HANGAIA
TE URUPOUNAMU
MŌ TĀTOU

HAUTANGA

Taumata 1 (Tau 1)

Teacher Booklet

ODD YEARS

Rapanga 1	Kei te tohatoha koe i tētahi hanuwiti me tō hoa. Whakaatuhia tō hauruatanga ki tō hoa.
Whakaaro Matua Pāngarau *Big Ideas*	Numbers can be described in many different ways including as fractions. The whole is important in naming fractions. A fraction is relative to the size of the whole or unit. A comparison of a part to the whole can be represented using a fraction. A fraction describes the division of a whole (region, set, segment) into equal parts.
Hononga ki te Marau	Ka mōhio ki ngā hautau māmā, pērā i ngā haurua me ngā hauwhā: ○ te tuhi i ngā tohu hautau ○ te tikanga o te taurunga me te tauraro o tētahi hautau māmā ○ te raupapa hautau māmā ○ te whakatauira i te hautau (pērā i te hurihanga 3/2)
Hononga Marautanga *Curriculum Links*	**NA1-1**: Use a range of counting, grouping, and equal-sharing strategies with whole numbers and fractions. **NA1-4:** Communicate and explain counting, grouping, and equal sharing strategies, using words, numbers, and pictures. **NA2-1:** Use simple additive strategies with whole numbers and fractions. **NA2-5:** Know simple fractions in everyday use.
Whāinga Ako *Learning Outcomes*	• Share a whole into equal parts. • Put two equal parts (units) together to make one whole. • Count or add fractional parts to make one whole.
Reo Matatini Pāngarau *Mathematical Language*	Whole, half, halves, fraction, share, fair, divide, same as, equal, more than, less than.
Tohatoha Whakaaro/Wā Hononga *Sharing back/ Connect*	Select students to share who have split their whole into two equal parts. **Connect:** Use the playdough as one whole ball. Cut into equal parts and ask the students to describe what you have done. Shape the playdough as a rectangular cuboid. Cut into equal parts in different ways and ask the students to describe what you have done.

Kōrero Tautoko *Teacher Notes*	• During the launch talk about how we all have to share something with other people and retell a story of your own about sharing something with one other person. Have students make links to times they have had to share one thing with someone else in their whanau and what they did. From there make links to how you might share part of a sandwich if someone else did not have one. • Engage in a hands-on, bus stop activity where the children explore what half looks like using different media. • Have playdough, ribbon or string, multilink blocks (to represent possible food items). • Facilitate the students to notice that when talking about fractions we always refer to the unit whole as one or one whole and halves (not two pieces or bits). Have them explain using materials what they did and ending with "of my one whole …" 3 Level 1 - Year 1: Fractions • Monitor for students using vocabulary like two bits or two pieces and informally revoice as two halves and that they are both the same and equal. • Record using the word half before introducing notation • For the independent task, have containers and water for students to explore.
Ngohe whakaharatau *Independent Tasks*	Whirihia tētahi ipu, whakakī mā te wai. Riringihia hawhe o te wai. He aha te wai e toe ana? Kowhirihia tētahi atu ipu rerekē me te riringi hawhe anō. He aha tō kitenga? Tāngia he pikitia hei whakaatu ou mahi. Tohu ate hawhe ki ia ipu.
Ngā matapae *Anticipations*	

