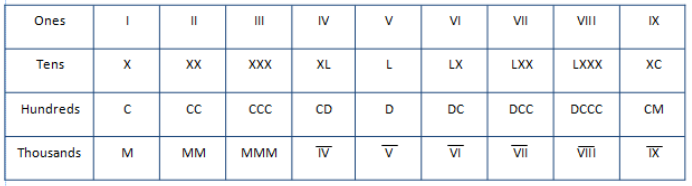
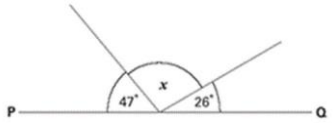
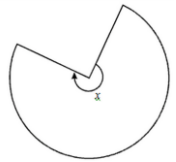
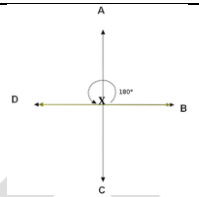
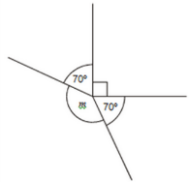
Maths Meetings

Autumn	Suggested topics	Suggested ideas
Calendar maths	• Time, day, date and year • Record the year in Roman numerals • **Number of days in each year, including leap years** • Record the temperature in degree Celsius • Record and compare weather patterns using tables and graphs	• **Rhyme on the months of the year: '30 days hath September, April, June and November…'** • Display the year using both digits and Roman numerals • Roman numeral of the day – (could correspond to the date); change the number by adding one more or less. Use chart below to write down four digit numbers and years  • Compile weather data using a bar chart • Record the daily temperature using a line graph • Compile total weekly rainfall data in ml
Number	• **Distinguish between prime and composite numbers up to 19** • Establish whether a number up to 100 is prime • **Count in multiples of 6, 8, 50, 100 and 1000** • **Multiplication and division tables up to 12 × 12** • **Count backwards through zero to include negative numbers** • **Count forwards and backwards in fractions of the same denominator** • Add and subtract fractions with the same denominator • Convert mixed numbers to improper fractions and vice versa • Multiply proper fractions and mixed number by whole numbers • Read decimal numbers as fractions	• Transum – 'A very strange game'. (recognising square numbers, prime numbers, multiples and odd numbers) http://www.transum.org/software/SW/Starter_of_the_day/starter_March29.asp • **Skip counting songs** • Number of the day (including negative numbers) – count on and back in tens; multiply by 6; reverse the digits; make the largest or smallest number possible by rearranging the digits • $\frac{2}{5}+\frac{4}{5}=\frac{6}{5}$. What is it as a mixed number? • What decimal is equal to 25 hundredths? • Write these numbers in order of size, starting with the smallest. 1.01, 1.001, 1.101, 0.11 • Circle the fractions that are equivalent to 0.6: $\frac{6}{10}, \frac{1}{60}, \frac{60}{100}, \frac{1}{6}$ • Use a dice to generate two decimal numbers of different lengths. As a class decide which is bigger/smaller

Ones	I	II	III	IV	V	VI	VII	VIII	IX
Tens	X	XX	XXX	XL	L	LX	LXX	LXXX	XC
Hundreds	C	CC	CCC	CD	D	DC	DCC	DCCC	CM
Thousands	M	MM	MMM	$\overline{IV}$	$\overline{V}$	$\overline{VI}$	$\overline{VII}$	$\overline{VIII}$	$\overline{IX}$

