YEAR 4 MATHS

CURRICULUM OVERVIEW

IN YEAR 4, PUPILS BUILD ON THE STRONG FOUNDATIONS LAID IN YEAR 3 BY MOVING INTO MORE COMPLEX AND ABSTRACT AREAS OF MATHEMATICS. THEY DEEPEN THEIR UNDERSTANDING OF NUMBER THROUGH WORK ON LARGER NUMBERS, MORE EFFICIENT WRITTEN METHODS FOR ADDITION, SUBTRACTION, MULTIPLICATION, AND DIVISION, AND A GREATER FOCUS ON FRACTIONS AND DECIMALS. MEASUREMENT CONTINUES WITH NEW TOPICS SUCH AS AREA AND MONEY, WHILE TIME IS REVISITED WITH INCREASED EXPECTATIONS AROUND FLUENCY AND PROBLEM SOLVING.

PUPILS ALSO EXPLORE SHAPE, POSITION AND DIRECTION IN GEOMETRY, AND ARE INTRODUCED TO FORMAL STATISTICS. AS THE MATHEMATICAL CONTENT BECOMES MORE SOPHISTICATED, SO DOES THE LEVEL OF REASONING AND PROBLEM SOLVING REQUIRED.

PUPILS ARE EXPECTED NOT JUST TO COMPLETE CALCULATIONS, BUT TO EXPLAIN THEIR THINKING, JUSTIFY THEIR METHODS, AND APPLY THEIR KNOWLEDGE IN UNFAMILIAR CONTEXTS. THIS ONGOING EMPHASIS ON REASONING HELPS PUPILS MAKE CONNECTIONS BETWEEN DIFFERENT MATHEMATICAL CONCEPTS AND SUPPORTS THE DEVELOPMENT OF INDEPENDENCE, CONFIDENCE, AND FLEXIBILITY. ALL ESSENTIAL FOR SUCCESS AS THEY PROGRESS THROUGH KEY STAGE 2.

YEAR 4 MATHS YEARLY OVERVIEW

	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10
AUTUMN 1	NUMBER: PLACE VALUE				NUMBER: ADDITION AND SUBTRACTION					
AUTUMN 2	NUMBER: ADDITION AND SUBTRACTION		MEASUREMENT: AREA		NUMBER: MULTIPLICATION & DIVISION			GEOMETRY: SHAPE		ASSESSMENT WEEK
SPRING 1	MEASUREMENT: LENGTH & PERIMETER		NUMBER: FRACTIONS							
SPRING 2	NUMBER: FRACTIONS		NUMBER: DECIMALS A			ASSESSMENT WEEK				
SUMMER	NUMBER: DECIMALS B		MEASUREMENT: MONEY		MEASUREMENT: TIME		GEOMETRY: POSITION AND DIRECTION		STATISTICS	ASSESSMENT WEEK

MADE IN HARROW

四年级数学
课程概览

在四年级中，学生们将在三年级所打下的坚实基础上，进入更复杂和更抽象的数学领域。他们将通过学习更大的数值、更高效的加、减、乘、除书写方法，以及对分数和小数的更深入探究来加深对数字的理解。在测量方面，他们将接触新的主题，如面积和货币，同时在时间的学习中对流利度和解决问题的能力有更高的要求。

学生们还会在几何中探索图形、位置和方向，并初步学习正式的统计知识。随着数学内容的日益复杂，对推理和解决问题的要求也不断提高。

学生不仅需要完成计算，还要能够解释自己的思路、证明所使用的方法，并在陌生的情境中运用所学知识。这种持续强调推理的方式有助于学生在不同的数学概念之间建立联系，并培养他们的独立性、自信心和灵活性——这些都是他们在关键阶段二（KEY STAGE 2）继续取得成功的必备能力。

四年级数学学年概览

	第一周	第二周	第三周	第四周	第五周	第六周	第七周	第八周	第九周	第十周
秋季学期上	数字：位值				数字：加法和减法					
秋季学期下	数字：加法和减法		测量：面积		数字：乘法和除法				几何：形状	考试周
春季学期上	测量：长度和周长		数字：分数							
春季学期下	数字：分数		数字：小数A			考试周				
夏季学期	数字：小数B		测量：金钱		测量：时间		几何：位置和方向		统计	考试周

MATHS: CURRICULUM OVERVIEW

YEAR 4 - AUTUMN 1:

PLACE VALUE & ADDITION AND SUBTRACTION

In Year 4, pupils extend their understanding of number even further, working confidently with numbers up to 10,000. In Number: Place Value, they learn to recognise the value of each digit in four-digit numbers, round numbers to the nearest 10, 100 and 1,000, and use number lines and practical models to support their understanding. This builds on their Year 3 knowledge of hundreds, tens and ones but requires them to think in larger steps and with greater precision.

