Oaklands Infant School
Key Instant Recall Facts

Fluency in number is key to accessing all areas of Mathematics confidently and securely. We have devised a 'Progression in Key Facts' scheme that children will systematically work through to ensure they are fluent and confident in their basic skills.

Why are they important?

Research shows that:

- *Learning key facts 'by heart' enables children to concentrate on the calculation, which helps them to develop better calculation strategies.*
- *Using and applying strategies to work out answers helps children to acquire and so remember more facts.*
- *Many children who are not able to recall key facts often treat each calculation as a new one and have to return to first principles to work out the answer again.*
- *Once they have a secure knowledge of some key facts, children can learn to appreciate that from the answer to one problem, other answers can be generated.*

Knowing number facts 'off by heart' frees up space in a child's working memory when they complete more complex calculations and allows children to reason and problem solve with greater depth.

The bullet points below set out how the scheme works, however if you have any queries please contact your child's class teacher.

- *Children will be given a set of number facts to learn over the course of approximately six weeks. These facts will link to a calculation strategy.*
- *They should practise these at home wherever possible and the facts will also be practised in class.*
- *They are not designed to be a time-consuming task and can be practised anywhere – in the car, walking to school, etc. Regular practice - little and often – helps children to retain these facts and keep their skills sharp*
- *The aim is to be able to recall each fact in the set within 3 seconds.*

Oaklands Infant School
Key Instant Recall Facts

- *It is important for children to look at the facts in order to learn the pattern and make connections but they should also be able to know them out of sequence and they will be tested on them in a random order.*
- *There will be an assessment at the end of the six weeks to check if the facts have been retained.*

+	0	1	2	3	4	5	6	7	8	9	10
0	0+0	0+1	0+2	0+3	0+4	0+5	0+6	0+7	0+8	0+9	0+10
1	1+0	1+1	1+2	1+3	1+4	1+5	1+6	1+7	1+8	1+9	1+10
2	2+0	2+1	2+2	2+3	2+4	2+5	2+6	2+7	2+8	2+9	2+10
3	3+0	3+1	3+2	3+3	3+4	3+5	3+6	3+7	3+8	3+9	3+10
4	4+0	4+1	4+2	4+3	4+4	4+5	4+6	4+7	4+8	4+9	4+10
5	5+0	5+1	5+2	5+3	5+4	5+5	5+6	5+7	5+8	5+9	5+10
6	6+0	6+1	6+2	6+3	6+4	6+5	6+6	6+7	6+8	6+9	6+10
7	7+0	7+1	7+2	7+3	7+4	7+5	7+6	7+7	7+8	7+9	7+10
8	8+0	8+1	8+2	8+3	8+4	8+5	8+6	8+7	8+8	8+9	8+10
9	9+0	9+1	9+2	9+3	9+4	9+5	9+6	9+7	9+8	9+9	9+10
10	10+0	10+1	10+2	10+3	10+4	10+5	10+6	10+7	10+8	10+9	10+10

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

Oaklands Infant School
Key Instant Recall Facts

Year 1
Autumn 1

Strategy
Five and A Bit

Five and A Bit	The numbers 6, 7, 8 and 9 are made up of 'five and a bit'. This can be shown on hands, and supports decomposition of these numbers into their five and a bit parts (e.g. 5 + 3 = 8, 9 – 5 = 4).

Facts to learn:

5 + 1 = 6
5 + 2 = 7
5 + 3 = 8
5 + 4 = 9
5 + 5 = 10

Facts to learn:

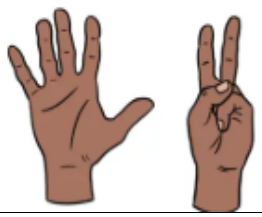
6 – 5 = 1
7 – 5 = 2
8 – 5 = 3
9 – 5 = 4
10 – 5 = 5

It is important for children to look at these in order to learn the pattern and make connections. They should also be able to know them out of sequence and they will be tested on them in a random order.