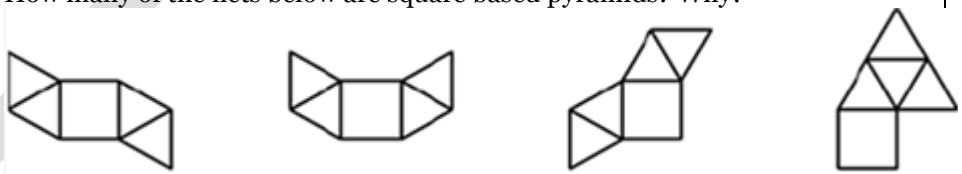
	• Decimal notation of tenths and hundredths using place value board • Read, order and compare number with up to three decimal places • Multiply and divide whole number and those involving decimals by 10, 100, and 1000 • Round decimals with two decimal places to the nearest whole number and to one decimal place • Find percentages of whole numbers • Write percentages as fraction with denominator 100, and as a decimal • Add and subtract three-digit and four-digit numbers mentally • Recognise and use factor pairs and commutativity in mental calculations • Recognise and use square numbers and cube numbers and notation for squared (^{2}) and cubed (^{3})	• True/False. The answer to 0.003 x 1000 is bigger than 0.3 x 100 • 30% of 60 is equal to ___? 30% of ___ is equal to 60. • How can you use factors to multiply 16 by 12? • Using a number that has at least 6 factors (e.g. 48), look at how many multiplication and division facts you can find. What facts involving decimals can you derive? • Find two square numbers that total 45
Data handling and representation	• Complete, read and interpret information in tables, including timetables • Solve comparison, sum and difference problems using information presented in a line graph, bar chart, pictogram, table or other graph • Interpret and present discrete and continuous data using appropriate graphical methods including bar charts and time graphs	• Use ITP data handling resources to create and then interpret charts and graphs http://www.taw.org.uk/lic/itp/line_graph.html • Temperature and rainfall line graphs – keep for comparison purposes • A time graph could be compiled when several line graphs have been formed
Coordinates, shape and symmetry	• Know and use the angles at a point/full turn add up to 360° • Know and use the angles on a straight line/half turn add up to 180° • Know and use other multiples of 90° • Use the properties of rectangles to deduce related facts and find missing lengths and angles • Describe positions in the first quadrant of a 2D grid as coordinates • Plot specific points and draw sides to complete a	• Calculate the size of these angles: (not drawn accurately)  

	given polygon • Distinguish between regular and irregular polygons based on reasoning about equal sides and angles. • Compare and classify geometric shapes, including quadrilaterals and triangles, based on their properties and sizes • Estimate, in degrees, the size of a given acute or obtuse angle • Identify 3-D shapes from 2-D representations • Estimate and compare acute, obtuse and reflex angles • Identify, describe and represent the position of a shape following a reflection or translation and know that the shape has not changed	  • Partly label a rectangle. Using its properties complete any missing dimensions or angles. • Plot and read coordinates on a graph using x and y axes in the first quadrant • Angle guesser game: http://www.primaryresources.co.uk/online/angle.swf • Online angle game: http://nrich.maths.org/1235 • Identify what has happened to the shape, can you describe the reflection, rotation or translation. http://www.bbc.co.uk/bitesize/ks2/maths/shape_space/transformation/play/
Measure: capacity, volume, weight and money	• Use approximate equivalences between metric units and common imperial units focusing on kg → lbs, inches → cm and vice versa • Solve simple measure and money problems involving fractions and decimal fractions to two decimal places • Estimate, compare and calculate different measures including money in pounds and pence • Convert units of measurement: l to ml and vice versa, g to kg and vice versa • Estimate volume using 1 cm^3 blocks	• A bag of sugar weighs 1kg. Approximately how many pounds (lbs) is that equal to? • Which is longer – 3 cm or 3 inches? • Recall dividing by 10, 100 and 1000 when converting units • Use different containers to estimate and check volume e.g. 'higher or lower' game using the containers – I guess the next container to have a higher, lower volume
Length	• Measure and calculate the perimeter of a rectilinear figure in cm and m • Convert units of measurement e.g. m to cm, km to m • Find the areas of rectilinear shapes by counting squares	• Put these amounts in order starting with the largest: 13 000 cm, 1.2 km, 13 m • Recall dividing by 10, 100 and 1000 when converting units

Time	• Convert between units of time • Read and convert time between analogue, digital, 12-hour and 24- hour clocks • Solve problems involving converting between units of time	• Order these lengths of time starting with the longest: 62 minutes, 1 hour 1 minutes, 3600 seconds. • Use timetables in various formats (12 or 24 hour; digital or analogue) and solve problems based on them • Display analogue and digital clocks and convert from one to the other http://www.visnos.com/demos/clock. Answers can be hidden and displayed.

