

Extended Learning Opportunities to Develop Maths at Home

We all use maths every day, often without realising it. We believe that every child can develop the numeracy skills they will need, to be as independent as possible. At Pield Heath House School we have created some mathematical opportunities that you can do at home with your child to extend their learning. These suggested activities are in hierarchal order from Developmental Levels to Independent Levels dependent on student ability.

Suggested activities for Cooking

- Collect cooking and preparation tools.
- Talk about the recipe/ingredients using terms like more, less, how many, how much.
- Count the pieces of food for each person.
- Set the table, copy a model setting.
- Prepare and share out food – “two for me and two for you”. Ask, “How many for each of us?”
- Investigate the units of measurement for items in the pantry or refrigerator.
- Cut the sandwich in half: “Can you cut the sandwich in half creating a different shape?”
- Mix a drink for the family: e.g. measuring cordial, fruit and water.
- Estimate how much each item weighs, then check how close the estimates are.
- Find the time we start cooking the rice so that our food is ready to be served at the same time?
- Change a recipe that serves 6 for 4 people (or 6 for 3 people for lower levels). How much of each ingredient will we need?
- Be a junior Masterchef: e.g. measure and weigh ingredients, apply ratio, consider cooking time, and serve portion sizes.

Suggested activities for ‘Shopping’ ing the home -

- Take a specific item from the shelf/cupboard.
- Ask, “What shapes can you find?” ‘what shape is it?’
- Refer to supermarket labels and allow your child to identify them, or verbally identify where it is from. Describe the logos to your child.
- Notice shapes and use mathematics vocabulary (cuboids instead of boxes).
- Estimate and weigh the fruit and vegetables - then weigh them together.
- Compare two items for the best value for money - refer to buy 3 and pay for 2 type stickers.
- Find specific items (e.g., medium-sized tin of red beans, 2 litres of milk, 250g of mince) in the fridge/cupboards.
- Compare packaging sizes for a litre and a kilogram.

Suggested activities for Reading

- Highlight everyday words “under”, “over”, “between”, “around”, “behind”, “up”, “down”, “heavy”, “light”, “round”, “circle”, “yesterday”, “tomorrow” in books you read.
- Conduct a shape and number search when reading a book.
- Highlight numbers in the story – count objects, the number of pages and look at the page numbers.
- Roll the dice to find out how many books (or chapters) you read with your child before bed.

- Describe the location of an object in an illustration, using books such as *Where's Wally?* Find the most common letter or word on a particular page.
- Create a map or timeline based on the story they are reading.

Suggested books:

- The Shopping Basket by John Burningham.
- 365 Penguins by Jean-Luc Fromental.
- We're Going on a Bear Hunt by Michael Rosen.
- The Girl Who Never Made Mistakes by Gary Rubinstein - great for teaching kids that it's OK to make mistakes and that you can learn from them
- Anno's counting book.

There are also some fantastic recommendations at

<https://www.mathsthroughstories.org/recommendations.html>

Suggested activities for Home

- Take turns closing their eyes and describing how to get from the living room to the kitchen, from the kitchen to their bedroom.
- Dance to their favourite song/music.
- Play "I Spy" with a mathematics focus; e.g., something rectangular and red.
- Measure everything! How far can you jump? How long is the desk? How tall are you? How tall is the dog?
- Mark important dates on a calendar.
- Estimate how long it takes you to:
 - brush your teeth?
 - drive to the store?
 - get dressed
 - jump up and down 10 times?
- Investigate how long it is to your children's birthdays (in months, weeks, days or hours).
- Enter dates into a digital calendar: e.g., identify the day of the week, the time between dates and set reminders.
- Help you to make a travel plan using timetables.
- Compare steps, paces and hand spans with metric units of length.

Suggested activities for TV and film

Whatever they're watching, there's opportunities to talk about maths. Ask them questions, such as how fast are the cars going in Top Gear, how many votes are being cast on Strictly Come Dancing. We highly recommend the shows Numberjacks, Numberblocks and The Numtums on CBBC.

Top tips for parents and families:

- **Be positive** about maths. Don't say things like "I can't do maths" or "I hated maths at school"; your child might start to think like that themselves.
- **Point out the maths in everyday life.** Include your child in activities involving maths such as cooking, dates, days of the week and daily timetables.
- **Praise your child for effort rather than talent** - this shows them that by working hard they can always improve.

Recommended websites:

Maths Games:

<https://www.topmarks.co.uk/maths-games/> - please choose an appropriate level for your child's ability.

<https://mathsframe.co.uk/en/resources/category/22/most-popular>

<http://www.crickweb.co.uk/ks2numeracy.html>

<https://www.mathsisfun.com/games/>

<https://play.numbots.com/#/account/school-login-type>

<https://mathszone.co.uk/>

Online Resources:

<https://whiterosemaths.com/homelearning/>

<https://classroomsecrets.co.uk/home-online-learning/>

<http://www.first4maths.co.uk/product-category/free-resources/>

http://www.bbc.co.uk/schools/websites/4_11/site/numeracy.shtml

<https://www.bbc.co.uk/bitesize/subjects/z826n39>

<https://masterthecurriculum.co.uk/> - VBC C,D and E only.

<https://www.bbc.co.uk/bitesize/subjects/zqhs34j> - VBC E only

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