

# MATHEMATICS

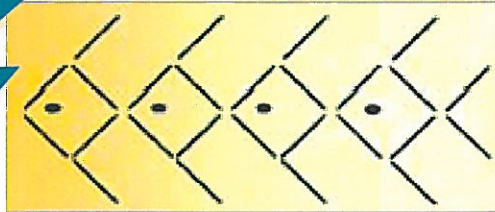
AT SCHOOL

## If your child is meeting the Mathematics Standard by the end of Year 8...

...they will be working at curriculum level 4, solving realistic problems using their growing understanding of number, algebra, geometry, measurement and statistics.

They will be able to use multiplication strategies to solve problems using fractions, decimals and percentages. They will be able explain different ways to solve problems. They will have a range of thinking strategies to help them to investigate mathematics.

Maths problems at this level might look like this:



With 26 matchsticks you can make 4 fish in this pattern.

**How many fish can you make with 140 matchsticks?**

**Write an equation that gives the rule for the number of matchsticks you need for a given number of fish.**



*I worked out that one fish uses 8 matches, then every fish after that uses 6.*

*So  $140 - 8 = 132$ .  $132 \div 6 = 22$ .  $22 + 1 = 23$  fish.*

*If 'f' is the number of fish and 'm' is the number of matchsticks used, the equation for this is:*

$$6 \times f + 2 = m$$

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

- solve problems with decimals and integers using addition and subtraction
- use a range of multiplication methods to solve problems with whole numbers and fractions
- create and use tables, graphs and rules to show linear and non-linear relationships (see example problem)
- measure objects and make simple conversions between units of measure
- find perimeters and areas of rectangles, parallelograms, triangles and volumes of cuboids
- explore transformation and discuss how shapes and patterns change after a transformation
- describe locations and give directions using scales, bearings and co-ordinates
- gather and use data that gives several pieces of information (e.g., age and size)
- sort data and display in different ways, and discuss patterns and trends
- use fractions to discuss the likelihoods of outcomes involving chance.

*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.*

### Focus on number

During Year 8, 40–60 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.

