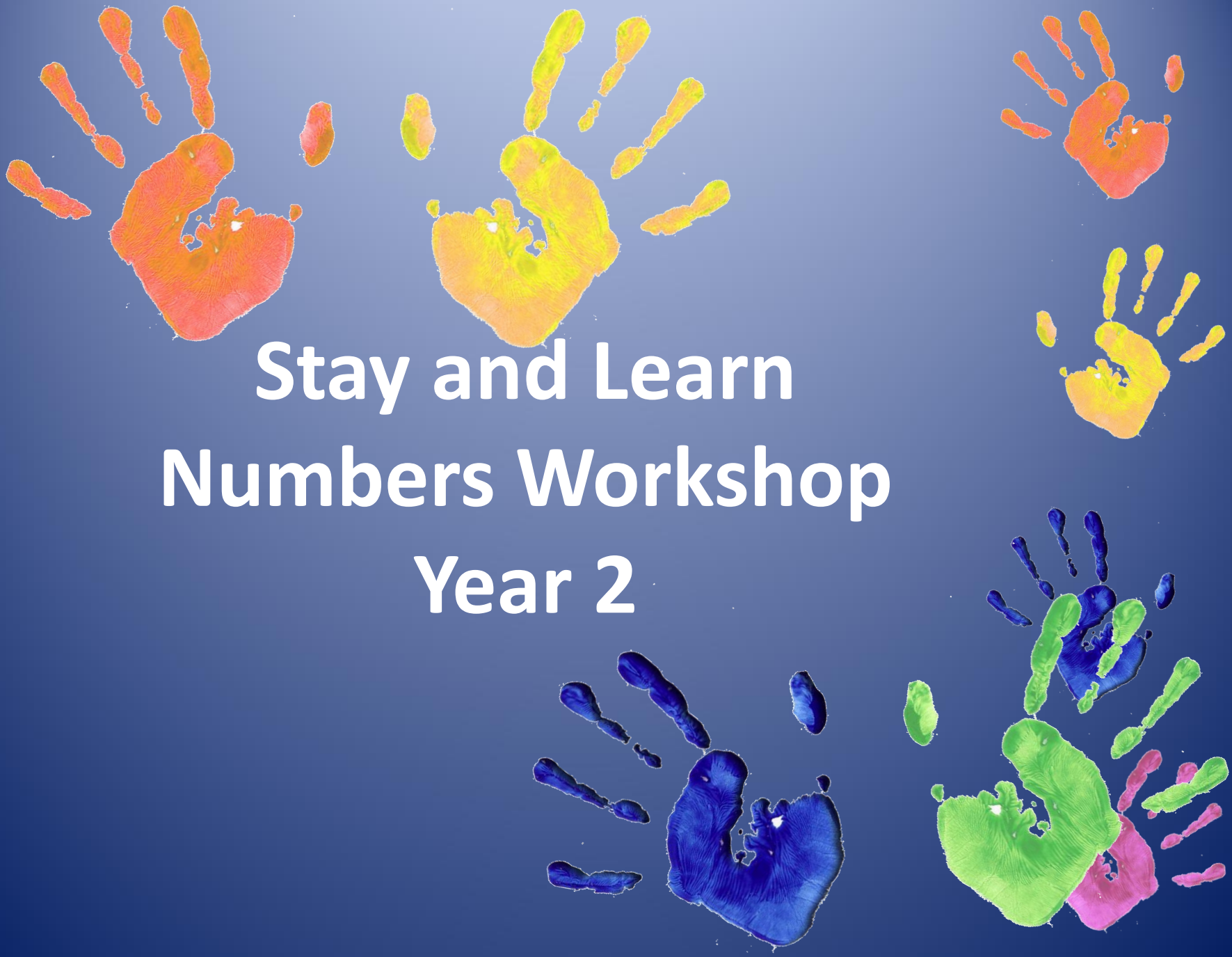


Stay and Learn
Numbers Workshop
Year 2

Place Value

At THPS we teach maths every day.
Children are grouped into maths sets so learning can be tailored better to their individual needs.
All children are working towards the same curriculum and will cover the same areas in maths:

- Number and place value
- Four operations (Calculation)
- Fractions
- Geometry
- Measurement including time/money
- Statistics

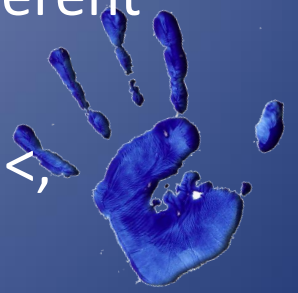



Number and place value provides the foundations for us to build on.

Number and place value
Expectations for end of year 2

- count in steps of 2, 3, and 5 from 0, and in tens from any number, forward and backward
- recognise the place value of each digit in a two-digit number (tens, ones)
- identify, represent and estimate numbers using different representations, including the number line
- compare and order numbers from 0 up to 100; use <, > and = signs
- read and write numbers to at least 100 in numerals and in words
- use place value and number facts to solve problems.






Solid Foundations

- Having a secure understanding of our number system is the bedrock for all future learning in mathematics.
- This starts in F1 and gets progressively more challenging
- Its not just about reading numbers, its also about understanding the make up of numbers.

Much of what we will show you will focus just on this aspect.

The number system can be represented in many ways.

Concrete Experiences

- **Concrete representation**
- • This is a 'hands on' component using real objects and it is the foundation for conceptual understanding

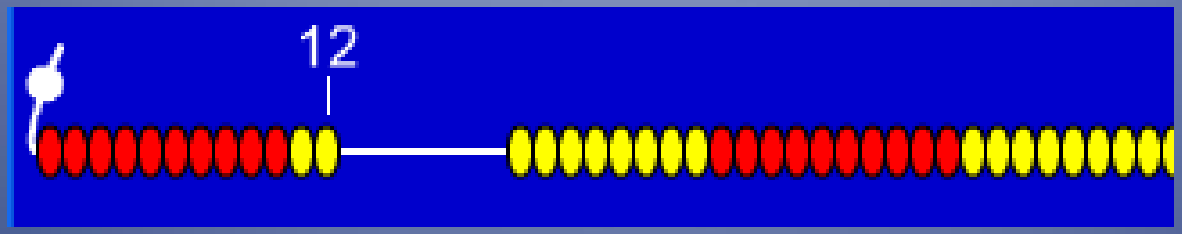


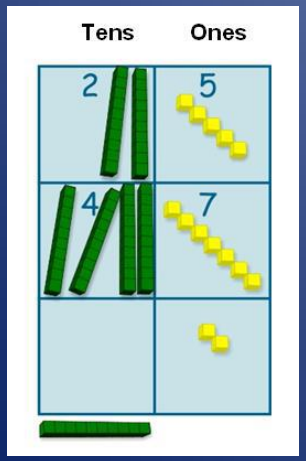

- Numicon
- Straw bundles
- Counters
- On a number line
- Arrow cards
- Bead strings
- Tens frames