In Number: Addition and Subtraction, children move from adding and subtracting three-digit numbers to using formal written methods with four-digit numbers, including exchanging across multiple columns. They also develop their mental strategies, choosing efficient methods depending on the problem. Word problems and reasoning tasks become more complex, requiring children to apply their skills in multi-step problems and explain their thinking clearly. This ensures that pupils not only gain fluency with larger numbers but also strengthen their problem-solving and reasoning abilities in preparation for Upper Key Stage 2.

STRAND OF MATHS: NUMBER/MEASUREMENT/STATISTICS/GEOMETRY

NUMBER: PLACE VALUE VOCABULARY: COUNT, MULTIPLES, MORE THAT, LESS THAN, BACKWARDS, NEGATIVE NUMBERS, PLACE VALUE, DIGITI, FOUR-DIGIT NUMBER, THOUSANDS, HUNDREDS, TENS, ONES, ORDER, COMPARE, IDENTIFY, REPRESENT, ESTIMATE, ROUND, NEAREST (10, 100, 1000), SOLVE, PROBLEMS, ROMAN NUMERALS, ZERO, DECIMAL NUMBERS, FRACTIONS

NUMBER: ADDITION & SUBTRACTION KEY VOCABULARY: ADD, SUBTRACT, FORMAL WRITTEN METHOD, COLUMN ADDITION, COLUMN SUBTRACTION, ESTIMATE, INVERSE, OPERATIONS, CHECK, CALCULATION, SOLVE, PROBLEM, METHOD, EFFICIENT

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数学：课程概览

四年级 – 秋季上半学期：

数位与加法和减法

在四年级中，学生们进一步拓展对数字的理解，自信地处理 10,000 以内的数字。在**数字（数位）**部分，他们学习识别四位数中每一位数字的数值，将数字四舍五入到最接近的 10、100 和 1,000，并使用数轴和实际模型来辅助理解。这是在三年级学习百位、十位和个位的基础上进行的，但要求他们以更大的步长、更高的精确度进行思考。

在**数字（加法与减法）**部分，孩子们从加减三位数过渡到使用规范的书面方法计算四位数，包括跨多列进位和退位运算。他们还会发展心算策略，根据问题选择高效的方法。文字题和推理任务变得更复杂，要求学生在多步骤问题中运用所学技能，并清晰地解释自己的思路。这确保了学生不仅能够熟练处理较大的数字，还能增强解决问题和推理的能力，为高年级数学学习做好准备。

数学领域：数 / 测量 / 统计 / 几何

数：数位值 关键词汇：数数 / 计数，倍数，多于，少于，倒着数 / 向后数，负数，数位值，数位（0–9），四位数，千位，百位，十位，个位，排序，比较，识别，表示，估算，四舍五入，最接近的（10、100、1000）
解决，数学问题，罗马数字，零，小数，分数

数：加法与减法 关键词汇：加 / 加法，减 / 减法，标准笔算方法，竖式加法，竖式减法，估算，逆运算（加 ↔ 减），运算，检查（验证答案），运算 / 计算，解答 / 求解，数学题 / 应用题，方法，高效的 / 简便的

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MATHS: CURRICULUM OVERVIEW

YEAR 4 - AUTUMN 2:

ADDITION AND SUBTRACTION, AREA, MULTIPLICATION & DIVISION, SHAPE

This term, Year 4 children will continue to strengthen their understanding of addition and subtraction, using efficient written methods and applying their knowledge to solve multi-step problems. They will focus on choosing appropriate strategies for different types of questions and explaining their reasoning clearly.

The next topic, measurement: area, introduces children to the concept of area as the amount of space a shape covers. They will explore how to calculate area by counting squares and by using multiplication, helping them make links between geometry and number.

