PUZZLERS

Teachers can photocopy this page to use in class

▶ FOUNDATION
MARBLES

This problem suits the 'act it out' problem solving strategy.

Katie was given a marble on Tuesday. Then she was given two marbles every day for a long time. When did she get her 11th marble?

http://nzmaths.co.nz/resource/marbles

▶ YEARS 1 AND 2
STRAWBERRY MILK

'Draw a picture' problem solving strategy is good for this problem.

Mary the milk lady had a square milk crate that could hold four bottles. In how many ways can she put two strawberry milk bottles into the crate?
Be careful that you don't repeat any arrangements.

Extension – Mary has a 3 by 3 square milk crate. How many ways can she put 8 bottles of strawberry milk in the crate?

http://nzmaths.co.nz/resource/strawberry-milk-0

▶ YEARS 3 AND 4
PIRATES

The 'act it out' problem solving strategy works well with this problem. There are 2 pirates and 4 treasure chests on an island. The pirates have 1 small boat to take the treasure to their ship. The boat can take 2 pirates or 1 pirate and 1 chest of treasure. How many trips do the pirates have to take to get all the treasure and both pirates onto the ship?

http://nzmaths.co.nz/resource/treasure-ship

▶ YEARS 5 AND 6
FARMYARD

This problem lends itself well to the 'Guess and Improve' problem solving strategy.

In the farmyard there are some pigs and some chickens. In fact there are 87 animals and 266 legs. How many pigs are there in the farmyard? There are many possible solutions.

http://nzmaths.co.nz/problem-solving-strategies