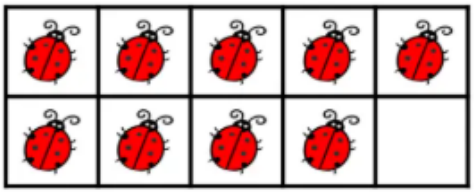
Key Vocabulary

add	plus	total of
subtract	less than	minus

Q1. There are 7 fingers. We can say that 7 is five and ____ more. Choose the number that completes the sentence.



Q5. How many ladybirds can you see?



Oaklands Infant School
Key Instant Recall Facts

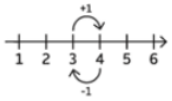
Year 1
Autumn 2

Strategy

Adding 1 – When we add 1 we get the next counting number.

Subtracting 1 – When we subtract 1, we get the previous counting number. (e.g. 5 – 1 = 4)

One More, One Less	When we add one, we get the next counting number. When we subtract one, we get the previous counting number (e.g. 5 – 1 = 4).



Facts to learn:	Facts to learn:	
1 + 1	1 - 1	*It is important for children to look at these in order to learn the pattern and make connections. They should also be able to know them out of sequence and they will be tested on them in a random order.*
2 + 1	2 - 1	
3 + 1	3 - 1	
4 + 1	4 - 1	
5 + 1	5 - 1	
6 + 1	6 – 1	
7 + 1	7 – 1	
8 + 1	8 – 1	
9 + 1	9 – 1	

Key Vocabulary

add	plus	total of
subtract	less than	minus

- Tom has these cakes.

  - Ann has 1 more cake than Tom.
    How many cakes does Ann have?
  - Sam has 1 cake fewer than Tom.
    How many cakes does Sam have?

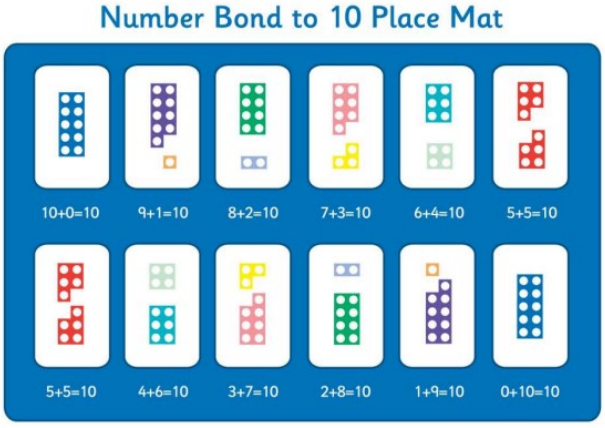
- Mo has these sweets.

  - He eats 1 sweet.
    How many sweets does he have left?

Oaklands Infant School
Key Instant Recall Facts

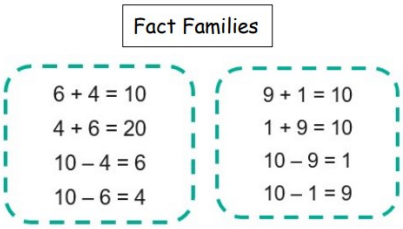
Year 1
Spring 1

Strategy
Number 10 Fact Families



Facts to learn:	Facts to learn:
0 + 10	10 - 0
1 + 9	10 - 1
2 + 8	10 - 2
3 + 7	10 - 3
4 + 6	10 – 4
5 + 5	10 – 5
6 + 4	10 – 6
7 + 3	10 – 7
8 + 2	10 – 8
9 + 1	10 – 9
10 + 0	10 - 10

It is important for children to be able to think of the facts as a family so they recognise that addition and subtraction are inverse.



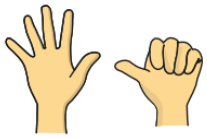
Key Vocabulary

add addition plus total of altogether bond

subtract subtraction less than minus

6 + □ = 10

- Max shows a number on his fingers.
  How many more are needed to make 10?
  What is the bond to 10?



