## Fraction, Decimal, Percentage Match ups

## Purpose:

To help your child to learn the conversions between fractions, decimals and percentages

## What you need:

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


## What to do:

Make the game cards by printing and pasting them on to card or writing the numbers on to card. Cut them out.

Shuffle the pack and deal 5 cards to each player. The rest of the cards are placed in a pile face down between the players.

The aim is to make a set of equivalent fractions, decimals and percentages. For example:

| Fraction | Decimal | Percentage |
| :---: | :---: | :---: |
| $\frac{1}{4}$ | 0.25 | $25 \%$ |


| $\frac{2}{4}$ | 0.50 | $50 \%$ |
| :--- | :--- | :--- |

The winner is the first person to put all their cards into sets.
The players look at their cards and place any sets they have on the table.
The first player asks the other person for a card to make a set. "Do you have $25 \%$ ?" If the other player has the card they give it to them if not they say "Go Fish" and the first player takes a card from the pile.

The other player then has a turn. The game continues until there is a winner.

## What to expect your child to do:

To be able to make sets of equivalent fractions, decimals and percentages.

## Variations:

- This game is played like Go Fish and is for two players.
- Before playing a game you could work together with your child to arrange the cards into sets.
- Snap: The same cards can be used to play Snap where two cards from a set could be "snapped".
- Order the cards from 0-1 in fractions, decimals or percentage

He Kupu Māori:

| percent | ōrau |
| :--- | :--- |
| fraction | hautau |
| decimal number | tau ā-ira |
| set of equivalent fractions | huinga hautau ōrite |
| 0.75 | kore ira whitu rima |
| $60 \%$ | ono tekau ōrau |

## Kia Mataara:

Be careful with the correct way of saying numbers with two and three decimal places. 0.25 is not said as 'kore ita rua tekau mā rima (zero point twenty five)' because saying rua tekau (twenty) is incorrect, misleading and confusing. The correct way of saying it is to say each individual digit: 'kore ira rua rima (zero point two five).

## He Whakawhitinga Kōrero:

- Riwhiriwhia ngā kāri. (Shuffle the cards.)
- Tukuna kia rima ki ia tangata. (Deal five to each person.)
- Kei a koe i te tuatahi. (Your turn first.)
- Whakatakotoria ō huinga kāri ōrite ki te tēpu. (Put your sets of equivalent fractions on the table.)
- Kei a koe te rua tekau mā rima ōrau? (Have you got 25?)
- Āe, anei. (Yes, here it is.)
- Kāore. Me tango tētahi anō kāri. (You should pick up another card.)
- He takitoru tēnei. He ōrite ngā hautau katoa. (This is a threesome. All the fractrions are equivalent.)
- Ehara tēnā i te takitoru ōrite. Kāore e ōrite ana te haurima me te ira toru. (That isn't an equivalent threesome. One fifth and point three are not equal.)

Game Cards for Fraction, Decimal, Percentage Match ups

| $\frac{1}{4}$ | $\frac{2}{4}$ | $\frac{3}{4}$ | $\frac{1}{3}$ | $\frac{2}{3}$ |
| :---: | :---: | :---: | :---: | :---: |
| $\frac{1}{5}$ | $\frac{2}{5}$ | $\frac{3}{5}$ | $\frac{4}{5}$ | $\frac{1}{10}$ |
| $\frac{2}{10}$ | $\frac{3}{10}$ | $\frac{4}{10}$ | $\frac{5}{10}$ | $\frac{6}{10}$ |
| $\frac{7}{10}$ | $\frac{8}{10}$ | $\frac{9}{10}$ | $\frac{1}{2}$ |  |


| 0.25 | 0.50 | 0.75 | 0.333 | 0.666 |
| :--- | :--- | :--- | :--- | :--- |
| 0.20 | 0.40 | 0.60 | 0.80 | 0.1 |
| 0.2 | 0.3 | 0.4 | 0.5 | 0.6 |
| 0.7 | 0.8 | 0.9 | 0.5 |  |


| $25 \%$ | $50 \%$ | $75 \%$ | $33.3 \%$ | $0.66 \%$ |
| :--- | :--- | :--- | :--- | :--- |
| $20 \%$ | $40 \%$ | $60 \%$ | $80 \%$ | $10 \%$ |
| $20 \%$ | $30 \%$ | $40 \%$ | $50 \%$ | $60 \%$ |
| $70 \%$ | $80 \%$ | $90 \%$ | $50 \%$ |  |

