## Divided by Ten

## Purpose:

You can help your child to learn what happens when a whole number is divided by ten.

## What you need:

A calculator

## What to do:

Type a 2 digit number into the calculator, for example " $56 \div 10$ ". Before you press " $=$ " ask your child to predict what the answer will be. Take turns with your child to enter the basic facts into the calculator and predict the results.

For each fact that you solve, discuss whether the answer from the calculator is reasonable. For example, $56 \div 10$ can be reasoned as " 50 divided by 10 is 5,1 divided by ten is 1 tenth, so 6 divided by 10 must be 6 tenths and 5.6 must be the right answer." This encourages your child to check the answers they receive from the calculator, rather than accept them as correct without consideration.

Keep a list of the problems you solve. Can you see a pattern in the answers?

## Variations:

Once you have identified the pattern when dividing a 2 digit number by ten try dividing three or four digit numbers by ten. What happens to the pattern?

He Kupu Māori

| two digit number | tau mati-rua |
| :--- | :--- |
| estimate | whakatau tata |
| calculator | tātaitai |
| divide | whakawehe $(-a)$ |
| decimal point | ira |

He Whakawhitinga Kōrero:

- Māku e whakauru tētahi whakawehenga ki te tātaitai. E [rima tekau mā ono] whakawehea ki te tekau. (I'll put a division in to the calculator. [56 divided by 10].)
- I mua i taku pēhi i te tohu ōrite, māu e whakatau tata te otinga. E pātata ana te otinga ki te aha? (Before I press the equal sign, you estimate the answer. What is the answer is close to?)
- E pātata ana te [56] ki te [60]. Whakawehea te [60] ki te 10, ka hia tērā? ([56 ]is close to [60]. Divide [60] by 10, how much is that?)
- Nō reira ko te [6] te whakataunga tata. (So [6] is our estimate.)
- Pēhia te tohu ōrite. He aha te otinga tōtika? (Press the equal sign. What is the accurate answer?)
- Whakawehea te [56 ki te 10], ko te [rima ira ono te otinga]. (Divide [56 by 10], the answer is [5.6]
- Anei ētahi atu whakawehenga. He tau mati-rua e whakawehea ana ki te tekau. (Here are some more divisions. A two digit number being divided by 10.)
- Kia āta titiro tāua ki ēnei whakawehenga o tētahi tau mati-rua ki te tekau. E kite ana koe ite tauira? (Let's have a closer look at these divisions of a two-digit number by 10. Can you see a pattern?
- He tauoti ngā tau mati-rua. Ina whakawehea ki te tekau, ko te whakauru noa i te ira ki waenganui i ngā mati. (The two-digit numbers are whole numbers. If you divide by 10 you just need to put a decimal point in between the digits.)

