

**Key concepts that will be covered****Counting out loud**

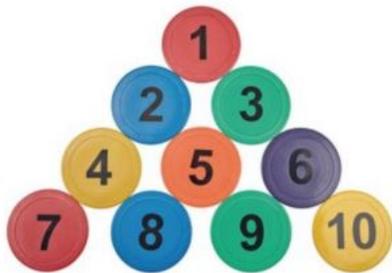
To count out loud to ten, starting at different numbers. To join in with number rhymes. To count back out loud from 5 to 0 then 10 to 0. Know what number comes before and after a given number Say a number between two given numbers

Number recognition / graphics

Recognise numerals 0 – 10

Represent amounts in their own ways, explaining what they mean Represent and explain their thinking in their own ways Write numerals 0 to 10

Order numbers to 10

**Calculating**

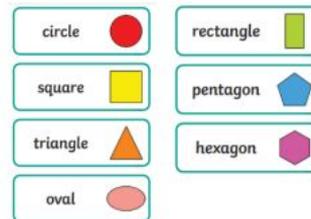
Understand the concept of addition by practically combining sets of objects to find how many and use the terminology part–part–whole Understand the concept of subtraction by practically removing one amount from within another to find how many are left and use the terminology part–part–whole Identify one more and one less than a given number

Identify two more and two less than a given number

Add two single-digit numbers totalling up to 10, using practical equipment
Subtract a single-digit number from a number up to 10, using practical equipment

**Shape**

Know that shapes can appear in different ways and be different sizes Name common 2-D shapes (circle, triangle, square rectangle, oblong rectangle) Talk about shapes using mathematical language (straight, curved, sides)

**Counting Objects**

Understand that counting is to find out how many if you don't already know. Use one to one correspondence when counting Understand that the last number said is the number in the set Count up to 10 objects, pictures, sounds and actions

Understand and use conservation of number Use the word 'zero' to represent 'none' Compare two sets of different objects saying which set is more, fewer, same, equal Order three or more sets of objects. Count objects to 5 by just looking at the pattern (subitise) quantities

Make a sensible guess of quantities within 10

**Key concepts that will be covered****Counting**

To count out loud to 20. To join in with number rhymes. To count back out loud from 10 to 0. Count objects to 15 pointing and moving each item – saying 1 number name for each object then knowing the last. Match the correct numeral to the objects. Count up to 20 claps or stamps (objects that can't be moved). Identify when counting whether a group has more or fewer objects than a given number. Compare up to three groups by counting the objects. Begin to use 1 more and 1 less. Know that bigger objects do not indicate greater amounts, e.g. 2 footballs are a lesser amount than 4 tennis balls. Understand the term between. Finding numbers between each other. Partition the whole set of objects between two groups with numbers to 10. Draw a picture/jotting to represent their mathematics,

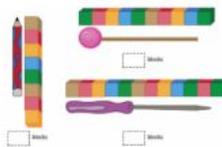
**Number recognition**

Recognise numerals 0 – 20.

Order numbers from 1 - 15 then up to 20.

**Distance Length, height Width**

Using words such as longer shorter, narrower, wider, taller, order a selection of objects. Start to use ways of measuring objects by using cubes etc.

**Capacity /Volume**

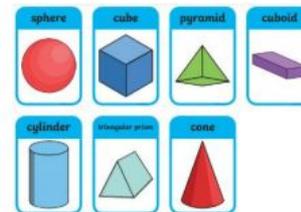
Understand that volume refers to how much liquid is in a container. Use vocabulary – full, nearly full, half full, empty.

Order a set of three identical containers from most full to least full and vice versa

Understand that to measure the capacity of a container it needs to be filled by repeatedly using the same sized smaller container

**Shape**

Recognise and sort 2D and 2D shapes. Identify similarities and differences. Build and make models with 3D shapes. Create and continue repeating patterns.

**Mass /Weight**

Explore what happens when objects are placed on balance scales. Use vocabulary – lighter, heavier, balance





Key concepts that will be covered

Addition

Know that one more is found by adding one object to an existing group of objects
 Recognise that one more is the next number in the counting sequence (when counting in ones)
 Know that two more is found by adding two objects to an existing group of objects
 Combine two groups of objects (total within 10) counting how many are there
 In practical situations, understand that when two parts are combined they make the whole



Subtraction

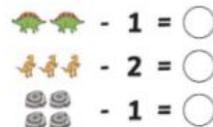
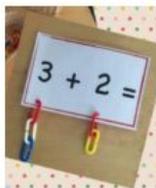
Know that one fewer is found by removing/taking away one object from an existing group
 Recognise that one less is the next number in the counting sequence when counting back (in ones)
 Subtract a single-digit number from a number up to 10 by removing a given amount from a greater set (with a whole of up to 10) counting to identify how many are left.



