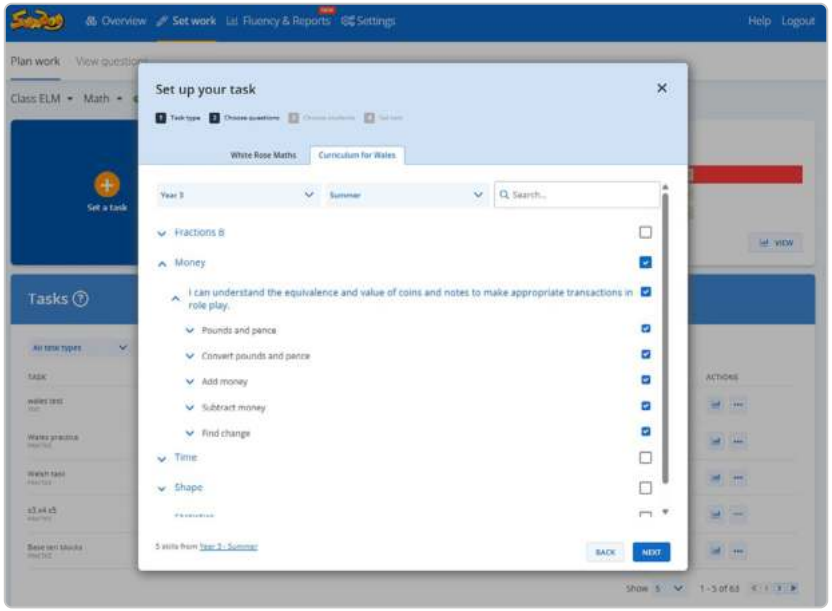
# Use Case

A Year 3 teacher is about to start teaching the 'Money' topic in the Summer term of Year 3.

Using the Sumdog Curriculum for Wales scheme of learning document to set work on Sumdog to complement their teaching, they follow these simple steps:

1. Teacher A creates a test on a Description of Learning on money from the previous year, 'Year 2 – Spring – I can understand the equivalence and value of coins and notes to make appropriate transactions in role play', to prepare their pupils for upcoming learning.
2. Using Sumdog's test reporting, they then reveal any areas for improvement that need to be addressed before moving on to the more complex Year 3 content.
3. Once they have started teaching the new topic, they consolidate their in-class teaching by setting in-game practice on Sumdog question steps aligned to the exact skills and Descriptions of Learning they are focusing learning on, either in-class or as homework.
4. They then repeat step 3 for the other Descriptions of Learning in the topic (Convert pounds and pence, Add money, Subtract money and Find change).
5. Finally, at the end of the topic, they create a test on Sumdog for all skills and Descriptions of Learning to assess learning across the topic in a low-stakes, familiar environment. Sumdog's test report enables them to easily identify any remaining gaps in understanding so they can plan intervention as required.



Interested in trying our new Curriculum for Wales scheme of learning?


0131 226 1511

aileen@sumdog.com

learn.sumdog.com