= Mathematics

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YEAR 5 MATHEMATICS AT SCHOOL: WHAT TO EXPECT

By the end of the year, your child will be meeting the Year 5 mathematics standard if ...

... they are solving realistic problems using their growing understanding of number, algebra, space, measurement, probability and statistics.

They will be solving problems involving several steps, for which they need to choose the most appropriate method to help them solve the problem. They will be using a variety of approaches and explaining how each one works.

FOCUS ON NUMBER

During Year 5 at school, more than half of mathematics teaching time will focus on number learning.

To meet the standard, your child will be learning to:

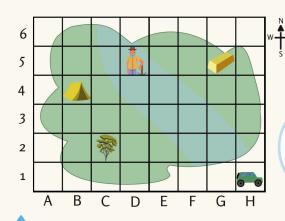
- choose a suitable method to solve problems
 (using +, -, x, ÷) and understand that explaining their method aloud is powerful for supporting accuracy
- use familiar number facts to work out unknown facts,
 e.g. knowing that 10 × 6 = 60 can help you work out
 9 × 6 because it will be one 6 less than 60
- connect grouping and sharing (multiplication and division) to find fractions of sets and quantities, e.g. knowing that 4 lots of 5 makes 20 (4 x 5 = 20) or that 20 shared between 4 is 5 (20 ÷ 4 = 5) can help you work out $\frac{1}{4}$ of 20
- recognise two-dimensional shapes in three-dimensional objects
- use grid references on maps to describe the location of objects
- measure the size and capacity of objects
- conduct chance experiments to explore and discuss outcomes that are and are not equally likely
- pose questions to investigate, then graph and discuss the findings.

This is a small part of the skills and knowledge your child is learning in order to meet this standard. Talk to the teacher for more information about your child's learning.

MATHEMATICS PROBLEMS AT THIS LEVEL MIGHT LOOK LIKE THIS:

Here is a map. What things are at B4 and C2 on the map? What is the location of the gold?

The gold prospector wants to use his compass to get back to his 4WD. In what direction should he go?



At B4 there's a tent and at C2 a tree. The gold is at G5.

Ask the teacher what your child is doing in mathematics. Talk about how you can work together to support your child's learning.



MATHEMATICS AT HOME

Talk together and have fun with numbers and patterns

Help your child to:

- practise counting forwards and backwards from any starting number up to and beyond 10,000 and take turns saying the next number
- read and discuss large numbers as they arise, e.g.
 prices at a local car yard, road signs with information
 about how far it is to the next town or city, a car's
 odometer that shows how far it has travelled
- play around with large numbers. Find different ways to make 100 and 1,000 and notice patterns (e.g. 100 more can be 800 + 200, 801 + 199 or 802 + 198). Name the number that is 10, 100 or 1,000 more (or less) than any number up to 10,000 and look out for patterns e.g. 100 more than 111 is 211, 1,000 more than 111 is 1,111)
- discuss number patterns in the multiplication facts (times tables), e.g. talk about why the product of 3 × 4 is the same as 2 × 6 and 6 × 2
- notice patterns and create your own, e.g. create a secret code using numbers and use it to write messages.

Involve your child in easy, everyday activities like these

- Making and organising lunch or a meal for a social gathering, including equal sharing of fruit, biscuits, sandwiches or drinks.
- Helping at the grocery store.
 Choose items to weigh. Look for the best buy between different makes of the same items
 (e.g. breakfast foods, household essentials), including looking at the ingredients and nutritional value per serve.
- Practising multiplication facts (times tables).
 Check with your child or their teacher which ones would be the best to practise. For trickier facts, encourage them to explain why they are sure of the answer. Do not rush your child.

 Praise clear, good reasons.
- Telling time to the minute and exploring time in 24-hour format.
- Noticing shapes, numbers and patterns when you are reading together.

Mathematics is an important part of everyday life and there are lots of ways you can make it fun for your child.



THE WAY YOUR CHILD is learning to solve maths problems may be different to your own experience.

FOR SCHOOL HOLIDAYS/WEEKENDS/RAINY DAYS

Here are some suggestions for what you and your child can do together.

- Play games using guessing and checking, e.g. pencil and paper games, card games and board games. Source games and other play materials at a local toy library or second hand store.
- Work on challenging puzzles, e.g. Sudoku puzzles, crossword puzzles, jigsaw puzzles.
- Look through junk mail. Find the most expensive and the cheapest item advertised, or tear or cut the junk mail into strips to make a woven mat.
- Make a roster for jobs around the house.
- Plan for a special event on a budget,
 e.g. afternoon tea for a grandparent or family friend.
- Play outside games such as cricket, netball, basketball, mini-golf, soccer, frisbee.

- Cook or bake. Follow a simple recipe,
 e.g. for damper, pancakes, scones.
- Find a 3D model or make one, e.g. using blocks that fit together. Draw what it looks like from each side and above.
 Then draw what your child thinks it looks like from underneath. Once finished, check the underneath of the real object against the drawing.
- Follow simple origami instructions.
- Collect family and friends' birthdays and put them in order. Make a reminder calendar for the year.

Being positive about mathematics is really important for your child's learning – even if you didn't enjoy it or do well at it yourself at school.

SUPPORT YOUR CHILD

Parents, family and carers like you play a big part in your child's learning every day - you can support and build on what they learn at school.

