## Ordering fractions, decimals, and percentages

## Purpose:

You can help your child order fractions, decimals, and percentages.
What you need:

- Game cards. You can print these or make your own.
- Cardboard.


## What to do:

Glue the cards on to cardboard. Cut the cards, shuffle them and deal 10 cards to each player. The aim of the activity is to make an ordered sequence of fraction, decimal and percentage numbers. The player with the $5 \%$ card starts by putting this card face up on the table. The next player places a card bigger than $5 \%$ next to it. Players take turns at adding a card to the sequence. If a player cannot make a move, they miss a turn. If neither player can make a move, then they start a new sequence with the player with the lowest card starting.
The winner is the first player to play all of their cards.

## What to expect your child to do:

To be able to convert between fraction, decimal and percentage numbers so they can order numbers. Over time expect your child to be able to make the sequences longer as they understand the ordering better.

## Variation:

- Players each take one card from the pile and the player with the biggest number wins a point. The cards are replaced at the bottom of the pile and each player takes another card. The first player to win 5 rounds wins the game,
- Work together to put all the cards in one long line.

He Kupu Māori:

| riwhiriwhi ( $\sim$ a) | shuffle |
| :--- | :--- |
| hautau | fraction |
| ōrau (paihēneti) | percent |
| nui ake | bigger |
| raupapa ( $\sim$ tanga) | sequence, order |
| hautau ā-ira | decimal fraction |
| kore ira iwa waru | zero point nine eight $(0.98)$ |
| whā haurima | four fifths (4/5) |

## He Whakawhitinga Kōrero:

- Riwhiriwhia ngā kāri. Tohaina kia tekau ki ia kaitākaro. (Shuffle the cards. Deal 10 to each player.)
- Kei a wai te kāri rima ōrau? Māu e tīmata. (Who's got the $5 \%$ card? You start.)
- Whakatakotoria to kāri rima ōrau ki te tēpu. (Put your 5\% card down on the table.)
- Kei ahau ināianei. He nui ake tēnei hautau e whakatakoto ana ahau i te rima ōrau. (My turn now. This fraction that l'm putting down is bigger than 5\%.)
- Kei a koe tētahi hautau nui ake i tērā? Whakatakotoria. (Have you got a fraction bigger than that? Put it down.)
- Kāore i ahau tētahi hautau nui ake i tēnā. Nō reira ka hoki ki a koe. (I don't have a fraction bigger than that. So it goes back to you.)
- Kāore i ahau, kāore hoki i a koe tētahi hautau nui ake i tēnā, nō reira ka tīmata tētahi raupapatanga hou. Kei a wai te hautau iti rawa atu hei tīmata? (Neither of us have a fraction bigger than that, so we start a new sequence. Who's got the smallest fraction to start off?)

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| $5 \%$ | 0.1 | $15 \%$ | 0.2 |
| :---: | :---: | :---: | :---: |
| $25 \%$ | 0.3 | $1 / 3$ | $38 \%$ |
| 0.4 | $45 \%$ | $1 / 2$ | 0.55 |
| $60 \%$ | $2 / 3$ | 0.7 | $3 / 4$ |
| $4 / 5$ | $89 \%$ | $9 / 10$ | 0.98 |