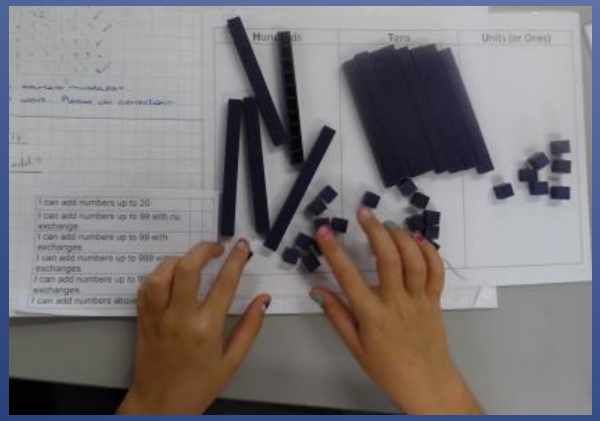


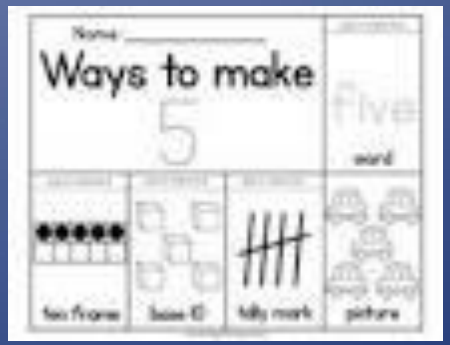

Pictorial Experiences

- **Pictorial representation**
- Using representations, such as a diagram or picture of the problem.