Children will then move on to multiplication and division, where they will build fluency in recalling and using multiplication facts up to 12 × 12. They will apply these facts to solve problems and explore the relationship between multiplication and division.

Finally, pupils will study geometry: shape, identifying and classifying 2D shapes based on their properties, such as angles and symmetry. They will also begin to understand different types of triangles and quadrilaterals.

Throughout the term, children will be encouraged to reason mathematically, explain their thinking, and apply their learning to real-life contexts.

STRAND OF MATHS: NUMBER/MEASUREMENT/STATISTICS/GEOMETRY

NUMBER: ADDITION & SUBTRACTION KEY VOCABULARY:

Add, subtract, formal written method, column addition, column subtraction, estimate, inverse, operations, check, calculation, solve, problem, method, efficient.

NUMBER: MULTIPLICATION & DIVISION KEY VOCABULARY:

multiplication, division, facts, arithmetic, operation, times tables, place value, multiply, divide, mentally, factor pairs, commutativity, formal written method, layout, short multiplication, short division, equality, expressions. Solve, problems, distributive law, associative law, integer, correspond. (for example, use the distributive law 39 × 7 = 30 × 7 + 9 × 7 and associative law (2 × 3) × 4 = 2 × (3 × 4)).

NUMBER: SHAPE KEY VOCABULARY:

Symmetry, line of symmetry, translation, reflection Compare, order, classify, geometric shapes, quadrilaterals, parallelogram, rhombus, trapezium, triangles, isosceles, equilateral, scalene, properties, sizes, acute, obtuse, angles, line of symmetry, 2-D, orientation, symmetric, figure Protractor, lengths, polygon, regular, irregular, dissect, diagrams, regular, irregular polygons, angles on a straight line.

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YEAR 4 MATHS OBJECTIVES - AUTUMN

四年级数学教学目标-秋季学期

NUMBER: PLACE VALUE

Number and Place Value	- To count in multiples of 6, 7, 9, 25 and 1000 - To find 1000 more or less than a given number - To count backwards through zero to include negative numbers - To recognise the place value of each digit in a four-digit number (thousands, hundreds, tens, and ones) - To order and compare numbers beyond 1000 - To identify, represent and estimate numbers using different representations - To round any number to the nearest 10, 100 or 1000 - To solve number and practical problems that involve all of the above and with increasingly large positive numbers - To read Roman numerals to 100 (I to C) and know that over time, the numeral system changed to include the concept of zero and place value.
数字和位值	- 以 6、7、9、25 和 1000 的倍数计数 - 找出比给出数字小/大 1000 的数字 - 倒数至 0 以下的负数 - 认出四位数任一位数的位值（个，十，百，千） - 比较、排序 1000 以后的数字 - 使用不同方法来辨认、呈现并估计数字 - 补完任意数字，使之等于最接近的 10、100 或 1000 - 解决包含上述所有内容及更大的正数的数字问题和应用问题 - 读到 100 的罗马数字（I 到 C），并知道随着时间的推移，数字系统发展到包含了零和位值的概念

NUMBER: ADDITION AND SUBTRACTION

Addition and Subtraction	- To add and subtract numbers with up to 4 digits using the formal written methods of columnar addition and subtraction where appropriate - To estimate and use inverse operations to check answers to a calculation - To solve addition and subtraction two-step problems in contexts, deciding which operations and methods to use and why.
加法和减法	- 适用时，使用正式的书面竖式计算加减最多 4 位数字 - 估计计算结果，并用逆运算检查答案 - 解决应用题中的加减两步问题，决定使用哪些操作和方法以及为什么使用

GEOMETRY: SHAPE

Geometry	- To compare and classify geometric shapes, including quadrilaterals and triangles, based on their properties and sizes - To identify acute and obtuse angles and compare and order angles up to two right angles by size - To identify lines of symmetry in 2-D shapes presented in different orientations - To complete a simple symmetric figure with respect to a specific line of symmetry. Describe positions on a 2-D grid as coordinates in the first quadrant - To describe movements between positions as translations of a given unit to the left/right and up/down - To plot specified points and draw sides to complete a given polygon.
几何	- 根据几何形状（包括四边形和三角形）的属性和大小对其进行比较和分类 - 识别锐角和钝角，并按大小比较和排序最多两个直角 - 认出以不同方向呈现的平面形状中的对称线 - 根据指定的对称线完成一个简单的对称图形，用第一象限中的坐标描述二维网格上的位置 - 将位置之间的移动描述为给定单元向左/向右和向上/向下的平移 - 绘制指定点并绘制边以补完给定的多边形

