

Number Lines

How to use them and why they are important.

- Number lines provide a mental strategy for addition and subtraction.
- Learner soon graduate from using simple number lines to visualising one in their mind.
- You can make a number line using a skipping rope, a length of wool or even a chalk mark on the floor.

From counting to addition and subtraction at home

- Play board games with dice—such as snakes and ladders.
- Ask your child to set the table and let them collect the right number of knives and forks.
- From a pack of cards (without the tens, Jacks, Queens and Kings) play a game of pairs where you try to turn over two of the same.
- As above, but turn over two cards that add up to ten.

Useful websites & Useful Apps

- If you would like to recommend any of these we will keep a list in the classroom ready to share between parents and guardians.



Maths at home: EYFS Chestnuts



Number Sense

Expectation: If a child can achieve number sense they'll have the perfect foundation for future challenges in maths and related subjects.

Initial skills which need to be developed.

- Recognition of the sounds of the numbers. Listening to number songs, rhymes and hear people counting. Books give reinforcement to the sound of counting and with it the fact that numbers relate to different amounts.
- Understanding of 'one to one correspondence.' Being able to match one object to one other object or person.
- 'How many are there?' Touching each object gradually adding one more number at a time. Everyday object counting such as cutlery and biscuits. Ask your child to guess how many objects there are before counting them together. It is important to build confidence through positive comments.
- The number of objects is the same however they are arranged. Ordering numbers, estimating and recognising the symbols.

Counting—early learning milestones

Some of the stages of learning you may notice your child going through at ages 4 –5.

- Recognising how many objects are in a small set without counting. If you show four cars they won't have to count them to tell you there's four.
- Knowing the "number words" from one to twenty and their order.
- Know the sequence regardless of which number they start on. So if you say 'start counting at four' they will count 'four, five...' as opposed to always counting from one.

- Conservation of quantity—this is where children realise that the number of objects in a set stays the same unless any are added or removed. So if they count six cans of beans in a straight line, then you rearrange the beans (in front of their eyes) into say two stacks of three—they will realise there's still six without recounting.
- Counting non-visible objects—your child will realise they can count things they can't touch or even see.
- Cardinality—This is knowing that the last number counted is equal to the quantity of the set. If your child counts six oranges 1,2,3,4,5,6 and then you ask, 'how many oranges are there?' and they count again, then they haven't yet grasped 'cardinality.'
- the symbols.

Counting on— as a step towards adding

Learning to add comes as an extension of counting. Here are some stages a child goes through to make this connection:

- Counting all—For $3 + 5$, children will count 'one, two, three,' and then 'one, two, three, four, five' to establish the quantity of the sets to be added—for example, three fingers on one hand and five fingers on the other. The child will then count all the objects 'one, two, three, four, five, six, seven, eight.'
- Counting on from the largest number—It's more efficient when the smaller of the two numbers is counted. The child now selects the biggest number to start with which is 'five,' and then counts on 'six, seven, eight.'
- The final stage isn't really counting—it's where learners know their number facts and skip the time consuming counting altogether.