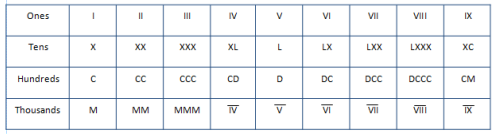
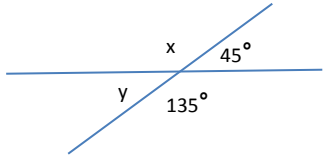
Autumn 2	Suggested topics	Suggested ideas
Calendar maths	• Time, day, date and year • Record the year in Roman numerals • **Number of days in each year, including leap years** • Record the temperature in degree Celsius • Record and compare weather patterns using tables and graphs	• **Rhyme on the months of the year: '30 days hath September, April, June and November…'** • Display the year using both digits and Roman numerals • Roman numeral of the day – (could correspond to the date); change the number by adding one more or less. • Compile weather data using a bar chart • Record the daily temperature using a line graph • Compile total weekly rainfall data in ml
Number	NEW FOR AUTUMN 2: • Read, write, order and compare numbers up to 10,000,000 and determine the value of each digit. • Round any whole number to a required degree of accuracy • Generate and describe linear number sequences • Recognise and write decimal equivalents to $\frac{1}{4}$, $\frac{1}{2}$, and $\frac{3}{4}$ and any number of tenths or hundredths • Compare and order fractions whose denominators are all multiples of the same number • Find percentages and fractions of whole numbers • Use negative number in context and calculate intervals across zero Also, continue to consolidate **all** previous material, especially: • **Distinguish between prime and composite**	• Use a large dice to generate 6, 7 and 8 digit numbers. Can we say this number in words? How would we write it? • Rounding any number up to 1,000,000 to the nearest 10, 100, 1000, 10 000, and 100, 000. • Place these fractions on a numberline between 0 and 1. Which two fractions have the same value or which would be the odd one out: $\frac{6}{10}, \frac{3}{5}, \frac{18}{20}, \frac{9}{15}$ • Circle the fractions that are equivalent to 0.6: $\frac{6}{10}, \frac{1}{60}, \frac{60}{100}, \frac{1}{6}$ • What decimal is equal to 25 hundredths? • How many halves in $1\frac{1}{2}$, $3\frac{1}{2}$, $9\frac{1}{2}$? • Which is bigger 65% or $\frac{3}{4}$? (of the same amount) • 30% of 60 is equal to ___? $\frac{3}{10}$ of ___ is equal to 60. • What is $\frac{3}{10}$ of 50, 20, 100? • What is the temperature in (location) today? In Canada it is 25 degrees colder,

