Ordering Fractions

## Purpose

You can help your child to order fractions.

## What you need:

Fraction bar and fraction cards. You can print these or make your own.

## What to do:

Cut out the fraction bar and the fraction cards. Spread them face up on a table.
Ask your child to find the fractions that are the quarters. (1/4, 2/4, 3/4, 4/4)
Question: How do you know they are quarters? (The 4 is the denominator because there are four quarters in a whole)
Can you put them on the fraction line in the correct place? Remember they will be evenly spread between the 0 and the 1 .
Ask your child to find the fractions that are the thirds. (1/3, 2/3, 3/3)
Question: How do you know they are thirds? (The 3 is the denominator because there are three thirds in a whole)
Can you put them on the fraction line in the correct place? Remember they will be evenly spread between the 0 and the 1 .

Ask your child questions about the order. For example:
What does the bottom number in the fraction tell us? (the number of parts the whole is cut into, 3 parts are called thirds with the 3 on the bottom of the fraction, 4 parts are quarters with 4 on the bottom of the fraction, and 5 parts are fifths with 5 on the bottom of the fraction).
What does the top number in the fraction tell us? (the number of pieces so $2 / 3$ means 2 third pieces)
What is bigger $1 / 4$ or $1 / 3$ ? ( $1 / 3$ )
Why is that? (The whole is split into 3 parts and so each part is bigger than when the whole is split into 4 parts. The same argument is why $1 / 2$ is bigger than $1 / 3$ and bigger than $1 / 4$ )
Why are $3 / 3,4 / 4$ and $5 / 5$ all the same as 1 whole? ( 1 whole can be cut into 3 equal pieces and written as 3 third pieces $3 / 3$, it can also be split into 4 equal pieces and written as 4 quarter pieces, and $5 / 5$ is 5 fifth pieces).

## What to expect your child to do:

- To read the fractions correctly.
- To arrange each type of fraction quarters, thirds, fifths evenly between the 0 and the 1 .
- Talk about what fractions mean.


## Variation:

Cut out the fraction bar and find the place for the quarters by folding it into 4 parts, mark these folds with a pen, then open it out and fold it into 3 parts to find the thirds, and again open it out and fold it into 5 parts to find the fifths.

## He Kupu Māori:

| hautau | fraction |
| :--- | :--- |
| kotahi haurua | one half |
| rua haurima | two fifths |
| raupapa (hia) | order/sequence |
| rārangi hautau | fraction line |
| nui ake | bigger |
| iti iho | smaller |

## He Whakawhitinga Kōrero:

- Horahia nga kāri ki te tepu, ko ngā mata ki runga. (Spread the cards out on the table, face up.)
- Kimihia ngā hauwhā katoa. (Find all of the quarter fractions.)
- He aha tātou i mōhio ai he hauwhā ēnā hautau? (How do we know that those fractions are quarters?)
- He whā te tauraro o ngā hauwhā. Koia hei tohu i te wāwāhitanga o tētahi mea kia whā ngā wāhanga ōrite. (4 is the bottom number of the fraction (denominator), which signifies something is divided into 4 equal parts.)
- Raupapahia ngā hauwhā ki te rārangi hautau. (Put the quarters onto the number line in order.)
- Ko tēhea te hauwhā iti rawa atu? (Which is the smallest quarter fraction?)
- Ko te pito mauī o te rārangi hautau hei tohu i te kore, ko te pito matau te kotahi. (The left hand end of the fraction line is zero, and the right end is one.)
- Whakatakotoria ngā hauwhā kia ōrite te wāhi ki waenganui i tēnā me tēnā. (Place the quarters so that the distance between each of them is the same.)
- He aha te tikanga o te tauraro o te hautau? (What is the meaning of the bottom number (denominator) of the fraction?)
- Ko te tauraro hei tohu i te maha o ngā wāhanga ōrite o tētahi mea. (The bottom number (denominator) determines the number of equal parts something is divided in to.)
- He nui ake te kotahi hautoru, te kotahi hauwhā rānei? (Which is bigger, $1 / 3$ or $1 / 4$ ?)
- He nui ake te kotahi hautoru, nā te mea kua wāwāhia tētahi mea kia toru ngā wāhanga ōrite, $\bar{a}$, he nui ake aua wāhanga i te wāwāhitanga o tētahi mea kia whā ngā wāhanga ōrite. (One third is bigger because something has been divided into three equal parts, and those parts will be bigger than if it was divided into four equal parts.)
- He aha te tikanga o te taurunga o te hautau? (What is the meaning of the top number (numerator) of the fraction?)
- Ko te taurunga hei tohu i te maha o ngā wāhanga e kōrerotia ana. (The top number (numerator) tells us how many parts we are talking about.)
- He aha ngā hautau e ōrite ana ki te kotahi? (What are the fractions that are equal to one?)
- E ōrite ana te rua haurua, te toru hautoru, te whā hauwhā me te rima haurima ki te kotahi. (2 halves, 3 thirds, 4 quarters and 5 fifths are equal to one.)

Fraction bar and cards


| $\frac{1}{3}$ | $\frac{2}{3}$ | $\frac{3}{3}$ | $\frac{1}{4}$ | $\frac{2}{4}$ | $\frac{3}{4}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $\frac{4}{4}$ | $\frac{1}{5}$ | $\frac{2}{5}$ | $\frac{3}{5}$ | $\frac{4}{5}$ | $\frac{5}{5}$ |

