



Whole School Curriculum Plan 2021-2022

Subject: Maths

Year 2 & 3

		Autumn Term 2021		Spring Term 2022		Summer Term 2022	
	Year group in class	Term 1	Term 2	Term 3	Term 4	Term 5	Term 6
Kingfishers	2 & 3	<p><u>Knowledge, Skills and Understanding</u> Counting in multiples Place value of 3-digit numbers Representing numbers in different ways. Comparing numbers Reading / writing numbers in numerals and words Solving number/practical problems Adding and subtracting numbers Estimating Checking answers</p>	<p><u>Knowledge, Skills and Understanding</u> Solving problems with addition and subtraction Addition and subtraction number facts Recalling and using multiplication and division facts Mental and written methods for addition, subtractions, multiplication and division Lengths Mass Volume Measuring perimeter around 2D shapes. Money – coins, notes and change Adding and subtracting £s and p.</p>	<p><u>Knowledge, Skills and Understanding</u> Recalling and using multiplication and division facts Odd and even numbers Solving problems involving multiplication and division, using materials, arrays, repeated addition, mental methods, and multiplication and division facts, including problems in contexts.</p>	<p><u>Knowledge, Skills and Understanding</u> Using mathematical vocabulary to describe position, direction and movement. Recognising, finding, naming and writing fractions $\frac{1}{3}$, $\frac{1}{4}$, $\frac{2}{4}$, $\frac{3}{4}$ of a length, shape, set of objects or quantity. Writing simple fractions for example $\frac{1}{2}$ of 6=3 and recognise the equivalence of $\frac{2}{4}$ and $\frac{1}{2}$. Adding and subtracting fractions with the same denominator within one whole. Comparing and ordering unit fractions, and fractions with the same denominators. Telling and writing the time from an analogue clock, including using Roman numerals from I to XII, and 12-hour and 24-hour clocks.</p>	<p><u>Knowledge, Skills and Understanding</u> Identifying and describing the properties of 2-D and 3-D shapes including the number of edges, vertices and faces. Identifying 2-D shapes on the surface of 3-D shapes. Comparing and sorting common 2-D and 3-D shapes and everyday objects. Reading and writing names for shapes Drawing lines and shapes Creating 3D shapes using materials Recognising angles as a property of shape or a description of a turn. Right angles Using a ruler to measure Recording, organising, constructing, Interpreting and comparing data Pictograms Tally charts Block diagrams Tables</p>	<p><u>Knowledge, Skills and Understanding</u> Measuring in the correct standard units Measuring using the correct equipment Combining money amounts to make a particular value. Solving simple problems in a practical context Money – coins, notes and change Adding and subtracting £s and p. Telling and writing the time to five minutes Interpreting and presenting data using bar charts, pictograms and tables. Consolidation of learning</p>
		<p>Topic(s) Number and Place value Addition and subtraction</p>	<p>Topic(s) Addition and subtraction Multiplication and division Measurement</p>	<p>Topic(s) Multiplication and division</p>	<p>Topic(s) Position and direction Fractions Time</p>	<p>Topic(s) Geometry – Properties of shapes. Statistics Angles</p>	<p>Topic(s) Measurement Interpret and present data</p>



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Year 4 & 5 (plus one Year 6 pupil)