	numbers up to 19 • Establish whether a number up to 100 is prime • **Count in multiples of 7, 9, 25, 100 and 1000** • **Multiplication and division tables up to 12 × 12** • Add and subtract fractions with the same denominator • Convert mixed numbers to improper fractions and vice versa • Multiply proper fractions and mixed number by whole numbers • Multiply and divide whole number and those involving decimals by 10, 100, and 1000 • Read, order and compare number with up to three decimal places • Add and subtract three-digit and four-digit numbers mentally • Recognise and use factor pairs and commutativity in mental calculations • Recognise and use square numbers and cube numbers and notation for squared (^{2}) and cubed (^{3})	what temperature is it? • Transum – 'A very strange game'. (recognising square numbers, prime numbers, multiples and odd numbers) http://www.transum.org/software/SW/Starter_of_the_day/starter_March29.asp • **Skip counting songs** • $\frac{2}{5}+\frac{4}{5}=\frac{6}{5}$. What is it as a mixed number? • Understand that $\frac{1}{3}$ *of* 12, $\frac{1}{3}\times$ 12, and 12 ÷ 3 are equivalent • True/False. The answer to 0.003 x 1000 is bigger than 0.3 x 100 • Write these numbers in order of size, starting with the smallest. 1.01, 1.001, 1.101, 0.11 • Comparing decimals. Use a dice to generate two decimal numbers of different lengths (filling in the gaps on a template on the board). As a class decide which one is biggest/smallest • How can you use factors to multiply 16 by 12? • Using a number that has at least 6 factors (e.g. 48), look at how many multiplication and division facts you can find. What facts involving decimals can you derive? • Find two square numbers that total 45
Data handling and representation	• Complete, read and interpret information in tables, including timetables • Solve comparison, sum and difference problems using information presented in a line graph, bar chart, pictogram, table or other graph • Interpret and present discrete and continuous data using appropriate graphical methods including bar charts and time graphs	• Use ITP data handling resources to create and then interpret charts and graphs http://www.taw.org.uk/lic/itp/line_graph.html • Temperature and rainfall line graphs – keep for comparison purposes • A time graph could be compiled when several line graphs have been formed
Coordinates, shape and symmetry	NEW FOR AUTUMN 2: • Describe positions in all four quadrants of a 2D grid as coordinates • Plot specific points in all four quadrants and draw sides to complete a given polygon	• Plot and read coordinates on a graph using *x* and *y* axes in all quadrants • Angle guesser game: http://www.primaryresources.co.uk/online/angle.swf • Online angle game: http://nrich.maths.org/1235 • Online game. Which 3D shape would the net make? Can you name it? http://www.sadlier-

	• Estimate and compare acute, obtuse and reflex angles • Identify 3-D shapes from simple nets Also, continue to consolidate all previous material, especially: • Know and use the angles at a point/full turn add up to 360° • Know and use the angles on a straight line/half turn add up to 180° • Know and use other multiples of 90° • Use the properties of rectangles to deduce related facts and find missing lengths and angles • Distinguish between regular and irregular polygons based on reasoning about equal sides and angles. • Compare and classify geometric shapes, including quadrilaterals and triangles, based on their properties and sizes • Identify, describe and represent the position of a shape following a reflection or translation and know that the shape has not changed	oxford.com/math/enrichment/gr4/EN0411b/EN0411b.htm • I am thinking of a 3D shape. It has a square base. It has four other faces which are triangles. What is the name of the 3D shape?' • How many of the nets below are square based pyramids? Why?  *Image taken from https://www.ncetm.org.uk/resources/42857 • If there are six equal angles around a point, what size are each of the angles? • The angles around a point are split equally so that each angle is 24°. How many equal angles are there?' • Partly label a rectangle. Using its properties complete any missing dimensions or angles. • What shape is in the bag? Pupil to describe without looking. Extended to include irregular polygons (e.g. it has five sides that are all different lengths) • Identify what has happened to the shape, can you describe the reflection, rotation or translation. http://www.bbc.co.uk/bitesize/ks2/maths/shape_space/transformation/play/
Measure: capacity, volume, weight and money	• Use approximate equivalences between metric units and common imperial units focusing on grams → ounces, litres → gallons/pints and vice versa • Solve simple measure and money problems involving fractions and decimal fractions to two decimal places • Estimate, compare and calculate different measures including money in pounds and pence • Convert units of measurement: l to ml and vice versa, g to kg and vice versa • Estimate volume using 1 cm^3 blocks	• A bottle contains 2 litres of fizzy drink. Approximately how many pints is that equal to? • Which is longer – 3 cm or 3 inches? • Recall dividing by 10, 100 and 1000 when converting units • Use different containers to estimate and check volume e.g. 'higher or lower' game using the containers – I guess the next container to have a higher, lower volume • Fill a small container with 1 cm^3 blocks, use this to estimate the volume

Length	• Measure and calculate the perimeter of a rectilinear figure in cm and m • Convert units of measurement e.g. m to cm, km to m • Find the areas of rectilinear shapes by counting squares	• Put these amounts in order starting with the largest: 130 000 cm, 1.2 m, 13 m • Recall dividing by 10, 100 and 1000 when converting units
Time	• Convert between units of time • Read and convert time between analogue, digital, 12-hour and 24- hour clocks • Solve problems involving converting between units of time	• Order these lengths of time starting with the longest: 62 minutes, 1 hour 1 minutes, 3600 seconds • Use timetables in various formats (12 or 24 hour; digital or analogue) and solve problems based on them • Display analogue and digital clocks and convert from one to the other http://www.visnos.com/demos/clock. Answers can be hidden and displayed.