MEASUREMENT: AREA

Measurement	- To find the area of rectilinear shapes by counting squares
度量	- 通过数方格的方法找出直线图形的面积

YEAR 4 MATHS OBJECTIVES - AUTUMN
四年级数学教学目标-秋季学期

NUMBER: MULTIPLICATION AND DIVISION

Multiplication and Division	- To recall multiplication and division facts for multiplication tables up to 12 × 12 - To use place value, known and derived facts to multiply and divide mentally, including: multiplying by 0 and 1; dividing by 1; multiplying together three numbers - To recognise and use factor pairs and commutativity in mental calculations - To multiply two-digit and three-digit numbers by a one-digit number using formal written layout - To solve problems involving multiplying and adding, including using the distributive law to multiply two-digit numbers by one digit, integer scaling problems and harder correspondence problems such as n objects are connected to m objects.
乘法和除法	- 回忆 12x12 乘法表以下的乘法和除法事实 - 使用位值和已知的及推导出的事实进行乘除法的心算，包括：乘以 0 和 1； 除以 1； 三个数相乘 - 在心算中识别并运用事实对和交换性 - 使用正式的书面写法计算两位数和三位数乘以一位数 - 解决涉及乘法和加法的问题，包括使用分配律将两位数乘以一位数、整数缩放问题和更难的对应问题，例如 n 个对象连接到 m 个对象

MULTIPLICATION SQUARE:

PUPILS CAN RAPIDLY AND ACCURATELY RECALL ALL MULTIPLICATION AND DIVISION FACTS UP TO 12 × 12, TYPICALLY RESPONDING WITHIN 5 SECONDS PER FACT, DEMONSTRATING AUTOMATICITY WITHOUT RELIANCE ON COUNTING OR DERIVED STRATEGIES.

EVIDENCE OF FLUENCY MAY INCLUDE:

- IMMEDIATE RECALL OF RANDOMISED FACTS (INCLUDING INVERSE FACTS)
- CONFIDENT USE OF FACTS TO SOLVE CALCULATIONS AND WORD PROBLEMS
- APPLICATION OF FACTS IN WRITTEN AND MENTAL MULTIPLICATION AND DIVISION

乘法表熟练度：

- 学生能够快速且准确地回忆起所有乘法和除法的事实，范围涵盖 1 × 1 到 12 × 12，通常每道题的反应时间在 5 秒以内，表现出自动化能力，而无需依赖计数或推导策略。
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- 熟练度的证据可能包括：
- 能立即回忆随机排列的乘除法事实（包括逆运算事实）
- 自信地使用乘除法事实解决计算题和应用题
- 在书面和口算中灵活运用乘除法事实
-

×	1	2	3	4	5	6	7	8	9	10
1	1	2	3	4	5	6	7	8	9	10
2	2	4	6	8	10	12	14	16	18	20
3	3	6	9	12	15	18	21	24	27	30
4	4	8	12	16	20	24	28	32	36	40
5	5	10	15	20	25	30	35	40	45	50
6	6	12	18	24	30	36	42	48	54	60
7	7	14	21	28	35	42	49	56	63	70
8	8	16	24	32	40	48	56	64	72	80
9	9	18	27	36	45	54	63	72	81	90
10	10	20	30	40	50	60	70	80	90	100

MATHS: CURRICULUM OVERVIEW

YEAR 4 - SPRING:

LENGTH & PERIMETER AND FRACTIONS

This term in maths, Year 4 pupils will be focusing on length and perimeter and fractions.

Children will consolidate their understanding of measuring length using standard units and will calculate the perimeter of rectilinear shapes. In fractions, pupils will develop their understanding of equivalent fractions, compare and order fractions, and begin to add and subtract fractions with the same denominator.

How you can help at home:

- Measure and compare lengths around the home using a ruler or tape measure.
- Find the perimeter of everyday objects such as books, tables or garden spaces.
- Use food or objects to explore equivalent fractions (e.g. two quarters is the same as one half).
- Encourage your child to explain their methods and reasoning clearly.

