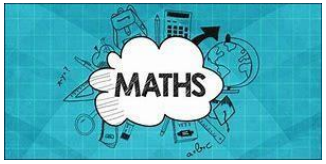
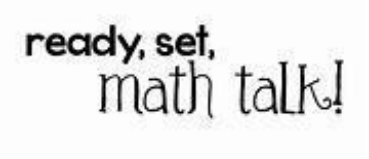
Make Maths fun and a part of life.

Give your child lots of praise and encouragement for their effort, rather than talent. By working hard, they can always improve.

For more information about how you can support your child at home with their Maths, please visit our Belton C of E School website.

Helping your child with maths





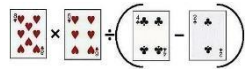
OUTDOOR LEARNING – MATHS IN OUR ENVIRONMENT

- **Number Hunt** - practise recognising and spotting numbers within our environment. For example: door numbers, road signs, at the shop, Roman Numerals. Encourage your child to join in with you. Can they identify one more, one less?
- Give your child the opportunity to **count** a range of interesting objects (sticks, trees, animals etc.). Encourage them to touch and move each object as they count.
- **Count** how many buses/cars/aeroplanes/birds you can spot on the way to school.
- **Order and compare** – find something that is bigger than you or squeeze something that is very small.
- Identify **shapes within the environment** – 2D, 3D, quadrilaterals, and polygons. There are lots of opportunities for discussion here.
- Can you find **patterns** and evidence of **symmetry** in your environment? E.g. symmetry on a leaf or patterns in the paving stones on the ground.
- Finding **angles** within the environment. Can you spot an acute, obtuse or reflex angle? If you cannot spot them, can you make the angle using resources you can find around you?
- **Fractions** within the outdoor environment. Can you find a representation of 1/5 e.g. a flower with five petals.
- Use **chalk to draw** on the ground. Create your own: hopscotch, number line, addition calculation etc.




CARD GAMES

- **Total of 10**. Lay 20 cards on the table. The goal is to find as many sets of cards as possible that add up to 10. Sets can be made of two or more cards.
- **Place value cards** – Each player takes it in turns to pick a card from the deck. The player must decide where to place the card, either in the ones, tens, hundreds or thousands column to make a four-digit number. The player with the biggest number at the end wins. **Variation** – decimal numbers.
- **Bingo.** Using two decks of cards, each player is dealt 16 cards. Arrange the cards face up in a 4 x 4 array. One player takes the roll of the caller who calls out the cards in the second deck. If one of the player's cards is called, they turn their card over. Can you get a row or a full house?
- **I'm the greatest!** Deal six cards to each player. Make a three-digit plus three-digit addition problem using the numbers on your cards. Challenge your child to find the largest sum possible.
- **Declare a fraction war**. Deal two cards to each player – one card becomes the numerator and one the denominator. Can you determine which fraction is the largest?
- **Fast Facts** – A two player game. Deal out half a deck of cards to each player. Flip them over simultaneously. The fastest person to call out the product of the two cards wins both cards. **Variation** – add or subtract the two cards.
- **Order of operations to get 24** – using four cards only and applying the rules of BODMAS, can you make a number as close to 24 as possible? (Brackets, Order, Divide, Multiply, Add, Subtract).



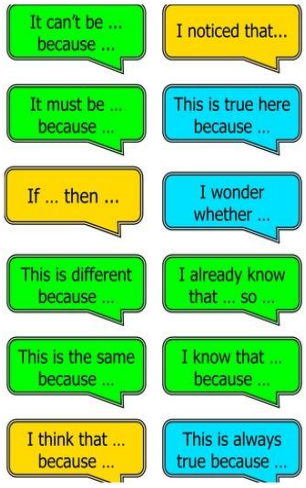
CALCULATIONS

The maths work your child is doing at school may look very different to the kind of 'sums' you remember. This is because children are encouraged to work mentally, where possible, using personal jottings to help support their thinking. Even when children are taught more formal written methods they are encouraged to use these methods to support the calculations they cannot solve in their heads.

