

Maths Activities at Home

As you are aware we want our Maths homework focus to be on Times tables and our online Abacus Maths activities. Ideally your child should be spending at least **10 minutes daily** practising their times tables facts using the ideas that were provided in the Times Table booklet given out in July (also available on the Prep Blog) or any other activities you find help.

I am aware that there are some parents and children who may wish to focus on other areas of the Maths curriculum at home, so I have prepared a range of activities across different maths themes. These are entirely **optional** and there is no pressure at all for children to complete these tasks.

Should your child wish to share their work, please encourage them to share it with their class teacher.

The activities are grouped in different mathematical themes, but they do not have to be done in order, simply choose one that you and your child find interesting. Most children love maths but as with everything, there are those that don't. Helping your child to have fun with maths will help them to become more confident and willing to have a go at maths. I hope you enjoy working though these activities with your child

Time



Diary

Keep a diary of the times you do different things this week. E.g. when you get up, visit a friend, eat breakfast, play, go to school, read, go to bed etc.

Convert Clocks

If you have a digital clock, try to write the time in an analogue way, if you have an analogue clock, write the time digitally or on the 24-hour clock. Check the time together at regular intervals.

TV Times

If you watch TV, when are your favourite programmes on? What time do they finish? How long are they on for? Who spends the most time watching TV in your house? On which day do you watch TV the most/least?

Time Yourself

How long does it take you to do different things? Brush your teeth/eat breakfast/get to school/have a shower/clean your room/do 10 star jumps/ hop around the garden, play a favourite game, etc. What can you do in two minutes? Try lots of different things! Record these timed activities in a table and write questions for someone to find the answers too from the data collected.

Birthdays

Look at a calendar. Find out how many days there are in a week, in each month, in a year. How many weeks are in a year? How many months are there in a year? Name them. Which is the sixth/last/third month etc? When are the birthdays or important dates in your family's year? When is the Queen's birthday? When is David Beckham's birthday? Put them in order. Make your own calendar showing these special dates. What are the different seasons and when do they start?

Mass



Kitchen

Record the weight of different foods you have in your kitchen. Which are in kilograms (kg) and which are in grams (g)? Choose 5 packs and order them from lightest to heaviest. Are the big packs always heaviest? Are the small packs always lightest? Are there any units that you are not familiar with?

Recipe

Look at a recipe for something you like. In what units are the ingredients measured? Follow the recipe reading the scales accurately, and then enjoy sharing what you have made together! Take pictures of the finished product to share with your teacher.... or bring some in for us to try!!

Scales

Weigh different items around your home using any scales you have (kitchen, bathroom etc). Focus on accuracy. What items added together make 2Kg, 100g, etc.

Fruit and Veg

Find a variety of fruit and vegetables. Estimate how much they weigh then weigh them accurately. Put the items in order of mass. Can you add any together to make 300g, 50g, 2Kg etc. Perhaps make a fruit salad or vegetable stir fry. How much did the peelings weigh? This can be recorded in a table with the heading 'estimation' and 'measurement'.



Capacity



Water

In the bath/kitchen sink/ paddling pool/bucket etc, pour water from different sized containers. How many little ones does it take to fill the largest one? Put the containers in order of capacity. Does the tallest/shortest container have the biggest/smallest capacity? (Use familiar objects like yoghurt pots, bowls, plastic bottles etc). Think about a fun way to record this information and share in class.

Coloured Water

(A few drops of food colouring in the water makes reading scales much easier). Use a measuring jug of coloured water to measure the capacity (in litres and/or millilitres) of known items. Order them from smallest to greatest capacity.

Units

In shops, look at and discuss any products that are sold by capacity, e.g. Paint, lemonade, soup, squash, milk. Estimate then calculate, how much liquid you drink each day. Research how much an adult and a child should drink in a day.

Length



Kilometres (km)

In a car/bus/atlas, discuss the distance between places. Walk a kilometre from your home. Where does it take you? Record the distance (in Km) of any journeys taken.

Metres (m)

At home find items shorter/longer than a metre. Order objects according to length.

Centimetres and m

Who has the longest jump/shortest hair/shortest leg/longest throw etc. Estimate first then measure accurately. Record as 142cm, 1.42m or 1m 42cm.

Millimetres and cm

Measure plants and monitor their growth, perhaps recording weekly. Snail race – measure how far a snail travels in 10 minutes (wash your hands!). Find a leaf that is 10cm, 43mm, etc. Record as 43mm or 4.3cm or 4cm 3mm.