Woodpeckers	4 & 5 <small>Plus 1 Year 6</small>	<p>Knowledge, Skills and Understanding</p> <p>Recognise numbers up to a million Compare and order numbers Rounding numbers Introducing negative numbers Add and subtract numbers up to 4 digits Multiply by 10, 100, 1000 Divide by 10,100, 1000 Multiply and divide by 3, 6, 7 and 9 Equivalent lengths mm and cm Kilometers Perimeter – rectangle, grid Area – counting squares</p>	<p>Knowledge, Skills and Understanding</p> <p>Multiply by 10, 100, 1000 Divide by 10,100, 1000 Multiply and divide by 3, 6, 7 and 9 Equivalent lengths mm and cm Kilometers Perimeter – rectangle, grid Area – counting squares Making shapes Comparing area</p>	<p>Knowledge, Skills and Understanding</p> <p>11 and 12 times table Multiply 3 numbers Efficient multiplication Written methods Multiply 2 digits by 1 digit Multiply 3 digits by 1 digit Divide 2 digits by 1 digit Divide 3 digits by 1 digit What is a fraction? Equivalent fractions Fractions greater than 1 Count in fractions Fractions on a number line Comparing and ordering fractions Adding and subtracting fractions</p>	<p>Knowledge, Skills and Understanding</p> <p>Tenths Fractions of a set amount Calculate fractions of a quantity Problem solving Tenths and Hundreds Recognise tenths and hundreds Tenths as decimals Tenths on a place value grid Tenths on a number line Divide 1 digit by 10 Divide 2 digits by 10 Hundredths Hundredths as decimals Hundredths on a place value grid Divide by 1 or 2 digits by 100</p>	<p>Knowledge, Skills and Understanding</p> <p>Bonds to 10 and 100 Make a whole Writing decimals Order decimals Round Decimals Halves and quarters Pounds and pence Ordering money Estimating money Convert pounds and pence Add and subtract money Find change Four operations Interpret charts Comparison, sum and difference Line graphs Telling the time to 5 and 1 minute Am and Pm 24 hour clock Hours, minutes and seconds Years, months weeks and days Analogue to digital</p>	<p>Knowledge, Skills and Understanding</p> <p>Identify angles Compare and order angles Turns and angles Right angles in shapes Recognise and describe 2D/3D shapes Draw accurately Triangles and quadrilaterals Describe position Draw and move on a grid Describe movement on a grid Lines of symmetry Horizontal and vertical Consolidation of learning</p>
		<p>Topic(s)</p> <p>Number and Place Value Number Addition and Subtraction</p>	<p>Topic(s)</p> <p>Addition Subtraction Multiply and Divide Area and Perimeter</p>	<p>Topic(s)</p> <p>Fractions</p>	<p>Topic(s)</p> <p>Fractions Decimals</p>	<p>Topic(s)</p> <p>Decimals (including money) Measurement: Time Statistics</p>	<p>Topic(s)</p> <p>Geometry: Properties of Shape Position and Directions Yr4 Consolidation Yr5 Converting Units and Volume</p>

Year 6

Owls	6	<p>Knowledge, Skills and Understanding</p> <p>-Recognise numbers up to ten million -Compare and order numbers -Rounding numbers -Understand negative numbers -Add and Subtract whole numbers with more than 4 digits. -Multi-step problems -short multiplication -long multiplication -short division</p>	<p>Knowledge, Skills and Understanding</p> <p>-Equivalent fractions -simplifying fractions -mixed numbers to improper fractions -fractions on a number line -compare and order fractions -Add and subtract fractions -Four quadrants -Translations -Reflections</p>	<p>Knowledge, Skills and Understanding</p> <p>-Decimals to three places -Multiply and divide by 10,100 and 10 -multiple and divide decimals by intergers -decimals as fractions -fractions as decimals -fractions as percentages -equivalent FDP -Ordering FDP -Percentages of amounts -find a rule -form expressions and formulae</p>	<p>Knowledge, Skills and Understanding</p> <p>-area and perimeter -area of triangles -area of parallelogram -volume of a cube. -ratio language -ratio and fractions -calculating ratio -using and calculating scale factors -ratio and proportion problems</p>	<p>Knowledge, Skills and Understanding</p> <p>-read and interpret line graphs -draw line graphs -solve problems using line graphs -read and interpret pie charts -pie charts with percentages -draw pie charts -understanding mean -measuring with a protractor -draw lines and angles accurately -angles on a straight line and around a point -calculate angles -angles in shapes</p>	<p>Knowledge, Skills and Understanding</p> <p>Consolidate all of the skills taught using projects which have been designed to explore maths in real life contexts, allowing children to see how important maths is in all aspects of life. (White Rose consolidation projects)</p>
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				-converting and calculating metric units -miles and kilometers -imperial units		-nets of 3-Dshapes	
		Topic(s) Number: Place Value Number: Addition, Subtraction, Multiplication and Division.	Topic(s) Number: Fractions Geometry: Position and Direction	Topic(s) Number: Decimals Number: Percentages Number: Algebra Measuring: Converting Units	Topic(s) Measurements: Perimeter, Area and Volume Number: Ratio Consolidation	Topic(s) Statistics Geometry: Properties of shape.	Topic(s) Consolidation and themed projects