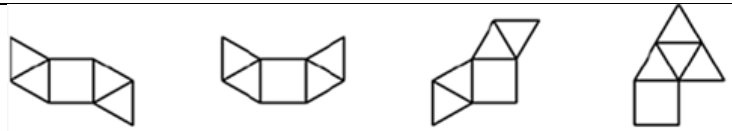
Spring	Suggested topics	Suggested ideas
Calendar maths	• Time, day, date and year • Record the year in Roman numerals • **Number of days in each year, including leap years** • Record the temperature in degree Celsius • Describe how to calculate the mean temperature of the week so far. • Record and compare weather patterns using tables and graphs	• **Rhyme on the months of the year: '30 days hath September, April, June and November…'** • Display the year using both digits and Roman numerals • Roman numeral of the day – (could correspond to the date); change the number by adding one more or less. • Compile weather data using a bar chart • Record the daily temperature using a line graph (work out the mean using a calculator) • Compile total weekly rainfall data in ml
Number	NEW FOR SPRING: • Calculate and interpret the mean as an average • Identify common factors, common multiples and prime numbers • Perform mental calculations including with mixed operations and large numbers • Express missing number problems algebraically • Find pairs of numbers that satisfy an equation with two unknowns • Use their knowledge of the order of operations to carry out calculations involving the four operations • Use estimation to check answers to calculations and determine, in the context of a problem an appropriate degree of accuracy Also, continue to consolidate **all** previous material, especially: • **Count in multiples of 7, 9, 25, 100 and 1000** • **Multiplication and division tables up to 12 ×**	• Calculate the mean from a list of data [5,6,5,4,7,3] • Using a number that has at least 6 factors e.g. 48 look at how many multiplication and division facts you can make using what you know about the number. What facts involving decimals can you derive? • Below are five cards. The sum of all five cards is 30. A and B stand for two different whole numbers. What could be possible values of A and B?  *Image taken from https://www.ncetm.org.uk/resources/42894] • Use a large dice to generate 6, 7 and 8 digit numbers. Can we say this number in words? How would we write it? • A bag of rice weighs 999 grams, roughly how much does 8 bags of rice way? • **Skip counting songs** • Number of the day (including negative numbers) – count on and back in tens; multiply by 6; reverse the digits; make the largest or smallest number possible by rearranging the digits; • What is the temperature in (location) today? In Canada it is 25 degrees colder, what temperature is it?

	12 • Use negative number in context and calculate intervals across zero • Read, write, order and compare numbers up to 10,000,000 and determine the value of each digit. • Round any whole number to a required degree of accuracy • Recognise and write decimal equivalents to $\frac{1}{4}$, $\frac{1}{2}$, and $\frac{3}{4}$ and any number of tenths or hundredths • Convert mixed numbers to improper fractions and vice versa • Multiply proper fractions and mixed number by whole numbers • Read Roman numerals to 1000 and recognise years written in Roman numerals	• Use a large dice to generate 6, 7 and 8 digit numbers. Can we say this number in words? How would we write it? • Use a dice to generate two decimal numbers of different lengths. As a class decide which is bigger/smaller • Rounding any number up to 1,000,000 to the nearest 10, 100, 1000, 10 000, and 100, 000. • Place these fractions on a numberline between 0 and 1. Which two fractions have Circle the fractions that are equivalent to 0.6: $\frac{6}{10}$, $\frac{1}{60}$, $\frac{60}{100}$, $\frac{1}{6}$ • How many halves in $1\frac{1}{2}$, $3\frac{1}{2}$, $9\frac{1}{2}$? • Understand that $\frac{1}{3}$ *of* 12, $\frac{1}{3} \times 12$, and $12 \div 3$ are equivalent • Use chart below to help write four digit numbers in numerals. 
Data handling and representation	• Complete, read and interpret information in tables, including timetables • Solve comparison, sum and difference problems using information presented in a line graph, bar chart, pictogram, table or other graph • Interpret and present discrete and continuous data using appropriate graphical methods including bar charts and time graphs	• Use ITP data handling resources to create and then interpret charts and graphs http://www.taw.org.uk/lic/itp/line_graph.html • Temperature and rainfall line graphs – keep for comparison purposes • A time graph could be compiled when several line graphs have been formed
Coordinates, shape, geometry and symmetry	NEW FOR SPRING: • Illustrate and name parts of circles, including radius, diameter and circumference • Know that the diameter is twice the radius • Recognise angles where they meet at a point, are on a straight line or are vertically opposite, and find missing angles • Compare and classify geometric shapes based on their properties and sizes and find unknown angles in any triangles, quadrilaterals , and regular	• The distance around the edge of my circle is 25cm. What is the mathematical name for this? • If the circle has a diameter of 10cm, how big is its radius? • Using your knowledge about angle facts can you calculate x and y?  • Online game. Which 3D shape would the net make? Can you name it?