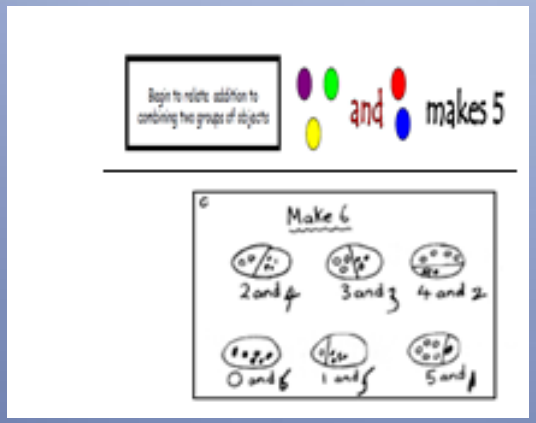


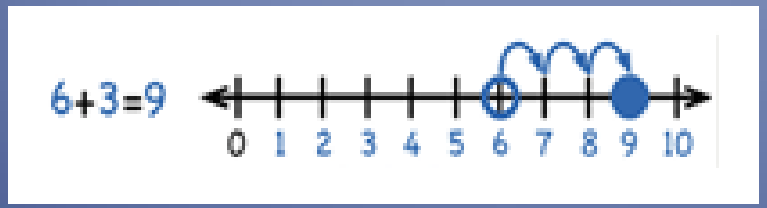


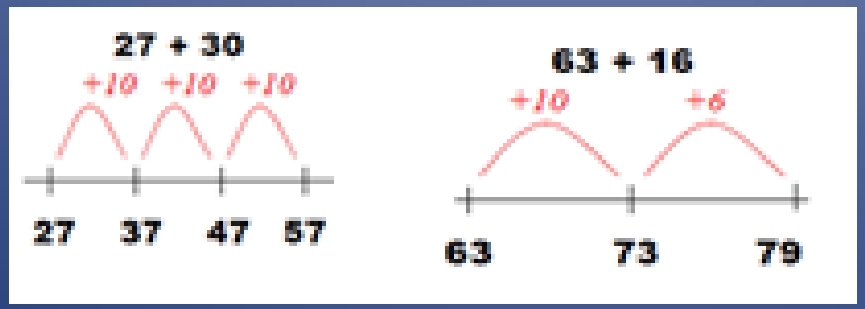




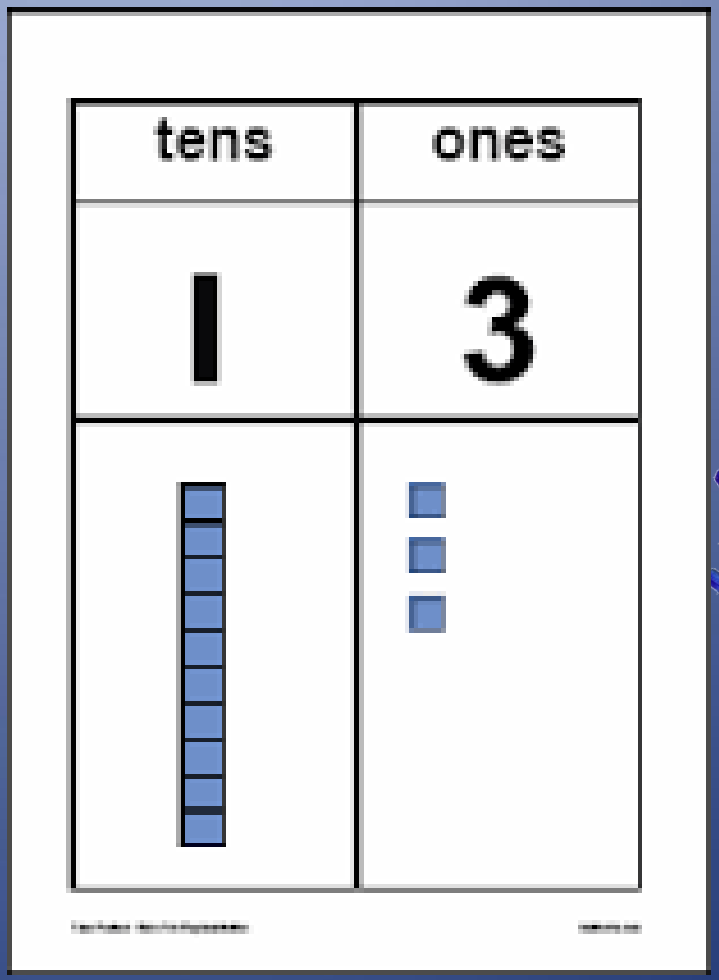
Symbolic/abstract Experiences





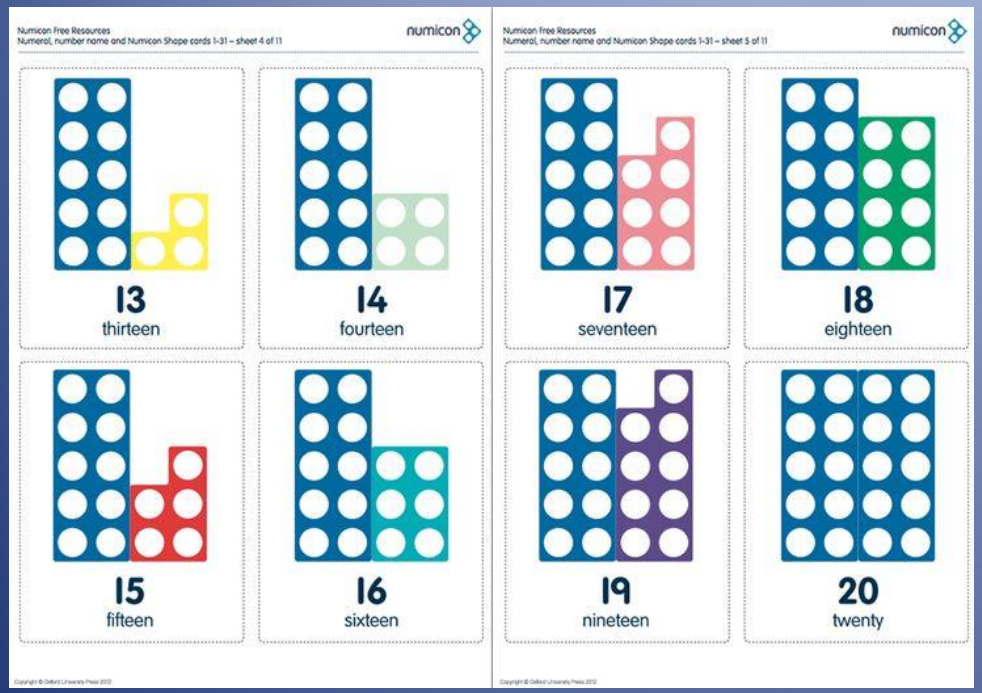


Representing number in many ways



Representing number in many ways

Representing number in many ways



153 = 100 + 50 + 3

792 = 700 + 90 + 2

42 = 30 + 12

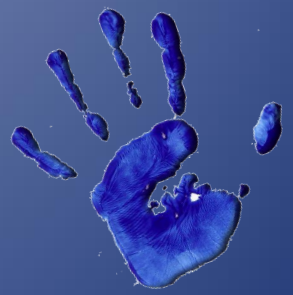
- Decisions about when to progress should always be based on the security of pupils' understanding and their readiness to progress to the next stage.
- Pupils who grasp concepts rapidly should be challenged through being offered rich and sophisticated problems before any acceleration through new content.
- Those who are not sufficiently fluent with earlier material should consolidate their understanding, including through additional practice, before moving on.
- Using a concrete, pictorial, abstract approach at all ages for all children