Whole School Curriculum Plan 2021-2022

Subject: Maths

Year 7

		Autumn Term 2021		Spring Term 2022		Summer Term 2022	
	Year group in class	Term 1	Term 2	Term 3	Term 4	Term 5	Term 6
Newts	7	Knowledge, Skills and Understanding Ordering numbers Relationships between HTO Subtraction rules Giving change Consolidation of prior learning	Knowledge, Skills and Understanding Rules of perimeter Rules of division/multiplication Relationship of 10 and 100 Rules of 0 Consolidation of prior learning	Knowledge, Skills and Understanding Times tables knowledge Different methods for calculations Recognise different approaches Consolidation of prior learning	Knowledge, Skills and Understanding Relationship between FDP Recognising different methods Place value knowledge after the decimal Consolidation of prior learning	Knowledge, Skills and Understanding Place value knowledge Giving change Linking currency to decimals Accuracy when telling time Consolidation of prior learning	Knowledge, Skills and Understanding Using ICT to draw graphs Data collection Data interpretation Shapes in the real world Consolidation of prior learning
		Topic(s) Place Value Addition/Subtraction Money	Topic(s) Length & Perimeter Multiplication & Division	Topic(s) Factors Long multiplication Long division Area	Topic(s) Equivalent Fractions Adding & Subtracting Fractions Decimals Tenths and Hundredths (PV)	Topic(s) Ordering decimals Rounding decimals Adding & subtracting money Telling the time to 5,10,15 mins	Topic(s) Statistics Line graphs Bar charts Pie Charts Properties of shape
Shrews	7	Knowledge, Skills and Understanding Ordering numbers Relationships between HTO Subtraction rules Giving change Consolidation of prior learning	Knowledge, Skills and Understanding Rules of perimeter Rules of division/multiplication Relationship of 10 and 100 Rules of 0 Consolidation of prior learning	Knowledge, Skills and Understanding Times tables knowledge Different methods for calculations Recognise different approaches Consolidation of prior learning	Knowledge, Skills and Understanding Relationship between FDP Recognising different methods Place value knowledge after the decimal Consolidation of prior learning	Knowledge, Skills and Understanding Place value knowledge Giving change Linking currency to decimals Accuracy when telling time Consolidation of prior learning	Knowledge, Skills and Understanding Using ICT to draw graphs Data collection Data interpretation Shapes in the real world Consolidation of prior learning
		Topic(s) Place Value Addition/Subtraction Money	Topic(s) Length & Perimeter Multiplication & Division	Topic(s) Factors Long multiplication Long division Area	Topic(s) Equivalent Fractions Adding & Subtracting Fractions Decimals Tenths and Hundredths (PV)	Topic(s) Ordering decimals Rounding decimals Adding & subtracting money Telling the time to 5,10,15 mins	Topic(s) Statistics Line graphs Bar charts Pie Charts Properties of shape