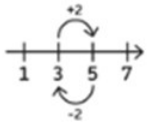
https://www.topmarks.co.uk/maths-games/mental-maths-train

Oaklands Infant School
Key Instant Recall Facts

Year 1
Spring 2

Strategy
Adding and Subtracting 2

Two More, Two Less: Think Odds and Evens



If we add two to a number, we go from odd to next odd or even to next even. If we subtract two from a number, we go from odd to previous odd or even to previous even.

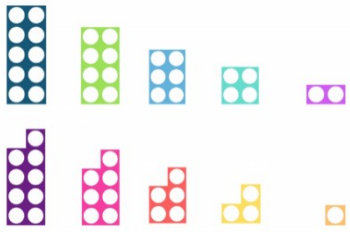
Facts to learn:

0 = 2 = 2
1 + 2 = 3
2 + 2 = 4
3 + 2 = 5
4 + 2 = 6
5 + 2 = 7
6 + 2 = 8
7 + 2 = 9
8 + 2 = 10
9 + 2 = 11

Facts to learn:

2 – 2 = 0
3 – 2 = 1
4 - 2 = 2
5 - 2 = 3
6 - 2 = 4
7 - 2 = 5
8 - 2 = 6
9 - 2 = 7
10 – 2 = 8
11 – 2 = 9

It is important for children to recognise the composition of odd and even numbers. Even numbers are made of 2s and have a flat top. Odd numbers have an extra block.



Key Vocabulary

odd even next previous

- There are 8 people on a bus.
  2 more people get on the bus.
  How many people are on the bus now?
  Write a number sentence.

Play a game

You need objects to count and a cloth to hide them under. Tell the child that you have 7 blocks altogether (do not show all 7 blocks), and you are going to hide some under a cloth. Place 2 blocks under the cloth.

Can you say how many are under the cloth?

