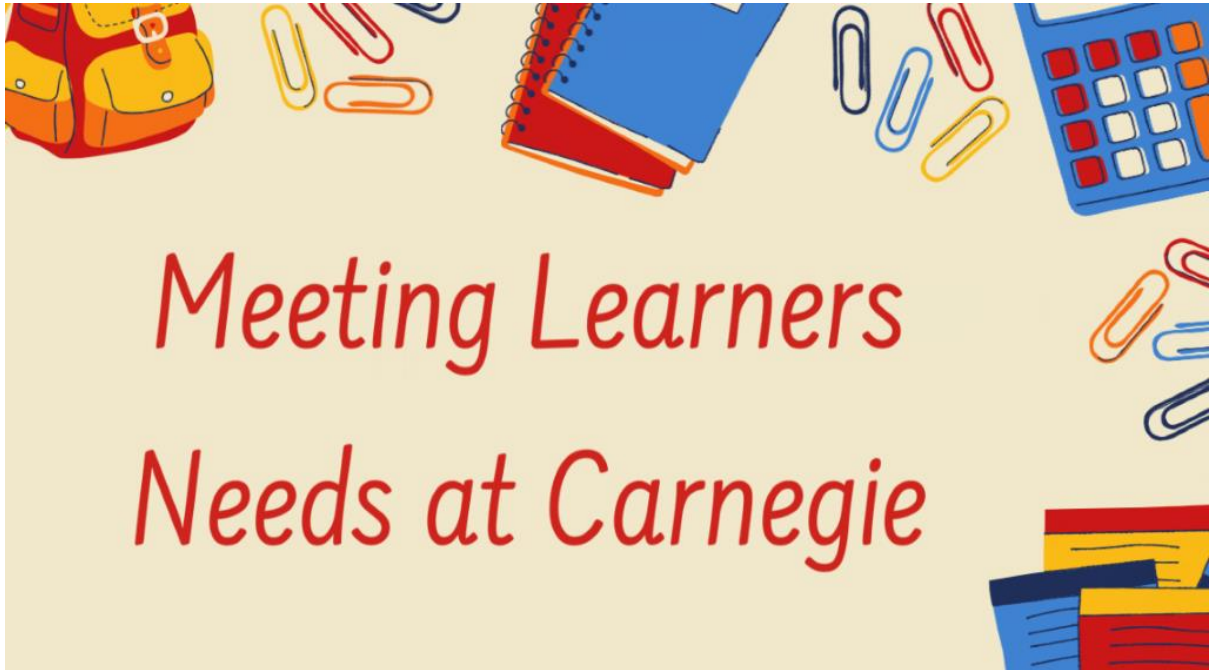


Carnegie Primary School



Supporting Numeracy Home Learning Toolkit

What is in this toolkit?

This toolkit provides a range of suggested supports to help support children with Numeracy while learning at home.

The toolkit can be used for reference to support learning at home.

If you have any further questions, please get in touch with Carnegie's Support for Learning Team.



