



Maths in Everyday Lives

KS2

The Four Operations $+$ $-$ $\times$ $\div$

When you're out and about...

- Ask your child to use mental addition to calculate how much your shopping costs.
- Mental subtraction– if I have £20 and I buy cereal and pasta for £3.40, how much money will I have left?
- When you're out shopping, try to estimate the costs of all the items in your trolley. How can your child be accurate when estimating?
- Look out for the numbers on a number plate and try to add, subtract, divide or multiply the numbers together.



When you're at home...



- Play lots of different board games and games with dice and encourage the use of all four operations.
- Share items within the house to encourage division. If there are 20 sweets and 4 people, how many sweets will each person receive?
- Scale up or down the amount of ingredients you will need when cooking. Try multiplying the quantities.
- Try measuring furniture around the house. What would the height of three chairs stacked on top of each other be? What about 20?

Real Life Skills...

- Ask your child to add up all of the coins in their piggy bank or in their adult's purse. How much more do you need to make £20?
- Pocket money! How much pocket money would you have if you saved this up for a month? What about a year?
- Your child could create a shopping list for items that you will need. How much do they estimate the items will cost?
- Organise a payment system for jobs around the house (e.g. 5p for emptying the dishwasher). How much money can they make in one day?





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Fractions, Decimals and Percentages

When you're out and about...

- When out shopping, ask your child to work out fractions of amounts. If you spent £52 on your food shopping, what would $\frac{1}{2}$ be? What about $\frac{1}{4}$ or $\frac{3}{4}$?
- Explore how items are often reduced when you're out shopping. Work out percentages of amounts. What would the price of the item be if there was 30% off?

When you're at home...

- Find fractions when cutting up different fruits and vegetables.
- Does your food packaging include nutritional values linked to fractions? How do the nutritional values change when you share the food between more or less people?
- Discuss splitting foods into fractions of amounts. For example, if you have $\frac{2}{6}$ of the pizza, how much will be left?
- Would your child rather have $\frac{1}{2}$ of the sweets or $\frac{3}{4}$? Work out which fraction is bigger by sharing the sweets out.
- Does your recipe mention using fractions of amounts? How can you accurately measure $\frac{3}{4}$ of a teaspoon of baking soda?



When you're in the garden...



- Your child can design their own garden patch. They can note the fraction they will use for flowers, fruit or vegetables.
- Ask your child to use their knowledge of measurement and measure different plants around the garden. Pay close attention to the exact measurements e.g. 30.2cm. How tall would 5 flowers on top of each other be?
- Take a photo of your garden. What fraction or percentage of your garden has grass? What fraction or percentage of your garden doesn't have grass?



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Measurement

When you're out and about...



- Look at the measurements listed on different furniture when you're out shopping. Ask your child to try converting the measurements e.g. centimetres to metres.
- Can your child estimate the weight of different fruits when you're out shopping? Which fruit or vegetable is the lightest/heaviest?
- Weigh different fruits and vegetables on the scales when you are shopping. Try to convert these between grams and kilograms.
- Can your child estimate how far you have travelled when you're out on a walk?

When you're at home...

- Follow a recipe and measure the ingredients you will need accurately.
- Discuss the difference between grams and kilograms– why would you measure something in grams as opposed to kilograms?
- How many millilitres or litres do objects around the house hold? Test this with bowls, vases, jugs etc. Try to estimating this first.
- Ask your child to estimate and then measure the length and width of a room in your home. What would the area and perimeter be of the room?



When you're in the garden...



- Estimate the weight, height and length of the plants and furniture around your garden. How can you be accurate when estimating?
- Measure different plants around the garden. What is the height of the tallest plant? What is the difference between the tallest and shortest plant?
- What is the area and perimeter of your garden?
- Collect different sized containers and ask your child to fill them up with different quantities of water. How much do they estimate will be in each container/bottle?
- Make your own rain gauge using a plastic bottle. Mark accurate measurements on the side and collect rain water over the course of a week/month.

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Time

Real Life Skills...

Incorporate time into every day by having competitions based around durations. You can also time how long different activities take and set time limits on activities (e.g. homework, watching TV etc.).

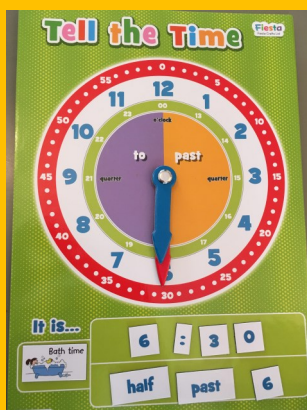
When you're out and about...