- Fluency
- Depth
- Mastery

The importance of problem solving, reasoning and fluency

- All children will be given opportunities to problem solve, despite the level they're working at.
- Problem solving is at the heart of our curriculum.
- The children should be presented a variety of problems as often as possible.
- Problem solving can be done in the context of numbers, money, measures, shape.

They are expected to develop their reasoning Ability E.g. Can 92 be a multiple of 5?



There is nothing wrong with making mistakes.

KS1 SATs

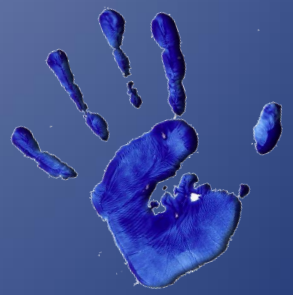
- Children will sit an arithmetic paper (25 marks) and a reasoning paper (35 marks).
- Their score is combined over both papers.
- Last year children needed a minimum of 36 marks to achieve the expected standard.
- Children must be consistently working within the expected standard and show evidence in their day to day work that they are working at greater depth to be given this judgement.

$10 + 40 + 20 =$ ☐

$8 \times 5 =$ ☐

$28 +$ ☐ $= 35$

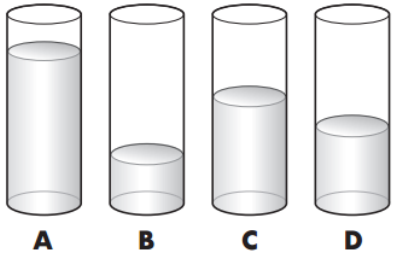
$\frac{1}{2}$ of $16 =$ ☐



Circle 63

10 10 1 1
10 1 1
10 1
10 1
10 10 1 1
1

6



Sort the glasses from **least full** to **most full**.

least full **most full**

One has been done for you.

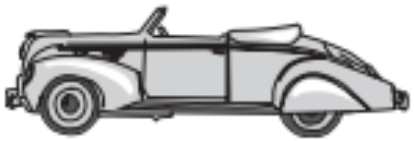
Less than 		More than 
		
		
		
		
		

12 Tick the **two** sentences that are correct.

	Tick **two**.
A square has sides of equal length.	☐
A square has curved sides.	☐
A square has lines of symmetry.	☐
A square has five sides.	☐

Abdul has some toy cars.

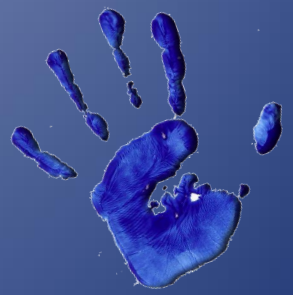
He gives half of them to Ben.



He has four toy cars left.

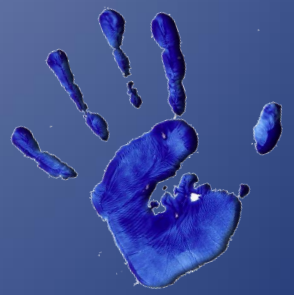
How many toy cars did Abdul start with?