Year 8

		Autumn Term 2021		Spring Term 2022		Summer Term 2022	
	Year group in class	Term 1	Term 2	Term 3	Term 4	Term 5	Term 6
Voles	8	Knowledge, Skills and Understanding Place Value 4 rules of number Estimation Consolidation of prior learning	Knowledge, Skills and Understanding Fine motor skills (using a ruler) Collecting data Interpret data Recognise properties of shape (in the real world) Consolidation of prior learning	Knowledge, Skills and Understanding Recognise different approaches Multiplication is commutative Division is sharing Parts of a whole Numbers between 0 and 1 Consolidation of prior learning	Knowledge, Skills and Understanding Numbers between 0 and 1 The link between FDP Shopping, discounts, value for money Research skills Consolidation of prior learning	Knowledge, Skills and Understanding Properties of shape Position and direction Using mathematical equipment Precision Consolidation of prior learning	Knowledge, Skills and Understanding Properties of shapes Lateral thinking Spatial awareness Consolidation of prior learning
		Topic(s) Rounding Negative numbers Roman numerals Addition Subtraction Inverse operations	Topic(s) Interpret charts Draw line graphs Read and interpret tables Perimeter of rectangles Finding perimeter Area of rectangles Area of compound shapes	Topic(s) Multiplication Long multiplication Division using bus shelter Division with remainders Equivalent fractions Simplify fractions Order fractions	Topic(s) Decimals as fractions Rounding decimals Ordering decimals Understand percentages Percentages as fractions/decimals Equivalent FDP	Topic(s) Identify angles Measure angles Draw angles Calculate angles on a line, in a triangle, in a quadrilateral and around a point.	Topic(s) Calculate angles and lines Regular and irregular polygons Reasoning in 3D Revision techniques
Hedgehogs	8	Knowledge, Skills and Understanding Place Value 4 rules of number Estimation Consolidation of prior learning	Knowledge, Skills and Understanding Fine motor skills (using a ruler) Collecting data Interpret data Recognise properties of shape (in the real world) Consolidation of prior learning	Knowledge, Skills and Understanding Recognise different approaches Multiplication is commutative Division is sharing Parts of a whole Numbers between 0 and 1 Consolidation of prior learning	Knowledge, Skills and Understanding Numbers between 0 and 1 The link between FDP Shopping, discounts, value for money Research skills Consolidation of prior learning	Knowledge, Skills and Understanding Properties of shape Position and direction Using mathematical equipment Precision Consolidation of prior learning	Knowledge, Skills and Understanding Properties of shapes Lateral thinking Spatial awareness Consolidation of prior learning
		Topic(s) Rounding Negative numbers Roman numerals Addition Subtraction Inverse operations	Topic(s) Interpret charts Draw line graphs Read and interpret tables Perimeter of rectangles Finding perimeter Area of rectangles Area of compound shapes	Topic(s) Multiplication Long multiplication Division using bus shelter Division with remainders Equivalent fractions Simplify fractions Order fractions	Topic(s) Decimals as fractions Rounding decimals Ordering decimals Understand percentages Percentages as fractions/decimals Equivalent FDP	Topic(s) Identify angles Measure angles Draw angles Calculate angles on a line, in a triangle, in a quadrilateral and around a point.	Topic(s) Calculate angles and lines Regular and irregular polygons Reasoning in 3D Revision techniques Consolidation of prior learning



Whole School Curriculum Plan 2021-2022

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Year 9

		Autumn Term 2021		Spring Term 2022		Summer Term 2022	
	Year group in class	Term 1	Term 2	Term 3	Term 4	Term 5	Term 6
Stoats	9	Knowledge, Skills and Understanding Embed algebraic rules Abstract thinking Problem solving Consolidation of prior learning	Knowledge, Skills and Understanding Averages in real life Interpreting data Decimal currency Using units of measurement Converting between units of measurement Consolidation of prior learning	Knowledge, Skills and Understanding Applications of number Fine motor skills (using a ruler) Collecting data Interpret data Recognise properties of shape (in the real world) Consolidation of prior learning	Knowledge, Skills and Understanding Negative numbers in everyday life (temperature, bank balances etc.) The link between FDP Shopping, discounts, value for money Research skills Consolidation of prior learning	Knowledge, Skills and Understanding Using fine motor skills Precision Problem solving Know properties of straight lines, triangles, quadrilaterals.. Consolidation of prior learning	Knowledge, Skills and Understanding Reasoning with number Have mental strategies Use estimation Understanding life is unpredictable Consolidation of prior learning
		Topic(s) Recognise sequences Explain term to term rule Find missing terms Use a function machine Find missing values Generate sequences Collect 'like' terms	Topic(s) Find range Find median Decimal place value Round to 1 significant figure Convert between FDP Use and interpret pie charts	Topic(s) Use formal methods of 4 rules Use mental calculations Decide which operation to use Solve problems using perimeter, area, bar charts, line graphs, tables and timetables. Use standard form	Topic(s) Order negative numbers Manipulate negative numbers Perform calculations across zero Find fractions of amounts Find percentage of amount mentally and with calculator Add and subtract fractions	Topic(s) Classify angles Measure angles Draw angles Construct shapes Find missing angles Solve complex angle problems	Topic(s) Check your answer Use factors to simplify Use Venn diagrams Recognise probability Use prime numbers LCM and HCF
Otters	9	Knowledge, Skills and Understanding Algebraic thinking	Knowledge, Skills and Understanding Averages in real life Interpreting data Decimal currency Using units of measurement Converting between units of measurement Consolidation of prior learning	Knowledge, Skills and Understanding Applications of number Fine motor skills (using a ruler) Collecting data Interpret data Recognise properties of shape (in the real world) Consolidation of prior learning	Knowledge, Skills and Understanding Negative numbers in everyday life (temperature, bank balances etc.) The link between FDP Shopping, discounts, value for money Research skills Consolidation of prior learning	Knowledge, Skills and Understanding Using fine motor skills Precision Problem solving Know properties of straight lines, triangles, quadrilaterals.. Consolidation of prior learning	Knowledge, Skills and Understanding Reasoning with number Have mental strategies Use estimation Understanding life is unpredictable Consolidation of prior learning
		Topic(s) Recognise sequences Explain term to term rule Find missing terms Use a function machine Find missing values Generate sequences Collect 'like' terms	Topic(s) Recognise place value in millions Find range Find median Decimal place value Round to 1 significant figure Convert between FDP Use and interpret pie charts	Topic(s) Use formal methods of 4 rules Use mental calculations Decide which operation to use Solve problems using perimeter, area, bar charts, line graphs, tables and timetables. Use standard form	Topic(s) Order negative numbers Manipulate negative numbers Perform calculations across zero Find fractions of amounts Find percentage of amount mentally and with calculator Add and subtract fractions	Topic(s) Classify angles Measure angles Draw angles Construct shapes Find missing angles Solve complex angle problems	Topic(s) Have mental strategies Use estimation Check your answer Use factors to simplify Use Venn diagrams Recognise probability Use prime numbers LCM and HCF