STRAND OF MATHS: NUMBER/MEASUREMENT/STATISTICS/GEOMETRY

Key Vocabulary:

Length & Perimeter: convert, units of measure, kilometer, metre, measure, calculate, perimeter, rectilinear, centimetres and metres, counting, arrays, multiplication, estimate.

Fractions: fractions, decimals, diagrams, common, equivalent, count, up, down, hundredths, tenths, calculate, quantities, divide, multiply, add, subtract, same, different, denominator, numerator, unit, non-unit fractions, improper fraction, mixed number, whole, recognise, value, digits, round, decimal place, number line, connect, numbers, measures.

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数学：课程概览
四年级——春季学期：
长度与周长，以及分数

在本半学期的数学学习中，四年级学生将重点学习长度与周长以及分数。孩子们将巩固使用标准单位测量长度的理解，并学习计算直边图形（由直线组成的图形）的周长。在分数学习中，学生将进一步理解等值分数，学会比较和排序分数，并开始进行分母相同的分数加减运算。

家长在家可以如何帮助孩子：

- 使用尺子或卷尺测量并比较家中物品的长度。
- 计算日常物品的周长，例如书本、桌子或花园区域。
- 使用食物或实物探索等值分数（例如：四分之二等于二分之一）。
- 鼓励孩子清楚地讲解自己的方法和推理过程。

数学学习领域：数 / 测量 / 统计 / 几何

关键词汇：

长度与周长：
换算，计量单位，千米，米，测量，计算，周长，直边图形，厘米和米，计数，阵列，乘法，估算。

分数：
分数，小数，图示，共同的，等值，数数（向上/向下），百分之一，十分之一，计算，数量，除，乘，加，减，相同，不同，分母，分子，单位分数，非单位分数，不当分数，带分数，整体，识别，数值，数字，四舍五入，小数位，数轴，连接，数字，测量。

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MATHS: CURRICULUM OVERVIEW

YEAR 4 - SPRING:

LENGTH & PERIMETER AND FRACTIONS AND DECIMALS

This term in maths, Year 4 pupils will be focusing on length and perimeter and fractions and decimals.

Children will consolidate their understanding of measuring length using standard units and will calculate the perimeter of rectilinear shapes. In fractions, pupils will develop their understanding of equivalent fractions, compare and order fractions, and begin to add and subtract fractions with the same denominator. In decimals, pupils will make connections between fractions and decimals, particularly tenths and hundredths, and learn to recognise, read and write decimal numbers. They will compare and order decimals and understand the place value of each digit.

How you can help at home:

- Measure and compare lengths around the home using a ruler or tape measure.
- Find the perimeter of everyday objects such as books, tables or garden spaces.
- Use food or objects to explore equivalent fractions (e.g. two quarters is the same as one half).
- Link fractions to decimals in real-life contexts, such as money (e.g. £1.50 = 1 and 50 hundredths) or measuring lengths in metres.
- Encourage your child to explain their methods and reasoning clearly.

STRAND OF MATHS: NUMBER/MEASUREMENT/STATISTICS/GEOMETRY

Key Vocabulary:

Length & Perimeter: convert, units of measure, kilometer, metre, measure, calculate, perimeter, rectilinear, centimetres and metres, counting, arrays, multiplication, estimate.

Fractions: fractions, decimals, diagrams, common, equivalent, count, up, down, hundredths, tenths, calculate, quantities, divide, multiply, add, subtract, same, different, denominator, numerator, unit, non-unit fractions, improper fraction, mixed number, whole, recognise, value, digits, round, decimal place, number line, connect, numbers, measures.

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数学：课程概览

四年级——春季学期：

长度与周长，以及分数

在本半学期的数学学习中，四年级学生将重点学习长度与周长以及分数。孩子们将巩固使用标准单位测量长度的理解，并学习计算直边图形（由直线组成的图形）的周长。在分数学习中，学生将进一步理解等值分数，学会比较和排序分数，并开始进行分母相同的分数加减运算。在小学数学课程中，学生将学习分数与小数之间的联系，特别是十分位和百分位，并学会识别、读写小数。他们将掌握比较和排序小数的方法，并理解每一位数字的位值意义。

