



## Factors Cover Up

### Purpose:

You can help your child to identify factors of numbers.

### What you need:

- Factors game boards. You can print these or make your own.
- Pack of playing cards – take out the aces and picture cards.
- 8 buttons/counters for each player.

### What to do:

2 – 4 players.

Shuffle the playing cards and place in a pile face down. Give a game board to each player.

The first player turns over a playing card. If the playing card number is a factor of any numbers on your game board, you can cover those numbers with a counter. Return the playing card to the bottom of the pile. For example: For playing card **8** You can cover 8, 16, 24, 32 etc.

The next player has a turn. The winner is the first person to cover all the numbers on their game board.

### What to expect your child to do:

- Identify factors of numbers.
- Use strategies such as multiplication and division facts, and divisibility rules.
- 5 can be a factor of numbers ending in 0 or 5,
- 2 can be a factor of even numbers,
- 3 is a factor of numbers whose digits add to be a multiple of 3 (e.g. 42:  $4 + 2 = 6$ , 6 is a multiple of 3, therefore so is 42)

### Variation:

- Swap game boards to play again.
- Play this game using your home languages.
- Make up more game boards.

### He Kupu Māori:

papa tau	number board
tauwehe	factor
porotiti	counter

### He Whakawhitinga Kōrero:

- Riwhiriwhia ngā kāri, ka whakaputu ai ko ngā mata ki raro. (*Shuffle the cards and place them in a pile face down.*)
- Tangohia tētahi kāri. Āta tirohia tō papa tau. Mēnā he tauwehe tō kāri o tētahi o ngā tau i tō papa, uhia taua tau ki te porotiti. (*Look carefully at your number board. If your card is a factor of a number on your board, cover that number with a counter.*)
- Whakahokia tō kāri ki raro o te putunga kāri. (*Return your card to the bottom of the pile.*)
- Kei ahau ināianeī. (*It's my turn now.*)
- Māu e tīmata. (*You can start.*)
- He tauwehe te whā nō te tekau mā rua. (*4 is a factor of 12.*)
- Ko te tangata tuatahi ki te uhi i ngā tau katoa i tōna papa, ko ia te toa. (*The first person to cover all of the numbers on their board is the winner.*)

### Factors Game Boards

14	24	20	32
45	35	16	28

15	48	32	30
45	21	18	27

21	24	16	28
12	25	18	27

12	40	35	18
15	28	16	49

