

## Square Roots

### Purpose:

To help your child to learn the square numbers to 100 and their square roots

### What you need to know:

Square root  $\sqrt{9}$  is 3       $\sqrt{9} = 3$

Square of 3 is 9       $3 \times 3 = 9$

### What you need:

Game cards

### What to do:

Make a set of game cards. See the next page.

Print the number cards and glue them on to cardboard. Cut the cards.

Or make your own cards and write the numbers on

Mix up the cards and spread them out face down between the players.

The first person turns over two cards. If they are a match of square and square root numbers the player takes the pair and has another turn.

If the cards do not match put them back, face down. The next player has a turn.

The winner is the player with the most pairs.

### Matching pairs:

3

$\sqrt{9}$

4

$\sqrt{16}$

6

$\sqrt{36}$

9

$\sqrt{81}$

### What to expect your child to do:

To quickly recognise a matching pair.

### Variation:

- This game is played like Memory. Use the same cards to play Snap.
- Use these cards as flash cards. Turn over one card and ask your child to name the matching square or square root for that card.

### He Kupu Māori:

turn over	huripoki (-na)
square (of a number)	pūrua
square root	pūtakerua
pair	takirua

**He Whakawhitinga Kōrero:**

- Riwhiriwhia ngā kāri. (*Shuffle the cards.*)
- Horahia ngā kāri, ko ngā mata ki raro. (*Spread the cards out, face down.*)
- Huripokina ētahi kāri e rua. (*Turn over two cards.*)
- He takirua tēnā. Ko te [iwa] te pūrua o te [toru]. Ko te [toru] te pūtakerua o te [iwa]. (*That's a pair. [9] is the square of [3]. [3] is the square root of [9].*)
- Ehara tēnā i te takirua. Kei a koe ināianeī. (*That's not a pair. Your turn now.*)

Game cards for squares and square roots

1	2	3	4	5
6	7	8	9	10
$\sqrt{2}$	$\sqrt{4}$	$\sqrt{9}$	$\sqrt{16}$	$\sqrt{25}$
$\sqrt{36}$	$\sqrt{49}$	$\sqrt{64}$	$\sqrt{81}$	$\sqrt{100}$