Stepping Stones

ACTIVITY

The Tāwhaio family farm has several streams running through it. Instead of building lots of bridges, they placed stepping stones where they cross regularly. Matiu can leap 2 gaps with a long stride, but sometimes he likes to take 2 short steps.

1. When he comes to a part of the stream where there are 2 stepping stones, he can cross with 3 short steps (SSS) or a short step followed by a long stride (SL).
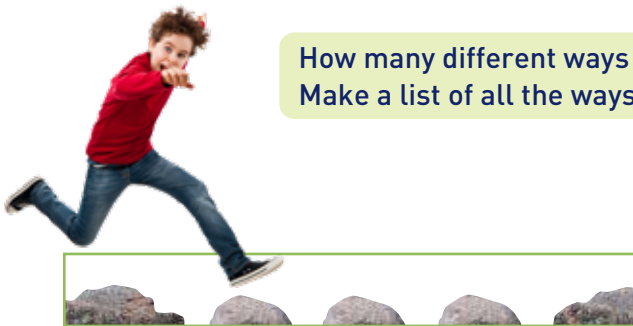

or

How else could he cross this part of the stream?

2. Behind the house, the stream needs 3 stepping stones.

How many different ways can Matiu get across? Make a list of all the ways.

3. What if there are more stepping stones?
    a. Make a table to record your results.

Number of stepping stones	1	2	3	4	5	6
Different ways to cross	2					

    b. Look carefully at the second row of your table. Can you see a pattern that would help you to work out how many different ways there are for any number of stepping stones?

4. a. How many different ways are possible if there are 10 stepping stones?
    b. This sequence of numbers is called the Fibonacci sequence. Do some research on it.