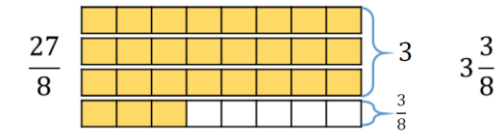
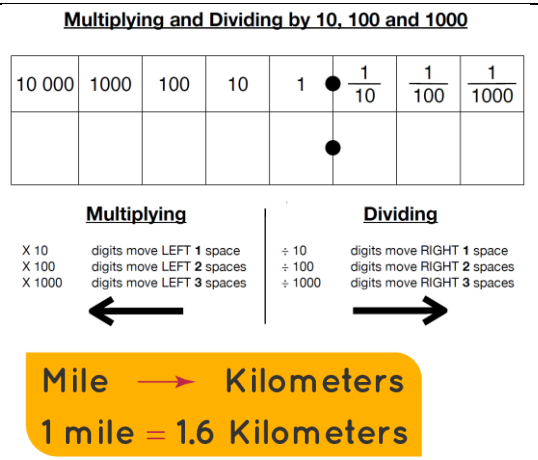
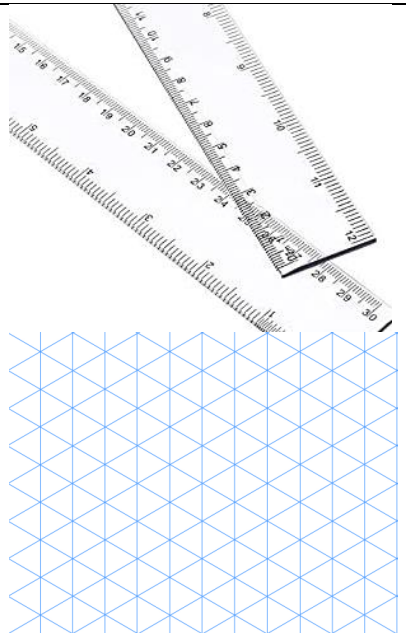
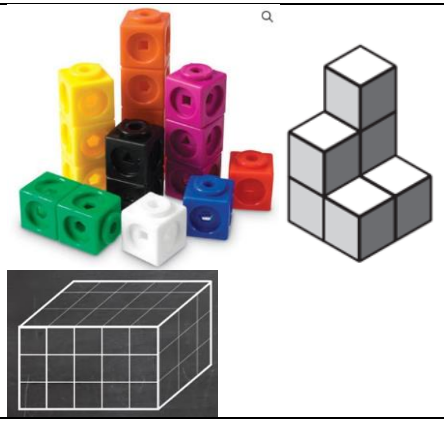
Captain Webb Primary School medium term plan

Year 6

Autumn 2	Strand	Number of weeks	Ready to Progress (Based on National Curriculum objectives)	Key areas of knowledge (small steps in learning)	Resources and methods (Calculation policy)
	Fractions: + and –	2	• Knows how to add and subtract fractions with different denominators and mixed numbers by identifying and finding equivalent fractions with the same denominator. • Knows how to compare and order fractions	• I know how to find equivalent fractions • I know how to simplify fractions using common factors and common multiples • I know how to place fractions on a number line • I know how to order and compare fractions • I know how to count forward and backwards in different fractions bridging whole numbers • I know how to add and subtract fractions with the same and different denominators • I know how to add mixed number fractions • I know how to subtract mixed number fractions	Tommy converts the improper fraction $\frac{27}{8}$ into a mixed number using bar models.  Use Tommy's method to convert $\frac{25}{8}$, $\frac{27}{6}$, $\frac{18}{7}$ and $\frac{32}{4}$ Aisha uses a bar model to help work out $1\frac{3}{5} + 2\frac{1}{5} = 3\frac{4}{5}$ 

	Measure: Units of Measure	2	• Knows that approximately 5 miles = 8 kilometres. • Knows how to use, read, write and convert between standard units of length, mass and volume. • Knows approximate conversions of imperial/metric units.	• I know the most appropriate units of measure in context (including tonnes for mass) • I know how to multiply and divide a number by 10, 100 and 1,000 • I know how many grams are in a kilogram and how many kilograms are in a tonne • I know many millilitres are in a litre • I know how to convert between units of length • I know 5 miles is approximately equal to 8 kilometres • I know some approximate conversions of imperial measurements	
	Measure: Area, Perimeter and Volume	2	• Knows how to recognise that shapes with the same area can have different perimeters and vice versa. • Knows how to calculate, estimate and compare volume of cubes and cuboids using the formula *l x b x h* • Knows how to calculate the area of parallelograms and triangles.	• I know that shapes can look different but still have the same area. • I know the formula for area and perimeter and can use it to find the area and perimeter of rectangles and rectilinear shapes. • I know how to calculate the area of a right-angled triangle • I know how to calculate the area of any triangle • I know how to solve problems which involve the area of a triangle • I know how to calculate the area of a parallelogram	

				• I know how to find the volume of a shape that is in cubic units. • I know how to find the volume of a cube or cuboid	

Problem solving and Reasoning

Autumn 2	Strand	Number of lessons	Ready to Progress (Based on National Curriculum objectives)	Key areas of knowledge (small steps in learning)	Resources and methods
	Logic	2	• I know where the most useful information is. • I know how to find the generalisations and rules. • I know that some information can be eliminated. • I know the best way present the solution. • I know when I have answered the question fully.	•	

House points

How many house points did each child in Grey House receive?

Usha	Sally	Tom
Anne	Sanjay	Jeremy
Sue	Bob	Pete

- At the end of the year the 9 children in Grey House all received some house points.
- The children's house points are consecutive numbers.
- The total house points for Grey House was 144 points.
- Each line of three children received the same total of points.
- No two children had the same number of house points.
- All children's house points were two-digit numbers.
- Jeremy had the least house points and sits in the same line as the girl who received more house points than anyone else.
- Jeremy did not have the same points as Sanjay.

Albert Square

In Albert Square no house has the same number of people living in it as another.
The houses are different sizes.
In each line of three houses there is a total of 15 people.
Altogether 36 people live in the eight houses.
No house is empty.

How many people live in each house?

(based on problem 68 from *Mathematical challenges for able pupils in Key Stages 1 and 2*. Ref: DfEE 0083/2000; NNS publication)

Put three whole numbers less than 10 to make this equation true.

Anyone for tennis?

Two boys and two girls can play tennis.

Ali said: 'I will only play if Holly plays.'
Holly said: 'I won't play if Ben is playing.'
Ben said: 'I won't play if Luke or Laura plays.'
Luke said: 'I will only play if Zoe plays.'
Zoe said: 'I don't mind who I play with.'

Which two boys and which two girls play tennis?

This chart shows the number of different types of big cat in a zoo.

There are **20** big cats in the zoo altogether.

Here are some statements about the chart.

Tick the statements that are **true**.

- There are more cheetahs than jaguars. ☐
- The total number of lions and tigers is 10 ☐
- One-quarter of the big cats are cheetahs. ☐
- There are more than 5 jaguars. ☐