When faced with a calculation problem, encourage your child to discuss their ideas first (problem solving) and then justify their answer (reasoning).

The strategies I could use are…

- I know my answer is reasonable because…
- I noticed/discovered that…
- I can check my answer by…
- I can prove my thinking by…



REAL LIFE PROBLEMS

- Go shopping with your child to buy two or three items. Ask them to work out the total amount spent and how much change you will get.
- Buy some items with a percentage extra free. Help your child to calculate how much of the product is free.
- Plan an outing during the holidays. Ask your child to think about what time you will need to set off and how much money you will need to take.
- Use a TV guide. Ask your child to work out the length of their favourite programmes. Can they calculate how long they spend watching TV each day / each week?
- Use a bus or train timetable. Ask your child to work out how long a journey between two places should take? Go on the journey. Do you arrive earlier or later than expected? How much earlier/later?
- Help your child to scale a recipe up or down to feed the right amount of people.
- Work together to plan a party or meal on a budget.
- Let your child help with cooking at home. Help them to measure ingredients accurately using weighing scales or measuring jugs. Talk about what each division on the scale stands for.
- Make a model using boxes/containers of different shapes and sizes. Ask your child to describe their model.
- Practise telling the time with your child. Use both digital and analogue clocks. Ask your child to be a 'timekeeper' (e.g. tell me when it is half past four because then we are going swimming).
- Choose some food items out of the cupboard. Try to put the objects in order of weight, by feel alone. Check by looking at the amounts on the packets.

BOARD GAMES

- Snakes and Ladders
- Ludo
- Frustration
- Monopoly
- Connect Four
- Bingo
- RummiKub
- Magnetic Darts – counting up the score
- Battleship

etc.

EDUCATIONAL ONLINE GAMES AND APPS

Times Table RockStars – each child in KS2 has a personal login to the website which allows them to play a variety of times table games. Will you become a Rock Hero? https://ttrockstars.com/

- **Hit the Button** – a game for both KS1 and KS2 children. The game features a variety of levels which allow children to practise their number bonds, doubling and halving fluency and multiplication and division knowledge. https://www.topmarks.co.uk/maths-games/hit-the-button
- **Maths Frame** – A website which features a vast variety of interactive resources designed for all aspects of the curriculum. https://mathsframe.co.uk/
- **Year 4 times table test** (practise) which will be administered nationally for all children in Year 4 in June 2020 (link via Maths Frame).https://mathsframe.co.uk/en/resources/resource/477/Multiplication-Tables-Check

DOMINO AND DICE GAMES

- **Lonely Domino** – Start with all of the dominoes facing upwards. Choose one of those dominoes and announce that it is lonely. Join the domino up with one or more dominoes whose number of dots **total** 8. Keep changing the total so that the children need to use their mental arithmetic skills.
- **Which is missing?** Take two dominoes and announce the total of the number of dots from both dominoes. Show your child one of the dominoes and ask how many dots must be on the other domino. Then swap roles.
- **I'm thinking of a domino that**… Lay all dominoes face up. Choose which one will be your secret domino. Give clues such as "one side of the domino has twice the number of dots as the other side does" or "the domino has a total number of dots less than 8".

DICE

- **Shut the Box** – Generally played with a wooden box that displays numbers 1-12, however you could write the numbers 1-12 on a piece of paper. Each player will roll two dice and find the total. Once a total is reached, the player can cross the number off of their list. The winner is the first person to match all of the numbers.
- **Beat That!** Children are provided between 2-7 dice depending on individual ability. The aim of the game is to make the highest number possible using the combinations of the rolled dice and their place value knowledge e.g. if a child using three dice rolled the numbers 4, 6, 8, then the highest number possible would be 864.
- **Run For It** – This game helps children to build on their understanding of the 5 times table. Using six dice, children must aim to roll dice that complete a sequence of numbers, such as 1-2 or 1-2-3. Each number that fits the sequence is worth 5 points. The winner of the game is the first person to reach 50 points.