☐ toy cars



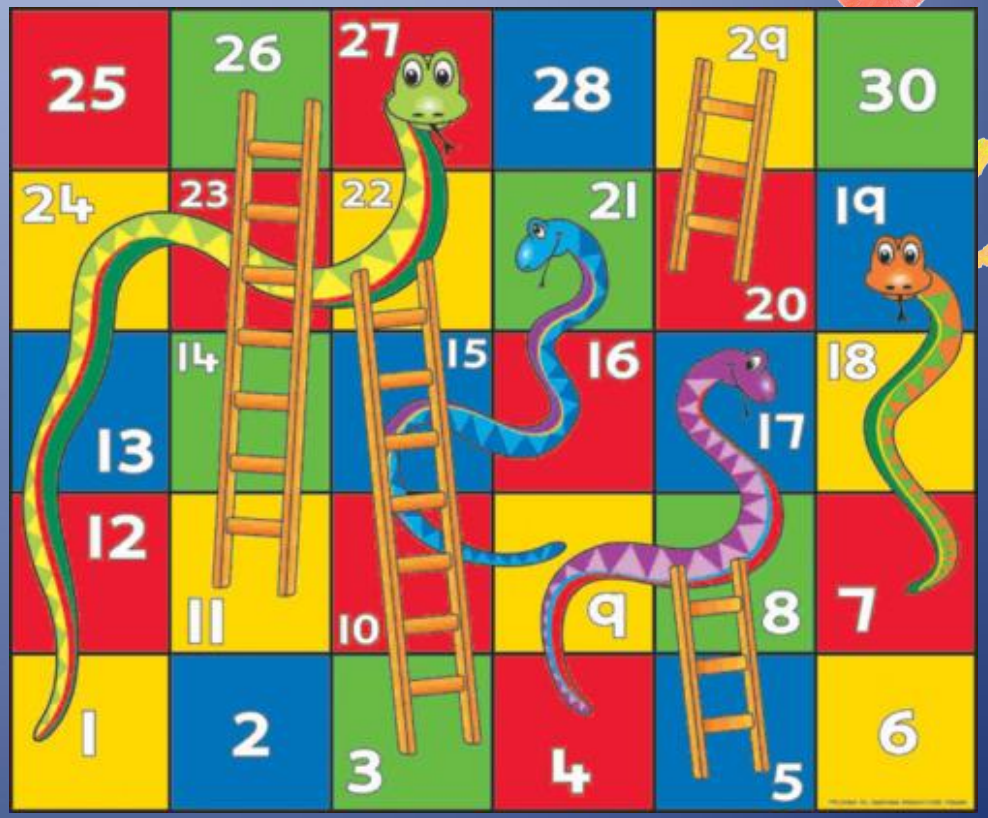
At Home

- Allow your child to handle and use money.
- Cooking in the kitchen
- Help your children tell the time.
- Help them with their positional language (left, right, clockwise and anticlockwise)
- Where can you count and see numbers in the world?
- Play puzzles and games
- Draw upon their interests
- **Top Marks**