- Read bus and train timetables when you're out. How long until the next bus/train? How long will the journey take?
- Ask your child to estimate how long they think certain activities will take. How long will it take us to walk to the shops?



When you're at home...

- What's the time Mr Wolf? Ask your child to tell the time and reinforce using the correct language. Challenge your child to write the time down in the 12 hour and 24 hour format.
- When cooking, encourage your child to note down the time the food will finish cooking.
- Ask your child to keep a diary for the week listing all of the different times they complete different activities. Ask them to be as accurate as possible.
- How many days are there in each month? Can your child think of a song or rhyme to remember this?
- Encourage your child to keep their own calendar or academic diary and to note down important dates.
- What are the similarities and differences between analogue and digital clocks?



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Geometry

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When you're out and about...

Look at the architecture of different buildings. Ask your child to identify the different shapes and patterns that have been used.

Observe different artwork to identify the formation of figures and shapes that the artist has used.



When you're at home...

- Ask your child to sketch a room within your home and then label the different shapes.
- Sort and organise different items around your home according to their shapes. This may include fruits, vegetables and toys. Which is the most/least common shape?
- Ask your child to use Lego or building blocks to create a structure. Can they identify which 3D shapes they have used?
- Battle ships! Play a game using coordinates and describe the movements between positions. If you're playing battle ships, you can talk about where the ships are in relation to each other.



When you're in the garden...

- If you look closely, you will find different geometrical shapes and patterns on leaves, flowers, stems, roots and bark. Which shapes can you identify?
- Experiment whether different plants or flowers within your garden have lines of symmetry. Your child may want to use a mirror to explore the lines of symmetry.

- Angles play a very important role when playing sports. At what angle will your child need to hit/kick/throw the ball in order for it to reach its desired destination?



- Go on an angle hunt whilst in the garden or out walking. Do they think that the angle is smaller or bigger than a right angle? Can they estimate the degrees of the angle?

- Encourage your child to draw a map of the garden with an x and y axis. Add different items to map and then identify their coordinates.

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Statistics

KS2

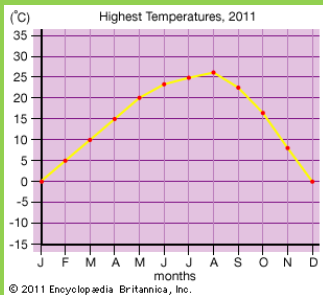
When you're out and about...

Walk in the garden/local area – collect data and record as tallies as you observe (e.g. flowers, insects cars etc.). Turn your tally into a graph to represent the data you have collected.

When you're at home...

- Play a board game and keep score using a set of tallies. Encourage your child to count up the total at the end– practising their counting in 5s.



- Record the temperature every day for a week/month and then plot this on a graph.
- Read timetables linked to TV schedules and pose questions about the times of different shows or films.
- Ask your child to create their own timetable of the school day. This can include the morning and after school too.

- Document your child's height over time and then record this in a graph. They could compare this to their sibling's height. What is the difference between their heights?

When you're in the garden...

- Plant flowers and/or vegetables and document their height over time. This data can then be turned into a line graph. Make this more challenging by documenting the growth of two different plants.
- Create a table and tally all of the different coloured plants you have in your garden or at the park. Which is the most/least common coloured plant?
- Set up an obstacle course in the garden and time how long it takes each person to complete the course. Then, represent your data as a graph and compare. Can your child create five questions linked to their graph?



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Algebra

(Year 6 only)

Real life skills...

We use algebra in everyday life without noticing. Just because we don't see 'x' and 'y' does not mean that we are not using algebra.

When you're at home...

- Ask your children to calculate the time it will take to wake up, get dressed, brush their teeth etc. They need to leave the house by 7:30am to catch the bus. What time will they need to set their alarm?
- Pose questions such as: there are 6 different flavours of ice cream you can choose from and you choose two flavours. How many possible combinations are there?

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Ratio and Proportion

(Year 6 only)

Real life skills...

Ratios are a simple way to compare numbers or quantities. They tell us how much there is of one thing compared to another. Proportion tells us how many of one thing there is out of a whole number.

When you're at home...

- When cooking, if a chicken/turkey or casserole has to be cooked for 35 minutes for each 1kg, how long will it need to be in the oven for?
- When sharing sweets- if I have a pack of 24 sweets and I give you two sweets for every one that I take for myself, how many more sweets will you have than me? This can we completed with toys too.