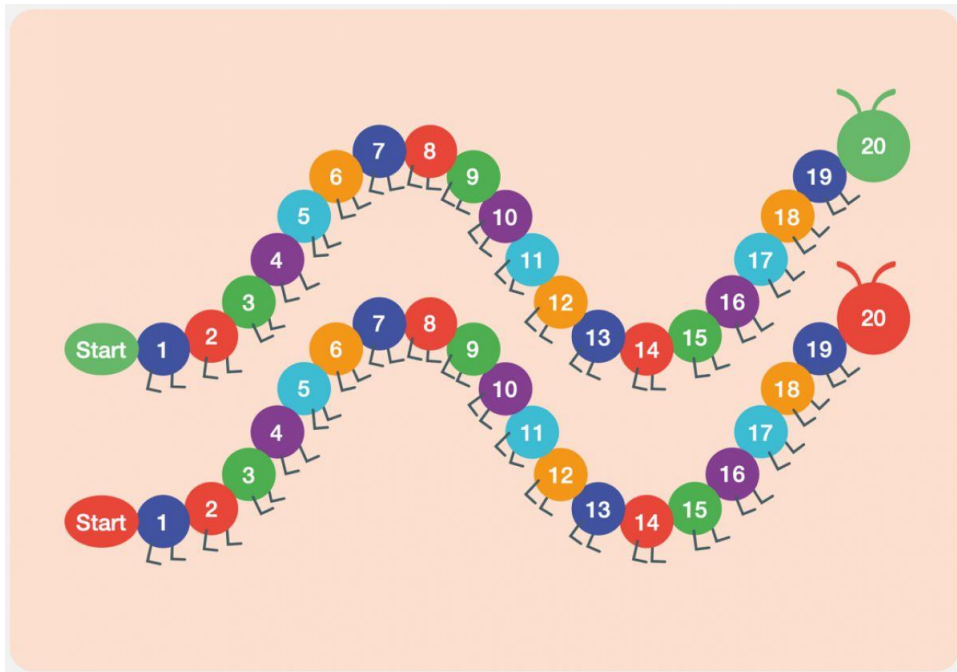
Strategies to support

Early primary:

Younger children will likely benefit from activities, games, and discussion with parents. Working with younger children at home, it is important not to see mathematics as a separate or standalone activity but rather as something which can be incorporated into everyday activities, games, stories, and conversations.

Here are some ways that we can celebrate maths as part of their day:

- **Board games**, particularly ones with linear, numbered, equal-sized spaces can be useful for the development of early number skills. Most families will have 'Snakes and Ladders' or something similar; if not, this is a great opportunity to make your own!



- Incorporate mathematics into **everyday routines and activities**: tidying up and meal times in particular provide opportunities for conversations about counting, comparing, time, and sharing.
- **Snack times** and meals are a great opportunity to learn mathematics, such as counting, estimating and comparing. For example, with young children, you could count and match items in a 'Teddy Bears' Picnic.' You can compare quantities such as more or less or quantify food items (making sure to link the last number counted to the number of items in the set) or discuss the capacity of different cups or jugs. A parent or puppet can make deliberate errors in counting and sharing, with the child encouraged to identify these mistakes.
- Use **mathematical vocabulary** where possible as part of conversations and play: for example, when making comparisons (*which is bigger? which teddy is first in line? who has more? are they shared fairly?*). Opportunities can also be taken for 'shape-spotting' and sorting around the home.
- Finding the mathematics in **story books**. www.mathsthroughstories.org contains explicit links to mathematics in stories, but you can also consider opportunities in more common story books for mathematical discussion.
- Use **manipulatives** to support learning. For example, building bricks could be used to model simple addition and multiplication, or toys used to make comparisons of size or quantity. Measuring items, scales, construction materials, puzzles, sorting and pattern materials are also great sources for discussion. www.mathsbot.com has some online versions of manipulatives used in school.

Upper primary:

Older children areas of study are more advance and will require following more closely the work set by the teacher.

- Create a **daily routine** for mathematical practice with your child and reinforce this with praise and rewards. This can increase the amount of time spent 'on task' and improve the effectiveness of how that time is spent. You might want to consider linking this routine to the rhythm of a normal school day, but be realistic in what you can manage as a family.
- Encourage your child to **set goals**, plan, and manage their time, effort, and emotions. This type of support can help children to regulate their own learning and will often be more valuable than direct help with mathematical tasks. As children become older, more independence can be expected but support will still be needed.
- Having a **place to study** mathematics is helpful. This could be a desk in a bedroom or a place at the kitchen table. Ensure your child has the materials they need. Whatever they may tell you, a notebook and pen will always be needed for working out (even when tasks are online). Also, a calculator, and a ruler are helpful.

Away from providing structure, there are some tips for engaging in mathematical content with older children at home:

- Many children enjoy **practising times tables** either online or on paper. There is value in this: evidence shows that pupils need to develop a fluent recall of mathematical facts, and times tables are among the most important of these.
- It can be difficult to learn new mathematical content away from the classroom, but evidence suggests that we should provide **opportunities for children to retrieve** the knowledge that they have previously learnt. Parents should encourage practice of previously studied content.
- When attempting to engage with new content, providing **worked examples** of concepts is likely to be beneficial.

Adapted from advice from <https://educationendowmentfoundation.org.uk/>