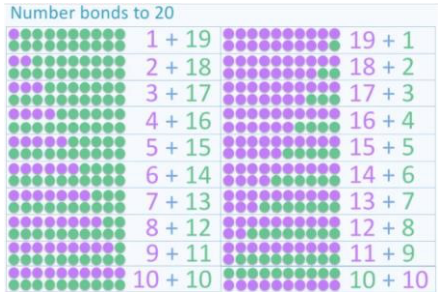
KIRF: I know number bonds to 20

Number bonds show us how numbers join together. They are very important for addition and subtraction. This half term, the children will be learning number bonds that make 20; they should be able to recall these independently.

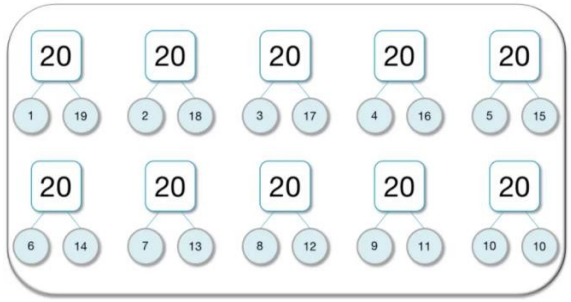
Year Two – Autumn 1

What can this look like?

Concrete:



Pictorial:



Abstract:

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

Questions to ask at home

What do we need to **add** to 13 to make 20?

If I have 10, how many more do I need to get to 20?

What is the **difference** between 20 and 12?

Key vocabulary

12 **add** 8 **equals** 20

18 **plus** 2 is **the same as** 20

20 **take away** 7 equals 13

20 **subtract** 3 makes 17

20 **minus** 9 equals 11

Activity Ideas

Chants- Practice chanting the number bonds.

Paper Chains- Use two different colours to make paper chains to show each number bond, for example 14 + 6 could be shown as 14 green links and 6 blue links.

Say it, make it, write it- For each number bond, say it our loud, make it using everyday objects and then write it as a sum.

Pegs – Put 20 pegs on to a coat hanger, split them in different ways and count how many pegs are on each side. E.g. 14 pegs + 6 pegs = 20 pegs (14+6=10).

Websites: White Rose video: Aut2.5.1 - Fact Families on Vimeo

Funk Mummy || Quick recall of addition, subtraction and multiplication facts || Mobile-friendly version (ictgames.com)

Smoothie Maths || Practise number facts to 10, then 20 (ictgames.com)

KIRF: I know the doubles and halves of numbers

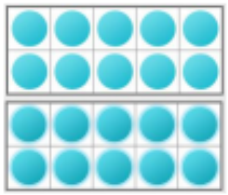
Year Two – Autumn 2

Children need to understand how to find half, and how to double numbers up to 20. They should be able to instantly recall what double and half is of each number to 20.

What can this look like?

Concrete:

Pictorial:



Abstract:

Double 10 is 20

Half of 20 is 10.

Questions to ask at home

What is **double** 9?
What is **half** of 4?
How can we find **half** of 8?
Explain how we can **double** 5.

Key vocabulary

Double- adding a number twice e.g. 6 + 6 or multiplying the number by 2 e.g. 6 x 2.

Half- splitting a number into 2, dividing by 2 e.g. 1- divided by 2 is 5. (Please note that children will not know what division is yet, they will be simply splitting the number into two groups.)

Things to try

Doubling butterfly- Draw an outline of a ladybird, paint spots on one side; fold it over to show double that number. Write the calculation to go with it.

Doubles bingo- Choose 5 numbers between 1-20. Ask questions such as, what is double 6 or what is half of 18. Keep going until all numbers have been crossed off!

Double or nothing- Create a 6 x 6 grid with a numbers 1-24. Working in a pair, roll 2 dice, double the number and cover the number with a counter/object. The first to get 4 in a row wins!

Websites:

https://www.ictgames.com/mobilePage/archeryDoubles/index.html

https://www.topmarks.co.uk/maths-games/hit-the-button

KIRF: I know the 2 times table (x and ÷)

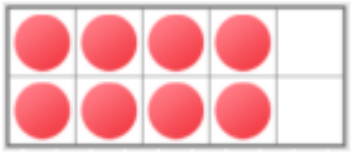
Year Two – Spring 1

The two times table is a key skill for KS1 learners. They should already be able to count forward and backwards in 2's, now they need to apply that be able to multiplication facts. They should be able to answer these questions in any order, including missing number questions, e.g. _ x 2 = 12.

What can this look like?

Concrete:

Pictorial:



Abstract:

2 **multiplied** by 4 = 8

2 x 4 = 8 4 x 2 = 8

8 **divided** by 2 = 4

8 ÷ 2 = 4

Questions to ask at home

What is 2 **multiplied** by 8?
What is 3 **lots of** 2?
What is 18 **divided** by 2?
How many **groups** of 2 can you make from 10 objects?

Key vocabulary

Multiply- Adding equal groups a certain number of times, e.g. 2 x 4 = 2+2+2+2 = 8. Can also be referred to as **groups of** or **lots of**.

Divide- Sharing or **grouping** numbers/objects into equal groups, e.g. 10 ÷ 2 = 5.

Things to try

Chanting- Say the times table facts out loud, 1 times 2 is 2, 2 times 2 is 4 etc.

Can you beat Siri?- Ask Siri a 2 times table question, see if they can answer it before Siri does!

Multiplication high fives- Draw around your child's hand 12 times, number each hand 1-12 and position them up the stairs. Ask your child to high five each hand as they go upstairs, multiplying the number in the hand by 2.

