

PROBLEM SOLVING YEAR 4

You will find where I got these maths problems on [e-ako maths](#) which provides free online basic fact learning tools which will help your child learn their basic facts, as well as a collection of games to improve their speed and accuracy. If you think this would benefit your child, click to read how to access this resource ([show instructions](#)).

Click to read about the purpose of the tasks below ([show purpose](#)).

[I've downloaded some math's problems for your tamariki. Please do only one problem a day and stop if your child gets too frustrated.](#)

We suggest that you ask your child what kinds of things they have been doing in maths at school, from here.

Double it: a dice game

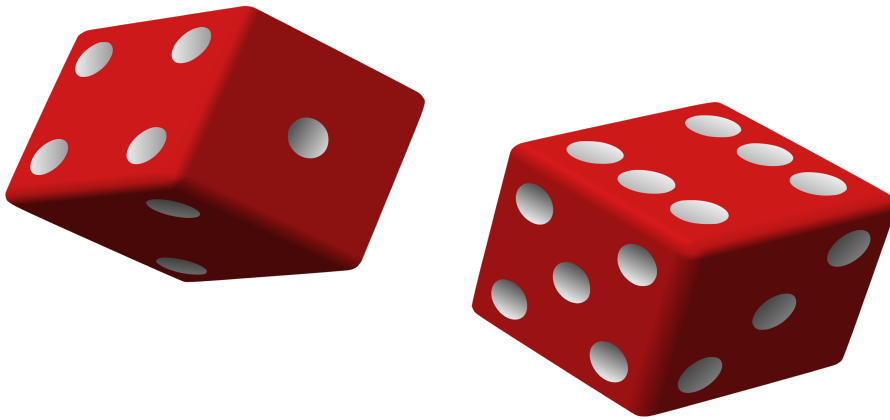
YOU WILL NEED DICE

The numbers 20, 22 or 24 most often in an agreed time. Here's what to do:

- Agree on a time for the game and set the timer.
- Take turns to roll the dice, add the two numbers, double their sum and write the total.

At stop, each person circles and counts the numbers 20, 22 and 24 on their list of totals.

- The winner is the person who has the most. To increase the challenge use three dice (target 36, 34, 32). Halve it. A variation on the game: Find the sum of 3 dice. If the sum is an odd number choose to subtract 1 (or add 1), then halve the number. The aim is to be the person who makes the numbers 1, 2 or 3 most often.



FRACTIONS

Fractions can be challenging for children and adults alike. It is very important that your child experiences success. As your child works on the tasks, have them talk about what they are doing and support and encourage them by asking helpful questions such as:

“What is the problem asking you to find out?”

“Have you tried...?”

•“Is there another way you could show that?” and making positive comments such as:

•“I like the way you are...”

“I can see you are trying really hard...” Notice in these tasks the fractions appear like this $\frac{2}{3}$ rather than like this Help your child to read these.

You are wanting children to reply with the fractions; $\frac{1}{3}$, $\frac{1}{5}$ etc.

3 children each get how much pizza of one pizza, divided into 3 pieces?

3 children get 2 pizzas divided into 3 pieces for each pizza. How many pieces does each child get?

3 children each get three pizzas. How many pieces of pizza each?

5 children get how much of one pizza?

5 children get how much of two pizzas?

5 children get how much of three pizzas?.



There are 8 pieces of orange. Each child gets $\frac{1}{4}$ of all the pieces of the orange



so how many pieces do they get each?

There are 15 strawberries and each child gets $\frac{1}{5}$ of the strawberries, so they get how many strawberries each?



There are 15 biscuits. Each child gets $\frac{1}{3}$ of the biscuits, so they get how many biscuits each?

You have a bag of jellybeans.

$\frac{1}{5}$ of the beans in your bag are red. How many jellybeans might be in your bag? Show how you know.

You and three friends each get 5 jellybeans. How many beans were in the bag? Show how you know.

You put some more jellybeans in the bag. This time $\frac{2}{3}$ of the beans in your bag are red. How many jellybeans might be in your bag? Show how you know.

You and five friends each get 4 jellybeans from the bag. It's empty



now. How many jellybeans were in the bag? Show how you know.