Addition and Subtraction

Find two more than a given number within 10
 Find two fewer/less than a given number within 10
 Understand that if a number is added to another and then the same number is then taken away from this total, the result is the original number.
 Addition
 - Label the individual groups as parts and use numerals to represent them - Label the combined group of objects as the whole and use numerals to represent them

Subtraction - Label the original set of objects as the whole and use numerals to represent them - Label the removed group of objects and those that are left as parts when these are easy to distinguish from one another and use numerals to represent them



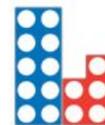
Halving and Doubling

Understand that when an object (that can be cut) has been shared equally between two, both parts are the same. Recognise, by counting, whether an amount has been shared equally between two or not. In real life contexts, use practical equipment to identify the doubles of numbers up to 5
 Understand that doubling is adding the same number to itself

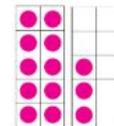


Number Sense

Use number equipment such as bundles of art straws, Unifix (tower of 10), ten frame with counters to create a group of 10 plus another group also using these to represent given numbers within the full counting sequence from 1 to 20 (match numeral to amount and vice versa)



Understand and partition the numbers 11 to 19 as 10 and 1, 10 and 2, 10 and 3 etc.



**Key concepts that will be covered****Counting/ Comparing/ Ordering**

To count, read write and order numbers to 20. Count from a given number to another number within 20. Find the numeral between two given numerals, e.g. 13 and 11 Find a numeral between two given numerals, e.g. 11 and 17.

Count up to 20 pictures without marking using a strategy such as starting at one side, ensuring that all pictures are included and that none have been counted more than once.

State without counting (subitise) quantities within 5 (*because some amounts may not need to be counted*)

Make a sensible guess of quantities within 10

Order three or more sets of objects

Order numerals 0-20

Order a random set of numerals within the range 0-20

20

**Shape and Sorting**

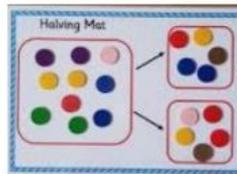
Name common 2-D shapes (circle, triangle, square, rectangle, oblong rectangle). Name common 3-D shapes (sphere, cube, cuboid). Find pairs of 3-D shapes that are the same despite being different sizes or in different orientations. Know that shapes can appear in different ways and be different sizes. When given one criterion, identify the shapes that match. Sort shapes according to their own criteria.

Understanding Whole/ Part Addition and Subtraction

Identify one more and one less than a given number. Identify two more and two less than a given number. Understand that 'teen' numbers (11-19) are a group of 10 plus another number (by partitioning a set of objects into a ten and the ones using part – whole language) Understand that 20 is the same as two groups of 10 Add two single digit numbers totalling greater than 10, using practical equipment. Subtract a single-digit number from a number greater than 10 using practical equipment.

**Fractions**

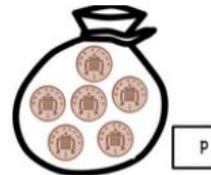
Solve practical problems that involve doubling, halving and sharing. In real life contexts, use practical equipment and equal sharing to find one half of an even number of objects. Understand that the terms halving and sharing between two, relate to splitting into two equal sized parts Understand that halving is sharing into two equal parts.

**Distance/ Length/ Height/ Width**

Recap - Compare the lengths of two items using direct comparison and use the terms longer and shorter. Order a set of three items from longest to shortest (and vice versa) using direct comparison. Use uniform non-standard units (items of the exact same size) to measure length / width / height. Recap – Compare two objects of different weight e.g. heavier / lighter. Use uniform non-standard units (items of the exact same size) to measure weight.

**Capacity/ Volume and Money**

Understand and use the language of comparison when ordering three of the same container holding different amounts e.g. most / least. Count up to 20 objects (1p coins) to match a given numeral.





Key concepts that will be covered

Number Sense

Say a number between two given numbers within 10
e.g. tell me a number between 4 and 8

Recognise repeating patterns in the counting sequence
i.e. 6, 7, 8, 9 and 16, 17, 18, 19 and 26, 27, 28, 29

etc. Count up to 20 pictures without marking, ensuring that all pictures are included and that none have been counted more than once, using a strategy such as starting at one side. Understand that 'teen' numbers are a group of 10



plus another number.



Understand 20 is the same as two groups of 10.

Space

Understand and use the terms first, second, third, fourth, fifth etc. to describe position in a line. Create a repeating pattern from

a given description, e.g. make me a pattern that is circle, square, circle, square...



Identify and describe the part of a pattern being repeated. Create patterns made of objects, numbers and shapes. Understand and use positional language in everyday situations. In everyday situations, understand and use the terms up, down and turn. forwards and backwards.

Addition and Subtraction

Understand the concept of addition by practically combining sets of objects to find how many and use the terminology part – whole. Identify one more than a given number. Identify two more than a given number. Add two single-digit numbers totalling greater than 10, using practical equipment. Place each of two amounts on separate ten frames and explore how they can be combined to find the total.

In practical situations, recognise that when two parts are combined to make a whole, removing one of those parts leaves the other part, e.g. 3 blue pens (part) and 4 red pens (part) makes a group of 7 pens (whole) and when the 3 blue pens are taken away, the 4 red pens are left. Understand the concept of subtraction by practically removing one amount from within another to find how many are left and use the terminology part – whole. Identify one less than a given number.

Identify two less than a given number.

Subtract a single-digit number from a number greater than 10 using practical equipment.

Time

Sequence two or three familiar events and describe the sequence.

Say the names of the days of the week in order. Use the language of comparison when talking about time, e.g. longer/shorter; faster/slower. Understand that we can compare speeds using words such as 'faster' and 'slower'.

Money and Sorting

Understand that money can be in the form of coins and notes. Understand that money can be paid in other ways such as a plastic card, mobile phone or using the internet. Use 1p coins to pay for objects with prices up to 20p.