Chalk sums- Use chalk on an outside patio/path to write out the 2 times table.

Websites: White Rose video: Spr2.2.3 - 2 times-table on Vimeo

Hit the Button - Quick fire maths practise for 6-11 year olds (topmarks.co.uk)

2 times table with games at Timestables.com

Whack A Mole || Counting in steps of 1, 2, 3....12 (ictgames.com)

KIRF: I know the 10 times table (x and ÷)

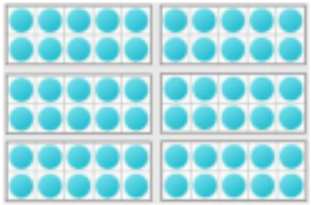
The ten times table is a key skill for KS1 learners. They should already be able to count forward and backwards in 10's, now they need to apply that be able to multiplication facts. They should be able to answer these questions in any order, including missing number questions, e.g. _ x 10 = 80.

Year Two – Spring 2

What can this look like?

Concrete:

Pictorial:



Abstract

6 **multiplied** by 10 = 60

6 x 10 = 60 60 = 10 x 6

60 **divided** by 10 = 6

60 ÷ 10 = 6

Questions to ask at home

What is 10 **multiplied** by 8?
What is 10 **times** 3?
What is 100 **divided** by 10?
How many **groups of** 10 can you make from 20 objects?

Key vocabulary

Multiply- Adding equal groups a certain number of times, e.g. 5 x 4 = 5+5+5+5 = 20.
Can also be referred to as **groups of** or **lots of**.
Divide- Sharing or grouping numbers/objects into equal groups, e.g. 10 ÷ 5 = 2.

Things to try

Beat the clock- You have 10 seconds to answers as many questions as you can. Each correct answer will earn you one second of extra time. The game ends when the time runs out or an incorrect answer is given.

Multiplication race– Write the answers to the 10 times table (10, 20, 30 etc.) n large pieces of card. Shout out a random 10 times table question and race your child to the right answer.

10p challenge– Gather some 10p coins, how many pence is there in total? What would this be as a multiplication sum? Change the number of coins and repeat.

Websites: White Rose video: Spr2.2.5 - 10 times-table on Vimeo

Whack A Mole || Counting in steps of 1, 2, 3....12 (ictgames.com)

Duck Shoot - tablet friendly (ictgames.com)

KIRF: I know the 5 times table (x and ÷)

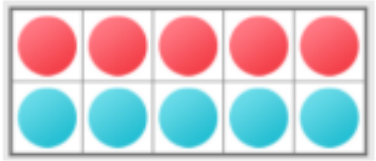
The five times table is a key skill for KS1 learners. They should already be able to count forward and backwards in 5's, now they need to apply that be able to multiplication facts. They should be able to answer these questions in any order, including missing number questions, e.g. _ x 5 = 25.

Year Two – Summer 1

What does can look like?

Concrete:

Pictorial:



Abstract

2 **multiplied** by 5 = 10

2 x 5 = 10 10 = 5 x 2

10 **divided** by 2 = 5

10 ÷ 2 = 5

Questions to ask at home

What is 5 **multiplied** by 8?
What is 3 **lots of** 5?
What is 25 **divided** by 5?
How many **groups** of 5 can you make from 10 objects.

Key vocabulary

Multiply- Adding equal groups a certain number of times, e.g. 5 x 4 = 5+5+5+5 = 20. Can also be referred to as **groups of** or **lots of**.

Divide- **Sharing** or **grouping** numbers/objects into equal groups, e.g. 10 ÷ 5 = 2.

Things to try

5 times table song- Play a 5 times table song in the car when travelling.

Can you beat the calculator? - Ask your child a 5 times table question, see if they can answer it before you type it into a calculator!

How many fingers and toes? - Draw around all of the hands and feet in your household, how many fingers and toes are there altogether?

Skip count – Go outside, use chalk to write the numbers 1-12 in a random order. Jump, skip or hop along the numbers, multiplying each number by 5 as you go.

Websites: White Rose video: Spr2.2.4 - 5 times-table on Vimeo

Hit the Button - Quick fire maths practise for 6-11 year olds (topmarks.co.uk)

Whack A Mole || Counting in steps of 1, 2, 3....12 (ictgames.com)

Duck Shoot - tablet friendly (ictgames.com)

KIRF: I can tell the time to the nearest 5 minutes.

Children need to be able to tell the time using a clock with hands (analogue clock). They should already be able to read o'clock, half past and quarter to/past.

Year Two – Summer 2

What can this look like?

Concrete:

Pictorial:

Abstract:

10 minutes past 10.

Ten past 10.

Questions to ask at home

Where does the **minute hand** point when it is 20 past?

Which side of the clock will the **minute hand** be if it is a 'past' time? Or a 'to' time?

Key vocabulary

Minute hand – the longer hand.
Hour hand – the shorter hand.
Half past – 30 minutes past the hour.
O'clock – on the hour
Quarter past – 15 minutes past the hour.
Quarter to – 45 minutes past the hour
__past ___ e.g. five past one **___to____** e.g. ten to five

Things to try

What time is it?- Find as many opportunities as possible to ask your child what time it is throughout the day. This will also help them to understand what happens at different times.

Hula hoop clock- Use a hula hoop, chalk for the numbers and some sticks to make your own clock.

Time monitoring- Give your child responsibility for keeping track of the time, for example 'We need to take the cakes out of the oven at 5 past 2. Tell me when that is.'

Websites:

https://mathsframe.co.uk/en/resources/resource/116/telling_the_time#

https://www.sheppardsoftware.com/math/time/clock-splat-game/