

# What to expect in the Early Years Foundation Stage: a guide for parents

## **Mathematics**

The following document has been produced for the Maths Champions Programme using the Mathematics pages from the document 'What to expect in the Early Years Foundation Stage: a guide for parents' 2021.

Full credit to content of this publication goes to: 'What to expect in the Early Years Foundation Stage: a guide for parents' 2021. East London Research School and DfE

For a full copy of the publication please follow this link [What to expect in the Early Years Foundation Stage: a guide for parents - full version](#)

## 3 & 4-year-olds: Mathematics

- I can quickly recognise groups of up to 3 objects, without having to count them individually (*this is called 'subitising'*).
- I can say numbers in order past five.
- I can say one number for each item in order: 1,2,3,4,5.
- I know that the last number I reach when counting a small set of objects tells me how many there are in total (*this is called the 'cardinal principle'*).
- I can show 'finger numbers' up to 5.
- I can match the correct numeral (number symbol) to the right amount, up to 5, e.g. point to the number 3 when I count 3 snails.

A photograph showing a child's hand in a red and blue plaid shirt pointing towards three snails on a weathered wooden plank. A speech bubble above the hand says "Look, 3 snails!". The background shows some green plants and a person's leg in a black and green shoe.

**"Look, 3 snails!"**

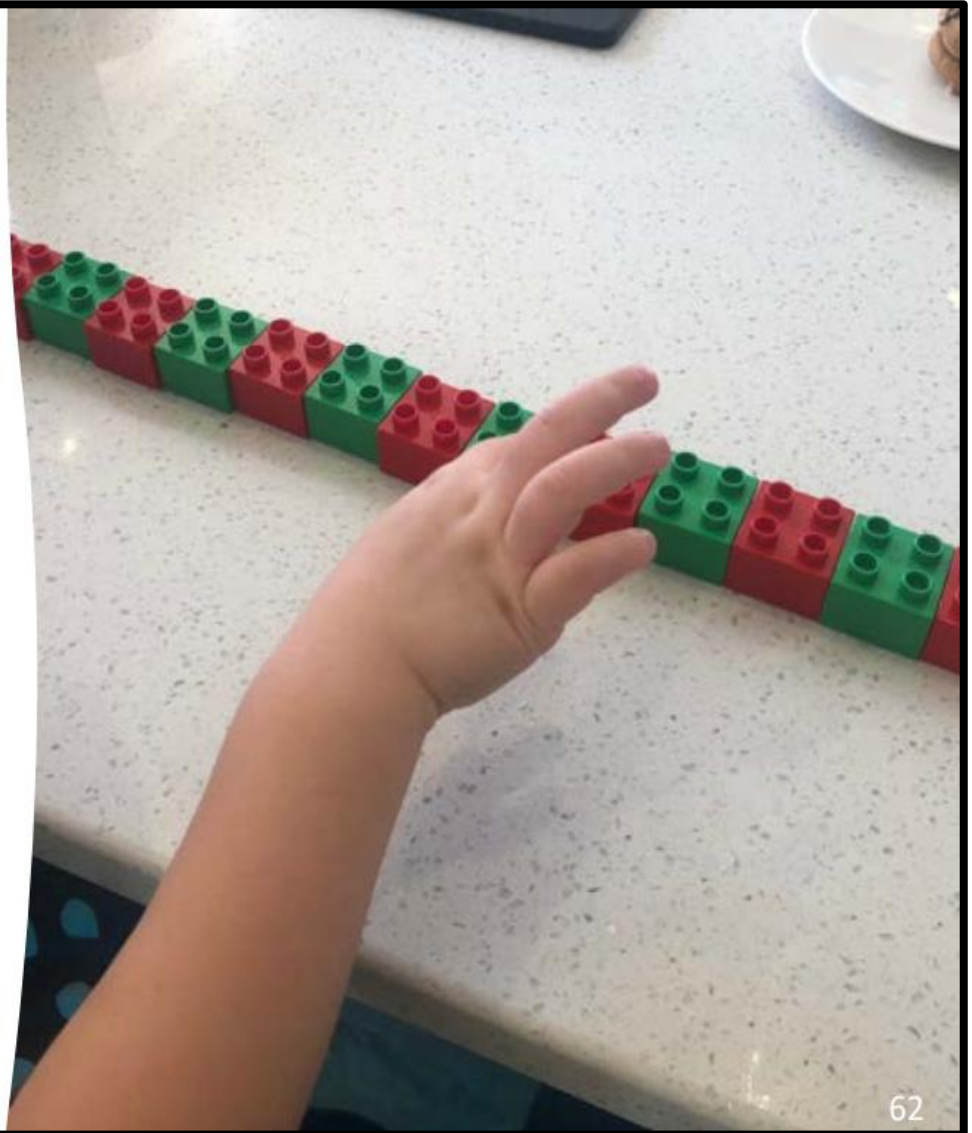
## 3 & 4-year-olds: Mathematics

- I like to experiment with making my own marks and symbols as well as numerals.
- I can use mathematical words to compare amounts 'more than', 'fewer than'.
- I like to explore 2D (flat) and 3D (solid) shapes. I can talk about shapes using everyday words like 'pointy'. I can use mathematical words like: 'sides', 'corners', 'straight', 'flat', 'round'.
- I can understand position through words alone, e.g. "The bag is under the table." – with no pointing.
- I can describe a familiar route.
- I can talk about routes and locations, using words like 'in front of' and 'behind'.



## 3 & 4-year-olds: Mathematics

- I can make comparisons between objects relating to size, length, weight and capacity.
- I can choose the right shape when building, e.g. triangular prism for a roof.
- I can combine shapes to make new ones - an arch, a bigger triangle etc.
- I can talk about and identify patterns that I see around me, e.g. stripes on clothes, designs on wallpaper. I use everyday language like 'pointy', 'spotty', 'blobs' etc.