	polygons Also continue to consolidate all precious material especially: • Identify 3-D shapes from simple nets • Describe positions in all four quadrants of a 2D grid • Know and use the angles at a point/full turn add up to 360° • Know and use the angles on a straight line/half turn add up to 180° • Know and use other multiples of 90° • Distinguish between regular and irregular polygons based on reasoning about equal sides and angles. • Estimate and compare acute, obtuse and reflex angles • Identify, describe and represent the position of a shape following a reflection or translation and know that the shape has not changed	http://www.sadlier-oxford.com/math/enrichment/gr4/EN0411b/EN0411b.htm • How many of the nets below are square based pyramids? Why?  *Image taken from https://www.ncetm.org.uk/resources/42857 • Plot and read coordinates on a graph using *x* and *y* axes in all quadrants • If there are six equal angles around a point, what size are each of the angles? • The angles around a point are split into equal angles, where each angle is 24°. How many equal angles are there?' • Identify what has happened to the shape, can you describe the reflection, rotation or translation. http://www.bbc.co.uk/bitesize/ks2/maths/shape_space/transformation/play/
Measure: capacity, volume, weight and money	• Use approximate equivalences between metric and imperial units, such as inches, pounds (weight) and pints • Solve simple measure and money problems involving fractions and decimal fractions to two decimal places • Estimate, compare and calculate different measures including money in pounds and pence • Convert units of measurement: l to ml and vice versa, g to kg and vice versa • Estimate volume using 1 cm^3 blocks	• A bag of sugar weighs 1kg. Approximately how many pounds (lbs) is that equal to? • Which is longer – 3 cm or 3 inches? • Recall dividing by 10, 100 and 1000 when converting units • Use different containers to estimate and check volume e.g. 'higher or lower' game using the containers – I guess the next container to have a higher, lower volume
Length	Continue to consolidate **all** previous material especially: • Measure and calculate the perimeter of a rectilinear figure in cm and m • Convert units of measurement e.g. m to cm, km to m	• Put these amounts in order starting with the largest: 1.3km, 130cm,130 m • Recall dividing by 10, 100 and 1000 when converting units

	• Find the areas of rectilinear shapes by counting squares	
Time	NEW FOR SPRING: • Convert between units of time Continue to consolidate **all** previous material especially: • Read and convert time between analogue, digital, 12-hour and 24- hour clocks • Solve problems involving converting between units of time	• Order these lengths of time starting with the longest: 62 minutes, 1 hour 1 minutes, 3600 seconds. • Use timetables in various formats (12 or 24 hour; digital or analogue) and solve problems based on them • Display analogue and digital clocks and convert from one to the other