Oaklands Infant School
Key Instant Recall Facts

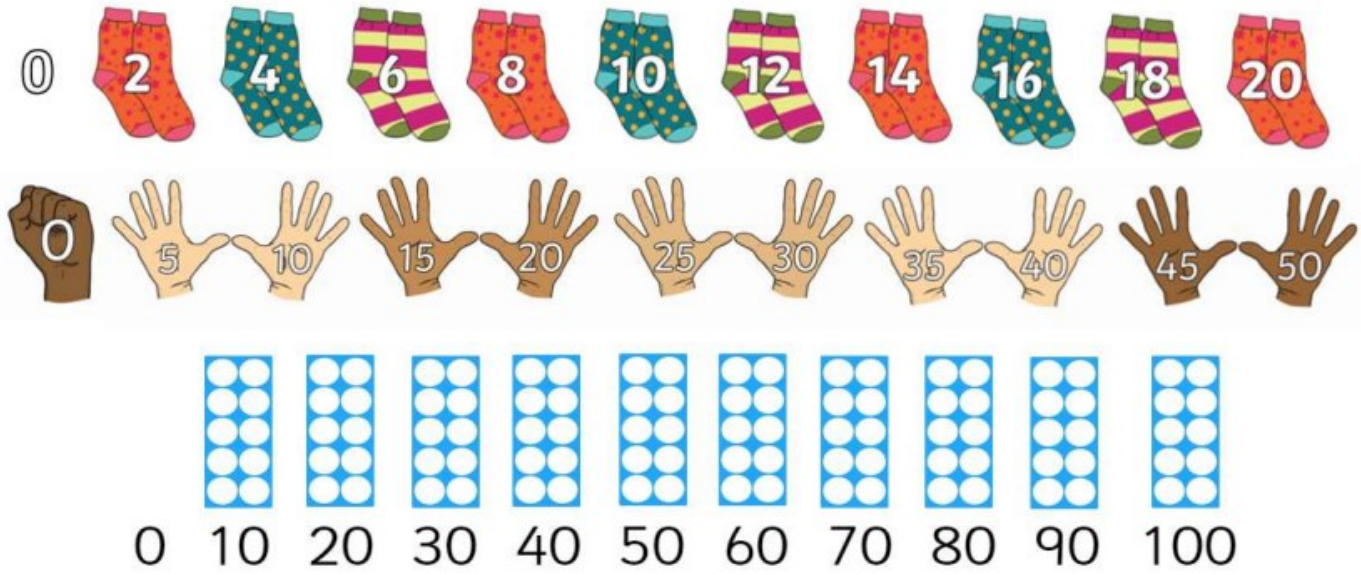
Year 1
Summer 1

Strategy

I can count forwards & backwards in steps of 2, 5 & 10.

By the end of this half term, children should be able to count in these three counting patterns. The aim is for them to say these off by heart – forwards and backwards.

Children should be able count on/back: 2s to 20, 5s to 50 and 10s to 100.



They should be able to count in these patterns and may be able to say if a number will be in the counting in twos, fives or tens pattern.

Key Vocabulary

twos fives tens lots of forwards backwards more than less than

You don't need to practise them all at once: perhaps you could have a week where you practise each pattern. When the children are confident with these facts can they count in 2s beyond 20 or in 5s beyond 50?

You can use coins to help you count forwards and backwards in 2s, 5s and 10s.
Counting games: https://www.topmarks.co.uk/learning-to-count/paint-the-squares
Practise looking for number patterns with https://www.primarygames.co.uk/pg2/splat/splatsq100.html

Oaklands Infant School
Key Instant Recall Facts

Year 1
Summer 2

Key Facts and Strategy

I know doubles and halves of numbers to 20.

Doubles and Near Doubles 	Memorise doubles of numbers to 10, using a visual approach. Then use these known double facts to calculate near doubles and hidden doubles. Once we know 6 + 6 = 12 then 6 +7 and 5 + 7 is easy.

Challenge - I know near doubles to 5

Facts to learn:
Doubles to 20

0 + 0 = 0
1 + 1 = 2
2 + 2 = 4
3 + 3 =6
4 + 4 = 8
5 + 5 = 10
6 + 6 = 12
7 + 7 = 14
8 + 8 = 16
9 + 9 = 18
10 + 10 = 20

Facts to learn:
Halves

half of 20 = 10
half of 18 = 9
half of 16 = 8
half of 14 = 7
half of 12 = 6
half of 10 = 5
half of 8 = 4
half of 6 = 3
half of 4 = 2
half of 2 = 1

Challenge
Near doubles

0 + 1 = 1
1 + 2 = 3
2 + 3 = 5
3 + 4 = 7
4 + 5 = 9
5 + 6 = 11

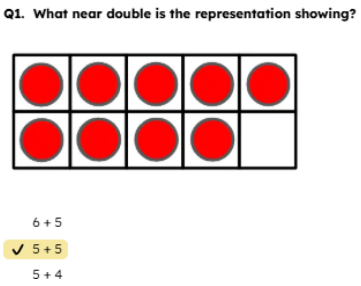
It is important for children to see that the near double is one more or less.

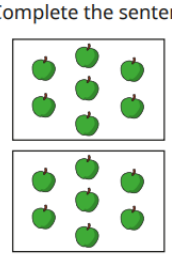
- The near doubles strategy uses the known doubles facts to assist with addition.
- Double one of the numbers in the addition and count on or back from this result.
- For example, 5 + 6 is one more than 5 + 5.
- Since 5 + 5 = 10, we know that 5 + 6 is one more than this.
- Therefore 5 + 6 = 11.

Key Vocabulary

double near double equal groups

Dinosaur Dentist - near doubles – (ICT Games)





- Complete the sentences to match the picture.

There are _____ equal groups.
There are _____ in each group.
There are _____ apples altogether.
_____ + _____ = _____
Double _____ is _____