家长在家可以如何帮助孩子：

- 使用尺子或卷尺测量并比较家中物品的长度。
- 计算日常物品的周长，例如书本、桌子或花园区域。
- 使用食物或实物探索等值分数（例如：四分之二等于二分之一）。
- 将分数与小数联系到现实生活场景中，例如货币（例如，1.50英镑等于1又百分之五十）或以米为单位的长度测量。
- 鼓励孩子清楚地讲解自己的方法和推理过程。

数学学习领域：数 / 测量 / 统计 / 几何

关键词汇：

长度与周长：

换算，计量单位，千米，米，测量，计算，周长，直边图形，厘米和米，计数，阵列，乘法，估算。

分数：

分数，小数，图示，共同的，等值，数数（向上/向下），百分之一，十分之一，计算，数量，除，乘，加，减，相同，不同，分母，分子，单位分数，非单位分数，不当分数，带分数，整体，识别，数值，数字，四舍五入，小数位，数轴，连接，数字，测量。

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YEAR 4 MATHS OBJECTIVES - SPRING 1 & 2

MEASUREMENT: LENGTH & PERIMETER

Measurement	- To convert between different units of measure - To measure and calculate the perimeter of a rectilinear figure (including squares) in centimetres and metres - To find the area of rectilinear shapes by counting squares - To estimate, compare and calculate different measures, including money in pounds and pence read, write and convert time between analogue and digital 12- and 24-hour clocks - To solve problems involving converting from hours to minutes; minutes to seconds; years to months; weeks to days.
度量	- 转换不同的度量单位 - 以厘米和米为单位测量并计算直线图形（包括正方形）的周长 - 通过数方格的方法找出直线图形的面积 - 估计、比较并计算不同的度量单位，包括镑与便士的转换 - 读、写并转换时钟与 12 小时制、24 小时制的电子表所显示的时间 - 解决涉及转换秒、分、时、日、星期、月和年的问题

NUMBER: FRACTIONS

NUMBER: DECIMALS A

Fractions	- To recognise and show, using diagrams, families of common equivalent fractions - To count up and down in hundredths; recognise that hundredths arise when dividing an object by one hundred and dividing tenths by ten. - To solve problems involving increasingly harder fractions to calculate quantities, and fractions to divide quantities, including non-unit fractions where the answer is a whole number - To add and subtract fractions with the same denominator - To recognise and write decimal equivalents of any number of tenths or hundredths - To recognise and write decimal equivalents to one quarter, one half and three quarters. - 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 - To round decimals with one decimal place to the nearest whole number - To compare numbers with the same number of decimal places up to two decimal places
	- To solve simple measure and money problems involving fractions and decimals to two decimal places.
分数	- 使用图表识别和显示常见等价分数族 - 以百分之一为单位正序/倒序数数；认识到百分之一来自于把一个对象一百等分或把一位数或把十分之一除以 10 - 解决用包括越来越难的分数来计算数量，用分数来划分数量，包括答案是整数的非单位分数 - 加减分母相同的分数 - 识别和书写与十分之几或百分之几相等的小数
	- 认出并写出与四分之一、一半和四分之三相等的小数 - 找出一位或两位数除以 10 和 100 的效果，将答案中数字的值确定为个位、十分位和百分位 - 将一位小数四舍五入到最接近的整数 - 比较具有相同小数位数的数字，最多两位小数 - 解决涉及到小数点后两位的分数和小数的简单的度量和货币问题

MATHS: CURRICULUM OVERVIEW

YEAR 4 - SUMMER: DECIMALS, MONEY, TIME, POSITION AND DIRECTION, STATISTICS

In the Summer term, Year 4 children will continue to build on their understanding of key mathematical concepts, applying their knowledge with increasing confidence across a range of topics. Learning will focus on developing fluency, reasoning and problem-solving skills through practical and real-life contexts.

Decimals:

- Recognise and write decimal equivalents of tenths and hundredths
- Compare and order decimals up to two decimal places
- Round decimals to the nearest whole number
- Solve problems involving decimals in real-life contexts



Money:

- Add and subtract amounts of money, including giving change
- Solve multi-step problems involving money
- Use written methods to support calculations
- Apply money skills in real-life situations

Time:

- Read, write and convert time between analogue and digital (12- and 24-hour clocks)
- Solve problems involving converting between units of time
- Calculate durations of events
- Interpret timetables and solve related problems

Position and Direction:

- Describe positions on a grid using coordinates in the first quadrant
- Describe movements between positions using translations
- Plot specified points and draw sides to complete a given polygon
- Use direction and turns (including clockwise and anti-clockwise)