Summer	Suggested topics	Suggested ideas
Calendar maths	• Time, day, date and year • Record the year in Roman numerals • **Number of days in each year, including leap years** • Record the temperature in degree Celsius • Describe how to calculate the mean temperature of the week so far (answer using a calculator) • Record and compare weather patterns using tables and graphs	• **Rhyme on the months of the year: '30 days hath September, April, June and November…'** • Display the year using both digits and Roman numerals • Roman numeral of the day – (could correspond to the date); change the number by adding one more or less. • Compile weather data using a bar chart • Record the daily temperature using a line graph • Compile total weekly rainfall data in ml
Coordinates, shape and symmetry	NEW FOR SUMMER • Solve problems involving similar shapes where the scale factor is known or can be found • Recognise that shapes with the same areas can have different perimeters and vice versa • Recognise when it is possible to use formula for area and volume of shapes • Calculate the area of parallelograms and triangles Also continue to consolidate **all** precious material especially: • Illustrate and name parts of circles, including radius, diameter and circumference • Know that the diameter is twice the radius	• Calculating area of parallelograms and triangles. Identify and measure the perpendicular height on different shapes, then use this to calculate the measurement. • The distance around the edge of my circle is 25cm. What is the mathematical name for this? • If the circle has a diameter of 10cm, how big is its radius? • Online game. Which 3D shape would the net make? Can you name it? http://www.sadlier-oxford.com/math/enrichment/gr4/EN0411b/EN0411b.htm • How many of the nets below are square based pyramids? Why?

	• Identify 3-D shapes from simple nets or 2D representations • Describe positions on the full coordinate grid (all four quadrants) • Using key angle rules e.g. angles around a point/full turn add up to 360 • Identify, describe and represent the position of a shape following a reflection or translation and know that the shape has not changed • Compare and classify geometric shapes based on their properties and sizes and find unknown angles in any triangles, quadrilaterals , and regular polygons	 *Image taken from https://www.ncetm.org.uk/resources/42857 • Plot and read coordinates on a graph using x and y axes in all quadrants • If there are six equal angles around a point, what size are each of the angles? • The angles around a point are split into equal angles, where each angle is 24°. How many equal angles are there?' • Label a rectangle with all dimensions and angles. Cover some of these. Can you work out what is underneath? • Identify what has happened to the shape, can you describe the reflection, rotation or translation.http://www.bbc.co.uk/bitesize/ks2/maths/shape_space/transformation/play/
Number	NEW FOR SUMMER: • Use common factors to simplify fractions; use common multiples to express fractions in the same denomination • Compare and order fractions, including fractions > 1 • Generate and describe linear number sequences (with fractions) • Add and subtract fractions with different denominators and mixed numbers, using the concept of equivalent fractions. • Multiply simple pairs of proper fractions, writing the answer in its simplest form • Divide proper fractions by whole numbers [for example, $\frac{1}{3} \div 2 = \frac{1}{6}$] • Recall and use equivalences between simple fractions,decimals and percentages, including different contexts. • Identify the value of each digit in numbers given to three decimal places and multiply and divide numbers by 10, 100 and 1000 giving answers up to three	• Order the following fractions using knowledge of common factors and multiples $\frac{6}{10}, \frac{4}{5}, \frac{3}{15}, \frac{20}{15}$ • Using knowledge of equivalent fractions to add fractions with different denominators e.g. $\frac{1}{4} + \frac{1}{2} = \frac{1}{4} + \frac{2}{4}$ • Place these fractions on a numberline between 0 and 1. Which two fractions have the same value or which would be the odd one out: $\frac{6}{10}, \frac{3}{5}, \frac{18}{20}, \frac{9}{15}$ • Multiplying fractions giving answers in their simplest form [e.g, $\frac{1}{4} \times \frac{1}{2} = \frac{1}{8}$] • Use worded problems to understand dividing proper fractions by whole numbers. For example, "If you share $\frac{1}{2}$ a pizza between two people, how much of a pizza would each person get?" Extend to examples such as $\frac{3}{4}$ of a pizza with 4 people • Which of the following are equivalent? $\frac{6}{10}$, 55%, 6% 0.6, $\frac{60}{100}$, 60% • Circle the fractions that are equivalent to 0.6: $\frac{6}{10}, \frac{1}{60}, \frac{60}{100}, \frac{1}{6}$ • Which is bigger 65% or $\frac{3}{4}$? (of the same amount) • Use a large dice to generate a decimal value. What is the value of each number?

