EYFS LEARNING IN MATHS — KNOWLEDGE ORGANISER

Love of Learning

Overview

Mathematics

-In maths, we study numbers, shapes and patterns..

We need to use maths everyday, for example when telling the time, playing games, cooking, building, or for almost any type of work.
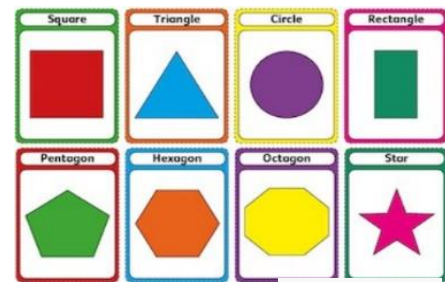
In EYFS, early maths knowledge focuses mostly on Numbers and Shape, Space and Measure.

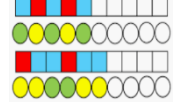This learning is a part of 'Mathematics' – one of the seven EYFS learning areas.

Shape, Space and Measure

Shapes Sub-Area: Shape, Space and Measure
-There are lots of different shapes all around us. -Use the correct maths names for 'flat' (2-D) shapes – see picture on right.
-You can also name some 'solid' (3-D) shapes, e.g. cube, sphere, cone or pyramid.

Patterns Sub-Area: Shape, Space and Measure
-Patterns are when colours, objects, lines or shapes are repeated in an order. We can find, describe and make our own patterns!

Measure Sub-area: Weight, length and capacity
-Compare objects using bigger/smaller, more/less or empty/full.

Time Sub-Area: Shape, Space and Measure
-Time tells us when things happen. We can split time into years, seasons, months, days, weeks, hours, minutes, seconds and more!
-Clocks and calendars help us to tell the time. We can use words such as 'later', 'earlier', 'before', 'after', 'when' to describe the time of events.
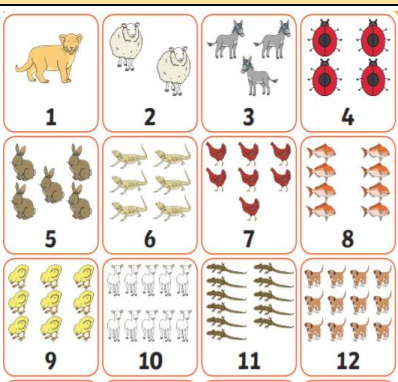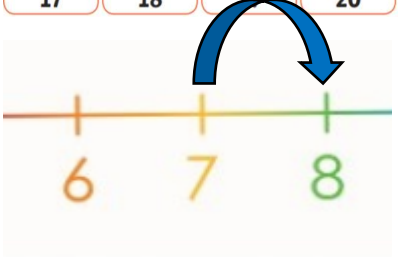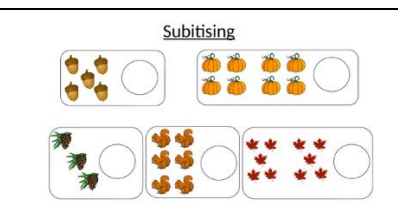
Money Sub-Area: Shape, Space and Measure
-Money is used to pay for things. Different types of money are used across the world. In the UK, we use pounds and pence (£ and p). We can use words such as 'cost', 'price', 'pounds', 'pence', 'change' to describe money.
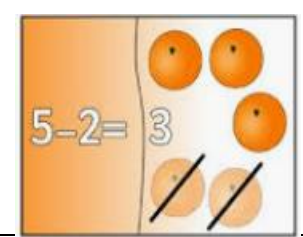
Key Vocabulary

Mathematics

Numbers

Digits

Shape/Pattern

Time/Money

Counting

Add

Subtract

Double

Share

Number - Counting

Sub-Area	Description
Digits Sub-Area: Numbers	-Numbers are what we use for counting and measuring. Numbers are made up of these digits (in order, from least to most): 0 1 2 3 4 5 6 7 8 9 -The digits can be used together and in different orders to show the amount of something.
Counting to 20 Sub-Area: Numbers	-Numbers can be counted, beginning (in order) from 0 to 9. -Once we count beyond 9, we need to start putting two digits together in order to create larger numbers, e.g. 10, 11, 12 etc. We should be able to count with numbers up to 20 by the end of Reception.
One More, One Less Sub-Area: Numbers	-We can use our knowledge of counting to work out one more or one less of an amount. e.g. *'I have 7 apples. I am given 1 more. How many do I have now?'* or *'Jake has 8 sweets, but gives 1 to Charlie. How many sweets does Jake have now?/* We can use the objects to show this, or can work out the answer using a number line (see left).
Subitising	We can use our knowledge of numbers by recognizing numbers, objects or items without counting.

Number - Calculations

Sub-Area	Description
Adding and Subtracting Sub-Area: Numbers	-Adding is when we add two numbers together to make a new total. E.g. *'3 and 2 makes 5.'* -Subtracting is when we take away one number from another number to make a new total. E.g. *'If we have 5 and we take away 2, then we have 3.'* We can use objects and pictures to add and subtract with one-digit numbers.
Doubling, Sharing and Halving Sub-Area: Numbers	We can use objects or pictures to work out problems involving doubling, sharing and halving. Doubling is when we add the same number to itself. E.g. *'2 and 2 is 4. So the double of 2 is 4.'* Sharing is when we split something into equal parts or groups. E.g. *'If there are 12 gems and 4 people, how many gems does each person get when we share?'* (answer is 3). When halving, we share into 2 equal parts/ groups. E.g. *'There are 6 books. Both girls have 3 each. They each have half.'*
Number bonds Sub-Area: Numbers	We can use our number bonds to 5 to support our understanding of the composition of numbers, so we can add and subtract as well as support our mental arithmetic.

Number Line 0-20

0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20