Statistics:

- Interpret and present discrete and continuous data using bar charts, pictograms and line graphs
- Solve comparison, sum and difference problems using information presented
- Ask and answer questions about data
- Draw conclusions from data and explain findings

How you can help at home:

- Encourage your child to use money in real-life situations (e.g. budgeting or shopping)
- Practise telling the time and discussing durations of daily events
- Look for decimals in everyday contexts (e.g. money, measurements)
- Explore coordinates using simple grid games or maps
- Discuss charts, graphs or tables you see and ask questions about the information
- Support your child in explaining their reasoning when solving problems

STRAND OF MATHS: NUMBER/MEASUREMENT/STATISTICS/GEOMETRY

*PLEASE NOTE THAT THE CURRICULUM CONTENT IS SUBJECT TO CHANGE, AS WE ARE ALWAYS STRIVING TO MAKE IMPROVEMENTS.

数学：课程概览

四年级 - 夏季学期：小数、钱币、时间、位置与方向、统计

在夏季学期，四年级的孩子们将继续巩固关键数学概念的理解，并在不同主题中越来越自信地应用所学知识。学习将侧重于通过实际操作和现实生活情境发展流畅性、推理能力和解决问题的技能。

小数：

- 识别并书写十分位和百分位的小数
- 比较和排列两位小数
- 将小数四舍五入到最接近的整数
- 解决现实生活中涉及小数的问题

钱币：

- 加减金额，包括找零
- 解决涉及多步计算的金钱问题
- 使用书面方法辅助计算
- 在现实生活中应用钱币技能

时间：

- 阅读、书写并在指针式与数字式（12小时和24小时制）之间转换时间
- 解决单位时间转换问题
- 计算事件持续时间
- 解读时间表并解决相关问题

位置与方向：

- 使用第一象限坐标描述网格上的位置
- 使用平移描述位置间的移动
- 标出指定点并连接边完成给定多边形
- 使用方向和转动（包括顺时针和逆时针）

统计：

- 使用条形图、象形图和折线图解释和展示离散与连续数据
- 利用数据解决比较、求和和求差问题
- 提出并回答有关数据的问题
- 从数据中得出结论并解释发现

在家中可以帮助孩子的方法：

- 鼓励孩子在现实生活中使用钱（例如理财或购物）
- 练习读时间并讨论日常事件的持续时间
- 在日常生活中寻找小数（例如金钱、测量）
- 使用简单的网格游戏或地图探索坐标
- 一起讨论看到的图表或表格，并提出关于信息的问题
- 支持孩子在解决问题时解释其推理过程

数学分支：数与运算，测量，统计，几何

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MATHS: CURRICULUM OVERVIEW

YEAR 4 - SUMMER: DECIMALS, MONEY, TIME, POSITION AND DIRECTION, STATISTICS

数学：课程概览

四年级 - 夏季学期：小数、钱币、时间、位置与方向、统计

Key Vocabulary/关键词汇:

Decimals: decimals, count, up, down, hundredths, tenths, calculate, quantities, divide, add, subtract, same, different, whole, recognise, value, digits, round, decimal place, number line

小数：小数，计数，向上，向下，百分位，十分位，计算，数量，除，增加，减少，相同，不同，整数，识别，数值，数字，四舍五入，小数位，数轴

Money: estimate, compare, order, money, pounds, pence, round, change/left over
钱币：估算，比较，排序，钱，英镑，便士，四舍五入，找零/剩余

Time: analogue, digital, 12- hour, 24-hour, clocks, minutes, seconds, years, months, weeks, days
时间：指针式，数字式，12小时制，24小时制，钟表，分钟，秒，年，月，周，天

Position and Direction: Describe, positions, movements, translations, 2-D grid, coordinates, first quadrant, unit to the left/right and up/down, plot, specified points, draw sides, complete, polygon Axes, equal scales, integer labels, pairs of coordinates e.g. (2, 5)
位置与方向：描述，位置，移动，平移，二维网格，坐标，第一象限，向左/向右和向上/向下移动单位，绘点，指定点，画边，完成，多边形，坐标轴，相等刻度，整数标签，坐标对，例如（2, 5）

