

## Decimal Cards

### Purpose:

The purpose of this activity is to help your child understand decimal place value.

### What you need:

A deck of cards with the face cards and jokers removed (aces count as 1s and 10s count as 0s).

### What to do:

Choose a target decimal number (eg 4.825).

Deal each player 6 cards (two more cards than the number of digits in the target number).

Each player has to construct a number as close as possible to the target number. For example if a player is dealt 3, 4, 4, 5, 7, 9 the closest number they can make is 4.795.

The player whose number is closest wins a point.

The winning player chooses the number for the next round.

You can play either that the first player to get 5 points wins, or whoever wins the most out of 10.

### What to expect your child to do:

- Use place value to decide which cards to use and in which order.
- Be able to tell you how many ones, tenths, hundredths etc in the number.
- Understand that the cards in the higher 'places' make more difference to the overall size of the number than those in the smaller 'places'.

### Variations:

- Change the number of decimal places in the target number.
- Require that the number be the closest possible number **less than** the target number.
- Require that the number be the closest possible number **more than** the target number.
- Include the jokers and allow them to be used as a wild card (any digit).

### He Kupu Māori

decimal number	tau ā-ira
place value	uara tū
digit	mati
tenths	hautekau
hundredths	haurau
thousandths	haumano
tenths digit	te mati o ngā hautekau

### He Whakawhitinga Kōrero:

- Māku e tuhi tētahi tau ā-ira. He tau matiwhā, e toru ngā mati ā-ira. (*I'll write down a 4 digit number, it's got 3 decimal digits.*)
- Ko te [rima ira rua whitu ono] te tau ā-ira. E tohu ana te mati [whitu] i te aha? (*The number is [5.276]. What does the [7] digit represent?*)
- E tohu ana te [whitu] i te [whitu haurau]. E noho ana te [whitu] ki te uara tū o ngā [haurau]. (*The [7] represents [7 hundredths]. The [7] is sitting in the [hundredths] place value.*)
- Riwhiriwhia ngā kāri. Tohaina kia ono ngā kāri ki ia kaitākaro. (*Shuffle the cards. Deal 6 cards to each player.*)
- Whakamahia ō kāri hei hanga i tētahi tau ā-ira e tino pātata ana ki te tau i tuhia e au. (*Use your cards to make a decimal number that is very close to the number I wrote down.*)

- E hia ngā mati ā-ira kei roto te tau i hangaia e koe? (*How many decimal digits are in the number you made?*)
- Kei a wai te tau e tino pātata ana ki te tau nāku nei i tuhi? (*Who has got the number that is closest to the number which I wrote down?*)
- He pātata ake tāku i tāu nā te mea ko te whitu te mati haurau i tāku, ā, ko te toru te mati haurau i tāu. (*Mine is closer than yours because 7 is the hundredths digit in mine and 3 is the hundredths digit in yours.*)