Whole School Curriculum Plan 2021-2022

Subject: Maths

Year 10

		Autumn Term 2021		Spring Term 2022		Summer Term 2022	
	Year group in class	Term 1	Term 2	Term 3	Term 4	Term 5	Term 6
Badgers	10	Knowledge, Skills and Understanding Proportional reasoning Recognise the "mixture" of recipes, paint, gender, cement. Multi-cultural awareness Method recognition Consolidation of prior learning	Knowledge, Skills and Understanding Representation Fine motor skills Accuracy and precision Link between positive and negative numbers for quadrants Recognise $y=mx+c$ Interpreting data Consolidation of prior learning	Knowledge, Skills and Understanding Algebraic techniques Algebraic terminology Recognising patterns Importance of checking an answer Index laws Consolidation of prior learning	Knowledge, Skills and Understanding Developing number The link between FDP Shopping, discounts, value for money Research skills Recognising use of standard form for very large or very small numbers Consolidation of prior learning	Knowledge, Skills and Understanding Developing geometry Using mathematical equipment Problem solving Understand basic angle rules Recognise pi as a relationship Consolidation of prior learning	Knowledge, Skills and Understanding Reasoning with data Interpreting data Fine motor skills Accuracy and precision Use of data in advertising and possible misuse of data Consolidation of prior learning
		Topic(s) Understand and use ratio notation Divide in a given ratio Express ratios in their simplest integer form Convert between currencies Interpret maps Multiply fractions Divide fractions	Topic(s) Plot in all 4 quadrants Find gradients Draw straight line graphs Use scatter graphs Recognise line of best fit Use frequency tables Use two way tables Find probabilities	Topic(s) Form expressions Expand brackets Factorise expressions Form and solve equations Form and solve inequalities Find the nth term Multiply indices Divide indices	Topic(s) Convert between FDP Calculate % increase Work with percentage change Work in standard form Add and subtract in standard form Multiply and divide in standard form	Topic(s) Work with parallel lines Find missing angles Find properties of polygons Work with pi Find circumference Find area Reflect shapes	Topic(s) Draw and use bar charts, line graphs, pie charts and pictograms. Find averages from them Use frequency tables Find averages from them
Foxes	10	Knowledge, Skills and Understanding Proportional reasoning Recognise the "mixture" of recipes, paint, gender, cement. Multi-cultural awareness Method recognition Consolidation of prior learning	Knowledge, Skills and Understanding Representation Fine motor skills Accuracy and precision Link between positive and negative numbers for quadrants Recognise $y=mx+c$ Interpreting data Consolidation of prior learning	Knowledge, Skills and Understanding Algebraic techniques Algebraic terminology Recognising patterns Importance of checking an answer Index laws Consolidation of prior learning	Knowledge, Skills and Understanding Developing number The link between FDP Shopping, discounts, value for money Research skills Recognising use of standard form for very large or very small numbers Consolidation of prior learning	Knowledge, Skills and Understanding Developing geometry Using mathematical equipment Problem solving Understand basic angle rules Recognise pi as a relationship Consolidation of prior learning	Knowledge, Skills and Understanding Reasoning with data Interpreting data Fine motor skills Accuracy and precision Use of data in advertising and possible misuse of data Consolidation of prior learning
		Topic(s) Understand and use ratio notation Divide in a given ratio Express ratios in their simplest integer form Convert between currencies Interpret maps Multiply fractions Divide fractions	Topic(s) Plot in all 4 quadrants Find gradients Draw straight line graphs Use scatter graphs Recognise line of best fit Use frequency tables Use two way tables Find probabilities	Topic(s) Form expressions Expand brackets Factorise expressions Form and solve equations Form and solve inequalities Find the nth term Multiply indices Divide indices	Topic(s) Convert between FDP Calculate % increase Work with percentage change Work in standard form Add and subtract in standard form Multiply and divide in standard form	Topic(s) Work with parallel lines Find missing angles Find properties of polygons Work with pi Find circumference Find area Reflect shapes	Topic(s) Draw and use bar charts, line graphs, pie charts and pictograms. Find averages from them Use frequency tables Find averages from them