Statistics: interpret, present, discrete, continuous, data, graphical methods, bar charts, time graphs, comparison, sum, difference, problems, information, presented, pictograms, tables, record, change
统计：解释，展示，离散，连续，数据，图形方法，条形图，时间图，比较，总和，差，问题，信息，呈现，象形图，表格，记录，变化

数学分支：数与运算，测量，统计，几何

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YEAR 4 MATHS OBJECTIVES - SUMMER
四年级数学教学目标-夏季学期

MEASUREMENT: MONEY

MEASUREMENT: TIME

Measurement	- To convert between different units of measure - To measure and calculate the perimeter of a rectilinear figure (including squares) in centimetres and metres - To find the area of rectilinear shapes by counting squares - To estimate, compare and calculate different measures, including money in pounds and pence read, write and convert time between analogue and digital 12- and 24-hour clocks - To solve problems involving converting from hours to minutes; minutes to seconds; years to months; weeks to days.
度量	- 转换不同的度量单位 - 以厘米和米为单位测量并计算直线图形（包括正方形）的周长 - 通过数方格的方法找出直线图形的面积 - 估计、比较并计算不同的度量单位，包括镑与便士的转换 - 读、写并转换时钟与 12 小时制、24 小时制的电子表所显示的时间 - 解决涉及转换秒、分、时、日、星期、月和年的问题

STATISTICS

Geometry	- To compare and classify geometric shapes, including quadrilaterals and triangles, based on their properties and sizes - To identify acute and obtuse angles and compare and order angles up to two right angles by size - To identify lines of symmetry in 2-D shapes presented in different orientations - To complete a simple symmetric figure with respect to a specific line of symmetry. Describe positions on a 2-D grid as coordinates in the first quadrant - To describe movements between positions as translations of a given unit to the left/right and up/down - To plot specified points and draw sides to complete a given polygon.
几何	- 根据几何形状（包括四边形和三角形）的属性和大小对其进行比较和分类 - 识别锐角和钝角，并按大小比较和排序最多两个直角 - 认出以不同方向呈现的平面形状中的对称线 - 根据指定的对称线完成一个简单的对称图形，用第一象限中的坐标描述二维网格上的位置 - 将位置之间的移动描述为给定单元向左/向右和向上/向下的平移 - 绘制指定点并绘制边以补完给定的多边形

YEAR 4 MATHS OBJECTIVES - SUMMER CONTINUED...

四年级数学教学目标-夏季学期续

NUMBER: DECIMALS B

Fractions and Decimals	- To recognise and show, using diagrams, families of common equivalent fractions - To count up and down in hundredths; recognise that hundredths arise when dividing an object by one hundred and dividing tenths by ten. - To solve problems involving increasingly harder fractions to calculate quantities, and fractions to divide quantities, including non-unit fractions where the answer is a whole number - To add and subtract fractions with the same denominator - To recognise and write decimal equivalents of any number of tenths or hundredths - To recognise and write decimal equivalents to one quarter, one half and three quarters. - 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 - To round decimals with one decimal place to the nearest whole number - To compare numbers with the same number of decimal places up to two decimal places - To solve simple measure and money problems involving fractions and decimals to two decimal places.
分数	- 使用图表识别和显示常见等价分数族 - 以百分之一为单位正序/倒序数数；认识到百分之一来自于把一个对象一百等分或把一位数或把十分之一除以 10 - 解决用包括越来越难的分数来计算数量，用分数来划分数量，包括答案是整数的非单位分数 - 加减分母相同的分数 - 识别和书写与十分之几或百分之几相等的小数 - 认出并写出与四分之一、一半和四分之三相等的小数 - 找出一位或两位数除以 10 和 100 的效果，将答案中数字的值确定为个位、十分位和百分位 - 将一位小数四舍五入到最接近的整数 - 比较具有相同小数位数的数字，最多两位小数 - 解决涉及到小数点后两位的分数和小数的简单的度量和货币问题

GEOMETRY: POSITION AND DIRECTION

Statistics	- To interpret and present discrete and continuous data using appropriate graphical methods, including bar charts and time graphs. - To solve comparison, sum and difference problems using information presented in bar charts, pictograms, tables and other graphs.
统计	- 使用包括条形图和时间图的正确的图表技巧来解读并展示离散的和连续的数据 - 使用条形图、象形图、表格和其他图形中呈现的信息来解决比较、求和与差异问