- I can make and extend ABAB patterns – stick, leaf, stick, leaf.
- I can spot an error in a repeating pattern and correct it.
- I am learning to use words such as 'first', 'then' 'after' to describe a pattern of events.



## **3&4 year olds: how you can help me with my learning**

- Point out the number of things rather than just the names, e.g. “We have two apples!”
- Give me lots of opportunities to count for a real reason and always emphasise the last number – “There are 3 cookies.”
- Cut out a large shape from a cereal box (circle, triangle), then cut that shape into 2-4 smaller pieces to make a simple puzzle.
- When we’re at the park, use words like ‘up’, ‘under’, and ‘between’ to talk about what we see.
- Make playdough with me.

## 4 & 5-year olds: Mathematics

- I can count objects, actions and sounds.
- I can quickly recognise a group of up to five objects without counting. This is called 'subitising'.
- I can match the correct numeral (number symbol) to the right amount, e.g. I can play 'snap' where some cards have numerals, and some have dot arrangements.
- I can count beyond ten.
- I can compare numbers of items.
- I understand the 'one more than/one less than' relationship between consecutive numbers.



## 4 & 5-year olds: Mathematics

- I am learning about how numbers are made up of other numbers up to 10, e.g. 3 and 3 makes 6. This is called composition of number.
- I know and can say number bonds for numbers 0-5 and some to 10.
- I can select and rotate shapes, this helps me to learn spatial reasoning skills.
- I am learning about how shapes can be combined to make new shapes, e.g. two triangles can be put together to make a square. This helps me to recognise a shape can have other shapes within it, just like numbers can.
- I can continue, copy and create repeating patterns.
- I can compare length, weight and capacity, e.g. "This is heavier than that."



## **4&5 year olds: how you can help me with my learning**

- Name small groups of things, this helps me to 'subitise' (instantly seeing how many without counting) e.g. "There are 3 slices of pizza left."
- Ask me to count out a number of things from a group, e.g. "Could you get me 6 eggs?"
- Make number snap or bingo with numerals and pictures. Match the numerals with the right amount.
- Make patterns with objects, e.g. buttons or shells. Such as 'big, small, big...'
- Make a mistake and talk with me about how to fix it.