Whole School Curriculum Plan 2021-2022

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Year 11

		Autumn Term 2021		Spring Term 2022		Summer Term 2022	
	Year group in class	Term 1	Term 2	Term 3	Term 4	Term 5	Term 6
Boars	11	Knowledge, Skills and Understanding Reasoning with algebra Working with graphs Recognise $y = mx + c$ Problem solving Checking answers Consolidation of prior learning	Knowledge, Skills and Understanding Constructing in 2D & 3D Fine motor skills Accuracy and precision Problem solving Spatial awareness Consolidation of prior learning	Knowledge, Skills and Understanding Reasoning with number The link between FDP Shopping, discounts, value for money Research skills Everyday bills and responsibilities Problem solving Consolidation of prior learning	Knowledge, Skills and Understanding Reasoning with Geometry Problem solving Working with transformations Trigonometry methods and rules Consolidation of prior learning	Knowledge, Skills and Understanding Revision Exam techniques	Knowledge, Skills and Understanding
		Topic(s) Find gradients Solve equations With variables on both sides Rearrange formulae Expand a pair of binomials	Topic(s) Recognise 2D & 3D shapes Draw nets of shapes Find area of 2D shapes Find surface area of 3D shapes Find volume Work with Loci Constructions	Topic(s) Solve problems with Fractions Solve functional problems Work out percentage change Interest Tax Wages	Topic(s) Use a chain of reasoning Rotations Translations Enlargements Right angled triangles Pythagoras' theorem	Topic(s) Pupil led consolidation	Topic(s)
Deer	11	Knowledge, Skills and Understanding Reasoning with algebra Working with graphs Recognise $y = mx + c$ Problem solving Checking answers Consolidation of prior learning	Knowledge, Skills and Understanding Constructing in 2D & 3D Fine motor skills Accuracy and precision Problem solving Spatial awareness Consolidation of prior learning	Knowledge, Skills and Understanding Reasoning with number The link between FDP Shopping, discounts, value for money Research skills Everyday bills and responsibilities Problem solving Consolidation of prior learning	Knowledge, Skills and Understanding Reasoning with Geometry Problem solving Working with transformations Trigonometry methods and rules Consolidation of prior learning	Knowledge, Skills and Understanding Revision Exam techniques	Knowledge, Skills and Understanding
		Topic(s) Find gradients Solve equations With variables on both sides Rearrange formulae Expand a pair of binomials	Topic(s) Recognise 2D & 3D shapes Draw nets of shapes Find area of 2D shapes Find surface area of 3D shapes Find volume Work with Loci Constructions	Topic(s) Solve problems with Fractions Solve functional problems Work out percentage change Interest Tax Wages	Topic(s) Use a chain of reasoning Rotations Translations Enlargements Right angled triangles Pythagoras' theorem	Topic(s) Pupil led consolidation	Topic(s)