



## Multiplying by 10, 100 and 1000

### Purpose:

You can help your child practice multiplying numbers by 10, 100 and 1000.

### What you need:

- Game board. You can print these or make your own.
- Cardboard.
- Dice.
- Piece of paper for each player.

### What to do:

Glue the cards on to cardboard. Give a game board to each player. Players take turns to roll the dice. The number on the dice is the number of zeros in the number. For example, 4 means 10 000.

The player then writes on their piece of paper how they will use the dice roll to cross a number off their game board.

- Example 1: If a player rolls a 4 they can cross off the number 20 000 by writing any of the following:  $2 \times 10\,000$ ,  $20 \times 1\,000$ ,  $200 \times 100$ ,  $2\,000 \times 10$  or  $20\,000 \times 1$ .
- Example 2: If a player rolls a 3 they can cross off the number 3 000 by writing any of the following:  $1 \times 3\,000$ ,  $10 \times 300$ ,  $300 \times 10$ , or  $1\,000 \times 3$

### Game board A

600	40	3 000	500	10 000	200 000
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Other players check the answer, if it is correct the player crosses off the answer.

Encourage your child to use a variety of equations, for example  $\times 10$ ,  $\times 100$  and  $\times 1000$  during the game.

The winner is the first player to cross off all the numbers on the game board.

### What to expect your child to do:

To correctly multiply by 10, 100, 1000.

### Variation:

- A player can have another turn if the number on the dice is the same as the number on the board. For example, using Game Board A: If a player rolls a 3 on the dice and has the number 3 000.
- Make more game boards.
- Use your home language to play this game.

### He Kupu Māori:

mataono tau	dice
pīrori (~hia)	roll (e.g. a dice)
papa tākaro	game board
whakarea (~tia)	multiply
whakareatanga	multiplication
porotiti	counter

### He Whakawhitinga Kōrero:

- Kei a koe i te tuatahi. Pīrorihia te mataono tau. *(You go first. Roll the dice.)*
- Kua pīrorihia te whā. Koirā te maha o ngā kore i tētahi o ngā tau i tō papa tākaro. Tohua tēnā tau. *(A 4 has been rolled. That's the number of zeros in a number on your game board. Point to that number.)*
- He aha tētahi whakareatanga e hua mai ai tēnā tau? *(What is a multiplication that will produce that number?)*
- Tuhia te whakareatanga ki te pepa. *(Write the multiplication on paper.)*
- Whakareatia te tekau mano ki te rua, ka rua tekau mano. *(Multiply 10 000 by 2 and you get 20 000.)*
- Uhia tēnā tau ki te porotiti. *(Cover that number with a counter.)*
- Kua uhia katoatia ngā tau i tō papa tākaro, ko koe te toa. *(You've covered all the numbers on your game board, you're the winner.)*

### Multiplying by 10, 100 and 1000 Game Boards

600	40	3 000	500	10 000	200 000
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400	6 000	20 000	5 000	10	100 000
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40 000	50	10 000	2 000	600	300 000
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500 000	200 000	60	400	30 000	1 000
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30 000	400	5 000	2 000	10 000	20
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