Money

Receipts

When shopping with parents, can you find things more expensive/cheaper than 50p, £1.00 etc. Which two items can be bought for £3.00. Find the cheapest bag of flour, rice etc. Look at the receipt together and order some items from least to most expensive.

Shops

Use real money to play shops. Label toys/food etc with prices (up to 50p) and role play paying and giving change accurately. Items can cost multiples of 5, 10 or 1 pence, depending on your child's confidence.

Banks

Using piles of 2p, 5p and 10p to count. If I give you 6, 2ps how much is that? 5 5ps, 8 10ps + 3 2ps etc. How many 2ps can you give me for 16p? I've got 10 5ps, how many 10ps will you swap me for them? Which is best to have, 3 5ps, or 8 2ps. etc. Initially work with just one value of coin, then add more, depending on your child's confidence and ability level.

Piggy bank

Give a selection of coins to count i.e. 1p, 2p, 5p, 10p, 20p, 50p, £1 and £2. (perhaps empty a piggy bank). What is the best way to count all the money? Big coins first? Make 10s? Put all the same values together? Randomly? Start with a few coins then add more, depending on your child's confidence.

Decimals (Confident Prep III and above mathematicians)

Loads of Money

Have piles of £1, 10p and 1p coins. Put into piles to show £4.32, £5.07. £5.70 etc. Make sure that your child knows that £5.70 is more than £5.07. Transfer values onto cards and put into order.

Prices

Collect a range of different receipts for your child to investigate, order the prices, focusing on their decimal values.

Coin Swap

With piles of £1, 10p and 1p coins, convert pounds to pence and vice versa. E.g. £1.62 = 162p, then swap roles. Write the values on cards and use to play snap to match equivalences.

Shape



2D and 1D

On walks, drives or at home, spot and name any 2D shapes that you see (e.g. road signs = triangle, window = square). Draw or photograph them, then label them with any properties that you know.

2D Cutting

From newspapers/magazines, cut out pictures of 2D shapes e.g. a circular clock to make colourful pictures. Next to the pictures write as many shape properties as you can think of.

Shape Make

Use an old food box or greetings card to make a range of 2D shapes. Quadrilaterals and triangles should be easy, as should irregular pentagons, hexagons, heptagons and octagons. You can draw around cans, coins, etc for different circles. Cut out the shapes and use them as templates to create interesting pictures. Can you use them to draw a robot?

2D Drawing

Use accurate ruler skills (or shapes made above) to make a picture using 2D shapes e.g. a house with square windows, rectangular door, and circular door handle.

Right Angle Hunt

Look around you to find lots of right angles (90 degrees). You could play an eye-spy type game ("I spy with my little eye a right angle on something blue/metal/over there etc.") Use a known right angle (like the corner of a ruler or book or set square) to find other angles that are smaller, same as, greater than a right angle.

3D/ 1D

Draw and name any 3D shapes that you see at home or on your travels. E.g. Beans can = a cylinder, ball = sphere etc. Have a go at naming them and identifying some of their properties.

3D Model

Make a model with 'junk' using mathematical names for the shapes. Discuss their properties e.g. vertices (corners), edges, faces etc.

Nets

Carefully unfold a small box (cereal box etc) and discuss its net. Use as a template to make nets for your own boxes. Discuss the purpose of the tabs. You could use your boxes for presents or for storage. Research different nets on the internet for you to make.

Symmetry 1

Adults draw half a shape/picture/pattern, then your child can draw the other so that it is symmetrical (the same on both sides). Swap roles.

Symmetry 2

Fold paper in half and cut out shapes across the fold so that they are symmetrical shapes. Children decorate them so that they are still symmetrical. (Butterflies and faces are always good).

Symmetry 3

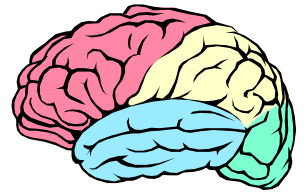
Children write words upside-down under the normal writing. (This can make good greetings cards). Children could draw or write when looking in a mirror too.

Battleships

Play battleships on paper using coordinates e.g. (7,3). We remember this by going along the corridor and up the stairs.



General Skills Games



These activities help your child in all areas of development

Car plates

Using number plates, children can create and order numbers, add and multiply, identify odd and even numbers and patterns.

Card Games

Playing pontoon, rummy and whist are good card games to promote addition.

Dice

Great to generate numbers for addition and multiplication.

Jigsaw Puzzles

Good for developing spatial awareness.

Board Games

Playing a range of fun board games including connect4, snakes and ladders, mastermind, Ludo, chess and darts are good for developing wider reasoning and application skills.

Bingo and Guess my Number

Helps promote awareness of numbers.