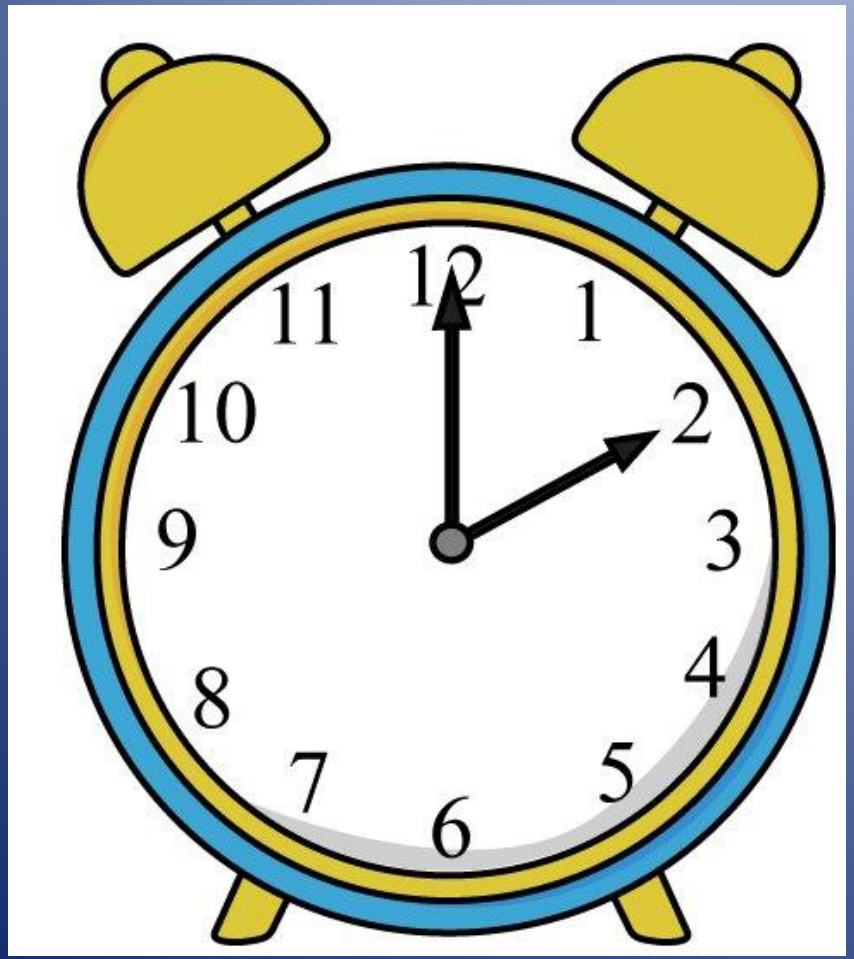


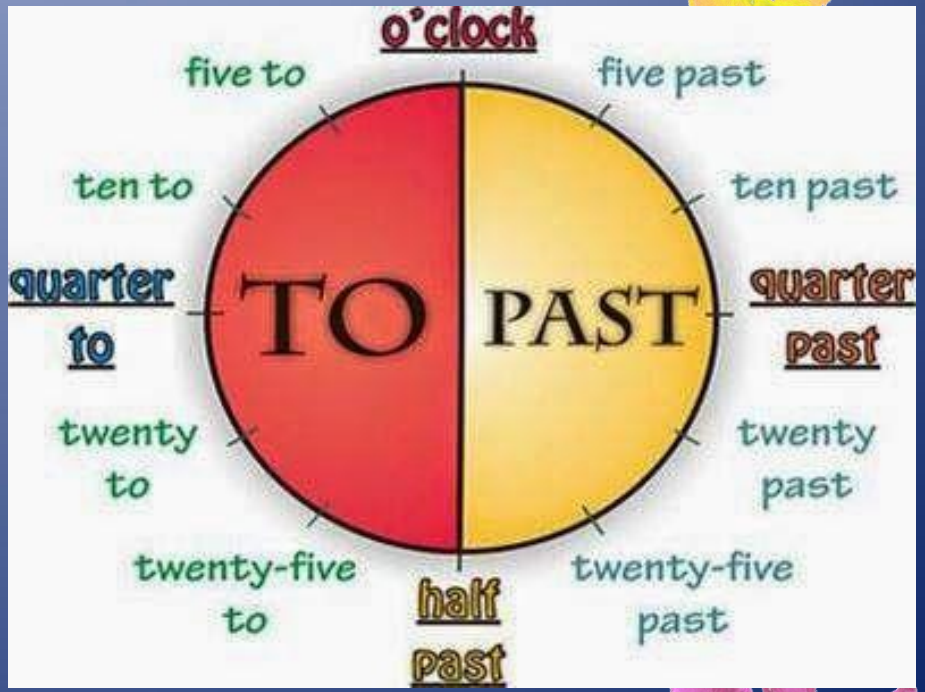
At home- Cooking

At home- games



At home - time


12
1
2
3
4
5
6
7
8
9
10
11


o'clock
five to
five past
ten to
ten past
quarter to
TO
PAST
quarter past
twenty to
twenty past
twenty-five to
half past
twenty-five past

At home- positional language

Remember

- Be positive (‘I was rubbish at maths at school’)
- Praise effort – even if the answer is wrong!
- Talk about maths regularly.
- Maths can be playful!
- Question their reasoning. ‘What do you think the answer might be?’

Thank you

- Have you got any questions?