	decimal places Also, continue to consolidate **all** previous material, especially: • **Count in multiples of 7, 9, 25, 100 and 1000** • **Multiplication and division tables up to 12 × 12** • Use negative number in context and calculate intervals across zero • Calculate and interpret the mean as an average • Perform mental calculations including with mixed operations and large numbers • Find pairs of numbers that satisfy an equation with two unknowns • Use their knowledge of the order of operations to carry out calculations involving the four operations • Multiply proper fractions and mixed number by whole numbers	• **Skip counting songs** • What is the temperature in (location) today? In Canada it is 25 degrees colder, what temperature is it? • Calculate the mean from a list of data [5,6,5,4,7,3] • Using a number that has at least 6 factors e.g. 48 look at how many multiplication and division facts you can make using what you know about the number. What facts involving decimals can you derive? • Below are five cards. The sum of all five cards is 30. A and B stand for two different whole numbers. What could be possible values of A and B?  *Image taken from https://www.ncetm.org.uk/resources/42894 • Simple calculations involving a combination of the four operations [e.g. 3 + 4 x 2]
Data handling and representation	NEW FOR SUMMER: • Interpret pie charts, and use these to solve problems Also, continue to consolidate **all** previous material, especially: • Complete, read and interpret information in tables, including timetables • Solve comparison, sum and difference problems using information presented in a line graph, bar chart, pictogram, table or other graph • Interpret and present discrete and continuous data using appropriate graphical methods including bar charts and time graphs	• Use ITP data handling resources to create and then interpret charts and graphs http://www.taw.org.uk/lic/itp/line_graph.html • Temperature and rainfall line graphs – keep for comparison purposes • A time graph could be compiled when several line graphs have been formed
Measure: capacity, volume, weight and money	NEW FOR SUMMER: • Use read and write standard units of measure • Convert standards units of length, mass, volume and time from a smaller unit of measure to a larger unit of measure, and vice versa • Convert between miles and kilometres • Estimate and compare volume of cubes and cuboids	• Fill in the gaps in a sentence with the most appropriate unit. For example Pupil A is 132 ___ tall. • Match the written form of the unit to its full name name. (Time this and try to complete in in less than 1 minute) • A bag of sugar weighs 1kg. Approximately how many pounds (lbs) is that equal to? • Which is longer – 3 cm or 3 inches?

	using standard units including cubic centimetres and cubic meters Also, continue to consolidate **all** previous material, especially: • Solve simple measure and money problems involving fractions and decimal fractions to two decimal places • Estimate, compare and calculate different measures including money in pounds and pence • Convert units of measurement: l to ml and vice versa, g to kg and vice versa • Use approximate equivalences between metric and imperial units, such as inches, pounds (weight) and pints • Estimate volume using 1 cm^3 blocks	• Use a conversion graph to convert between miles and kilometres • Recall dividing by 10, 100 and 1000 when converting units • Use different containers to estimate and check volume e.g. 'higher or lower' game using the containers – I guess the next container to have a higher, lower volume
Length	Continue to consolidate **all** previous material especially: • Measure and calculate the perimeter of a rectilinear figure in cm and m • Convert units of measurement e.g. m to cm, km to m • Find the areas of rectilinear shapes by counting squares	• Put these amounts in order starting with the largest: 130 000 cm^2, 1.2 m^2, 13 m^2 • Recall dividing by 10, 100 and 1000 when converting units
Time	NEW FOR SUMMER: • Convert between units of time Continue to consolidate **all** previous material especially: • Read and convert time between analogue, digital, 12-hour and 24- hour clocks • Solve problems involving converting between units of time	• Order these lengths of time starting with the longest: 62 minutes, 1 hour 1 minutes, 3600 seconds. • Use timetables in various formats (12 or 24 hour; digital or analogue) and solve problems based on them • Display analogue and digital clocks and convert from one to the other