

# MATHEMATICS

AT SCHOOL

## If your child is meeting the Mathematics Standard by the end of Year 6...

...they will be working at curriculum level 3, solving realistic problems using their growing understanding of number, algebra, geometry, measurement and statistics.

They will be solving problems involving several steps and which require them to choose the most appropriate method for the problem. They will be learning a range of approaches to solve problems and will be able to make general statements about numbers and patterns.

*I know that A is not correct. The rest all have four rectangle-shaped faces and two square faces. But C and F have faces that overlap when folded. So, only B, D & E fold to make the box.*

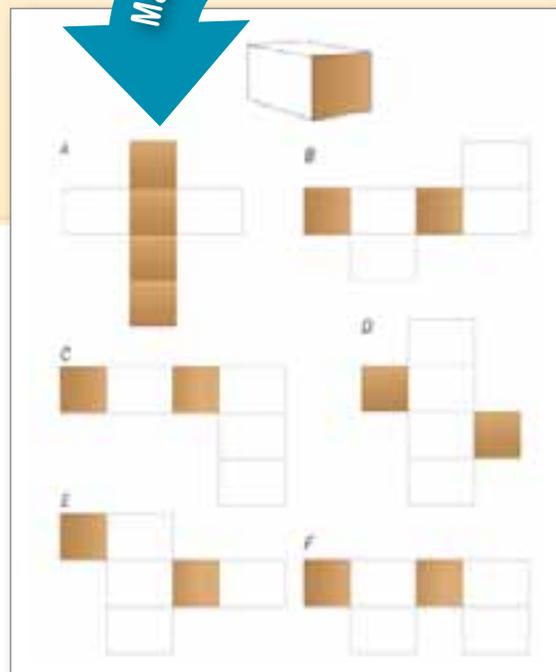


Maths problems at this level might look like this:

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

- solve problems (using +, −, ×, ÷) that require them to choose the best method
- use repeated halving or known multiplication facts to solve problems involving fractions
- find the value of a given number in a pattern
- sort, create and identify 2D and 3D shapes
- measure time and find the area and volume of objects
- use grid references on maps and points of the compass to give directions
- draw objects from different view points
- explain results of investigations by identifying patterns
- experiment to work out the likelihood of an event happening.

*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.*



**Without actually cutting or folding the paper, how many of these nets (templates) will fold up to make the box?**



## Focus on number

During Year 6, 50–70 percent of mathematics teaching time will focus on number learning.

## Work together...

Help support your child's learning by building a good relationship with your child's teacher, finding out how your child is doing and working together to support their learning.



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## AT HOME

## Talk together and have fun with numbers and patterns

Help your child:

- ✿ count forwards and backwards (starting with numbers like these fractions:  $\frac{1}{4}$ ,  $\frac{1}{2}$ ,  $\frac{3}{4}$ , 1,  $1\frac{1}{4}$ ,  $1\frac{1}{2}$  then back again)
- ✿ talk about large numbers in your environment e.g., computer game scores, distances
- ✿ talk about the phases of the moon and link these to the best times for fishing/planting
- ✿ talk about the patterns in the night sky – summer and winter. What changes and why?
- ✿ talk about graphs and tables that are in your local newspapers.

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

Talk a lot to your child while you are doing things together. Use the language that works best for you and your child.

## Use easy, everyday activities

Involve your child in:

- ✿ making dinner at home, at camp or on a marae – look at how many and how much is needed for the people eating (potatoes, bok choy, carrots, sausages). Talk about fractions (half, quarter, fourth) to calculate how much to cook and cooking times
- ✿ helping at the supermarket – look for the best buy between different makes of the same item and different sizes of the same item (e.g., toilet paper, cans of spaghetti, bottles of milk)
- ✿ looking at the ingredients – fat, sugar, additives – and deciding on the healthiest choice
- ✿ practising times tables – check with your child/their teacher which tables you could help your child with.

## For wet afternoons/school holidays/weekends

Get together with your child and:

- ✿ play card and board games using guessing and checking
- ✿ cook – make a pizza, working out who likes what toppings, making and cooking it, and making sure the pizza is shared fairly – make a paper or cardboard container to hold a piece of pizza to take for lunch
- ✿ mix a drink for the family – measuring cordial, fruit and water
- ✿ make kites or manu aute using a variety of shapes and materials. How high can it go, how long can it fly for?
- ✿ make a family/whānau tree or whakapapa – number of cousins, aunts and uncles, grandparents and their relationships to you
- ✿ plan out the holidays. Look at each day's fun time, kai time, TV time, helping time, family time and bedtime
- ✿ plan to make bead necklaces and friendship bracelets – calculate the cost of the materials, the length of stringing material
- ✿ play outdoor games – frisbee, touch rugby, kilikiti, cricket, soccer, bowls
- ✿ do complicated jigsaw puzzles
- ✿ go on scavenger hunts – make a map with clues and see who can get there first.

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 mathematics problems may be different to when you were at school. Get them to show you how they do it and support them in their learning.

## Support your child...

As parents, family and whānau you play a big part in your child's learning every day, and you can support and build on what they learn at school too.