

Oxford TEEMUP – maths activity suggestions

This leaflet suggests ideas to build on children's mathematical enjoyment and confidence. We do not expect you to do all these activities, just chose any that suit your lifestyle and plans, and feel free to adapt them to your child's ability and interest.

❖ SORTING AND COMPARING

Gather collections of items (soft toys, leaves, stones, toy cars – anything your child is interested in), count them, and talk about the collections – *Why are these all in the same group? Is this group bigger or smaller? Is there another way to arrange them? How many groups do we have?* Make labels to show the numbers of items.

❖ COUNTING

Take opportunities to count – count stairs as you go up/down, count red cars on a journey, count the number of steps to the shop. Before you start, guess how many it will be and talk about your answer.

❖ READING

Look at books with pictures or magazines and comics. Talk about the pictures using numbers, shapes, colours etc: *Look there are three ducks on the pond. Lets count them together: 1,2,3. Yes there are 3 ducks. Can you find a girl standing next to a cat? Where is the dog with 3 spots? How many different coloured balls are there?* Take turns with your child to answer and ask questions. Make up stories about the characters going on counting adventures.

For books/magazines with page numbers: *Can you find page 8? Page 102? What is the next page number? What if I turn over 3 pages?*

❖ HIDING GAMES

Get a plate with a box/cloth to cover it. Put some objects on the plate and get your child to count them. Hide the plate and remove some objects / rearrange them without your child seeing. Show them the plate. *What has changed? How many objects are there now? How many were removed/added?* Swap over.

❖ HELPING AROUND THE HOUSE

Sorting laundry, unloading the dishwasher, laying the table, tidying away toys all provide opportunities to talk about how many and categorise and sort objects.

❖ GROUPS OF TEN

Get a lidded eggbox with 10 compartments (cut a 12 down to 10 if necessary) and take it in turns to add less than 10 stones/buttons/beads, one in each compartment. Open the lid, quickly showing the contents before shutting. can the other person work out how many? Increase the challenge by using groups of 2, 5 or 10 objects in each compartment.

Top tips for developing maths skills and confidence

- If your child doesn't get the right answer, don't say it's wrong, instead ask them how they worked it out. They will often notice their mistake and correct it. If they don't then ask them how you can check and check it together.
- Praise children for the way they have tried to work something out, not the fact that they got the correct answer. Focussing on correct answers can cause maths anxiety.
- Try to avoid using the words 'clever', 'hard', 'easy'. Instead say 'you tried hard' or 'thought carefully about what to do'. Focus on praising their effort, trying different ways and sticking at it - this avoids young children thinking that they aren't good at maths or that maths is only for 'clever' people
- Spend time with your child doing the activity with no distractions. This will give your child the message that maths is important, collaborative and fun.
- If your child tells you that they find maths hard, reply with something like, 'oh yes, I found maths hard too, but I kept going and managed it'. Emphasise that we all learn by making mistakes and won't always get it right at first.



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❖ OUTDOORS

Play games that involve counting, such as hide and seek or grandmother's footsteps.

Give your child a small box and challenge them to fill it with as many items as they can – count and sort them.

Do exercise challenges – 3 jumps, 4 hops, run to the tree and back twice, touch your toes 5 times. Draw signs with the number and the action on and place them around the outside space for children to find.

Go on a nature hunt – draw a list of what you might see and keep a chart of how many you actually saw.

Go on a number hunt – what numbers can you see? Make a list (look on doors, car registrations, shop signs, buses etc). Can you put the numbers in order, smallest to largest? What was the biggest number? The smallest?

❖ FINGER GAMES

Finger games can be done anywhere – on a bus, in the car, outside and inside. A few suggestions are below.

What's this? – adult shows a number of fingers and child copies it and says how many fingers.

Adding fingers – two people put their hands behind their backs and pull them out together. How many fingers in all?

Making ten fingers – One person puts one hand behind their back and pulls it out and challenges their partner to show enough fingers to make a total of 10 (then later to 20).

For a group of 4 or more – all put hands behind back – on the count of 3, show a number of fingers. Anyone with the same number as anyone else gets a point.

Count claps – one person claps (up to 10 claps)– the other person shows that many fingers. Swap over.

Finger flash patterns – sit opposite you child and make up a pattern showing one number, then another number, then the first number of fingers (such as 1,3,1,3,1,3...) Stop and get your child to continue. Say the numbers aloud if it helps.

❖ BOARD GAMES

Any game using dice is excellent – by rolling the dice and working out the number, children will learn to recognise the numbers by the way the dots are arranged. If your child cannot recognise the dot patterns, you can support them to learn this by counting and commenting on the arrangement. For example: *There are 4 dots, 1,2,3,4 (point at each dot as you say a number), with one dot in each corner.*

For games where counters are moved according to the number thrown, encourage your child to work out where they will end up – if they get it wrong, then ask them how they knew it, rather than telling them it is wrong. They will often self-correct when they explain to you. Praise them for noticing their mistake and checking. You can also model this thinking out loud – *I know that if I got 10, I would be here, but I got 1 more than ten so I'll be here. I got 8 ...2,4,6,8.... I'm here.*

❖ CARD GAMES

Cards where children learn to recognise numbers and add/group/order the numbers are excellent. It is helpful to keep scores using pairs of tallies to make 10 as that supports children in their appreciation of how we count in tens. <https://gamerules.com/card-games/kids-card-games/> has a good selection of simple card games.



❖ EVENT COUNTDOWNS

At the start of a holiday or before it, use a countdown for a special event that is due to happen. Get an empty box. Every day, add an item (such as a stone, a bead, a coin, a marble) to the box and write the next number on the box. *How many days/sleeps have you waited so far? How many more to go? Count the numbers/objects to check.*

❖ FOOD AND COOKING

Count peas, chips, pieces of apple etc. Talk about cutting up food: *How many pieces shall we cut it into? What shapes shall we cut it into? Which piece is biggest? Smallest? How many mouthfuls will this yoghurt be? We have 4 people for tea, and they will want 2 sausages each – how many do I need to buy? There are 12 sweets in the bag – how many will everyone get? How can we check? How did you know?*



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