Rapanga 2	Kei te hanga kāri motuhake kōrua ko tō tuahine, engari kōtahi te pepa. Me hawhe te pepa. He aha ngā momo hauruatanga rerekē? Me whakamārama ngā momo hauruatanga.
Whakaaro Matua Pāngarau *Big Ideas*	Numbers can be described in many different ways including as fractions. The whole is important in naming fractions. A fraction is relative to the size of the whole or unit A comparison of a part to the whole can be represented using a fraction. A fraction describes the division of a whole (region, set, segment) into equal parts. The bottom number in a fraction tells how many equal parts the whole or unit is divided into. The top number tells how many equal parts are indicated.
Hononga ki te Marau	Ka mōhio ki ngā hautau māmā, pērā i ngā haurua me ngā hauwhā: - te tuhi i ngā tohu hautau - te tikanga o te taurunga me te tauraro o tētahi hautau māmā - te raupapa hautau māmā - te whakatauira i te hautau (pērā i te hurihanga 3/2)
Hononga Marautanga *Curriculum Links*	**NA1-1:** Use a range of counting, grouping, and equal-sharing strategies with whole numbers and fractions. **NA1-4:** Communicate and explain counting, grouping, and equal sharing strategies, using words, numbers, and pictures. **NA2-1:** Use simple additive strategies with whole numbers and fractions. **NA2-5:** Know simple fractions in everyday use.
Whāinga Ako *Learning Outcomes*	• Share a whole into equal parts. • Put equal parts (units) together to make one whole. • Count or add fractional parts to make one whole.
Reo Matatini Pāngarau *Mathematical Language*	Whole, half, halves, thirds, fraction, share, fair, divide, same as, equal, more than, less than.
Tohatoha Whakaaro/Wā Hononga *Sharing back/ Connect*	Select students to share who have shown different ways of showing halves and can explain and show how each pair of halves is equal. **Connect:** Provide students with the different size pieces of paper and ask them to show different ways of showing halves. Discuss and explore what is a half.

Kōrero Tautoko *Teacher Notes*	• During the launch, reinforce the need for the students to be able to explain and justify how the two halves of the one whole piece of card are equal. • Have A4 pieces of paper to represent card, pens, other different size pieces of paper including postage stamp size and larger than A4 paper. 5 Level 1 - Year 1: Fractions • Facilitate the students to notice that two halves of one whole have to be equal. • Monitor for students using two bits of pieces and revoice as two halves of one whole. • Notice students who use many different representations to explain all the different ways a whole can be shown as two halves equally • Expect students to represent different ways of showing two halves using drawings. • For the independent task, you will need containers that are the same size and shape and water.
Ngohe whakaharatau *Independent Tasks*	Whirihia tētahi ipu, whakakī mā te wai. Riringihia tētahi hautoru o te wai. He aha te wai e toe ana? Kowhirihia tētahi atu ipu rerekē me te riringi hautoru anō anō. He aha tō kitenga? Tāngia he pikitia hei whakaatu ou mahi. Tohua te hautoru ki ia ipu.
Ngā matapae *Anticipations*	

Rapanga 3	I karanga tētahi Māmā ki tana tamaiti "ka taea kōrua ko tō kaihana ki te toha tētahi patara wai ārani." "Me inu orite kōrua." Pehea te nui ō tō inu? Pehea te nui ō te inu o tō kaihana?
Whakaaro Matua Pāngarau *Big Ideas*	Numbers can be described in many different ways including as fractions. The whole is important in naming fractions. A fraction is relative to the size of the whole or unit A comparison of a part to the whole can be represented using a fraction. A fraction describes the division of a whole (region, set, segment) into equal parts. The bottom number in a fraction tells how many equal parts the whole or unit is divided into. The top number tells how many equal parts are indicated.
Hononga ki te Marau	Ka mōhio ki ngā hautau māmā, pērā i ngā haurua me ngā hauwhā: ○ te tuhi i ngā tohu hautau ○ te tikanga o te taurunga me te tauraro o tētahi hautau māmā ○ te raupapa hautau māmā ○ te whakatauira i te hautau (pērā i te hurihanga 3/2)
Hononga Marautanga *Curriculum Links*	**NA1-1:** Use a range of counting, grouping, and equal-sharing strategies with whole numbers and fractions. **NA1-4:** Communicate and explain counting, grouping, and equalsharing strategies, using words, numbers, and pictures. **NA2-1:** Use simple additive strategies with whole numbers and fractions. **NA2-5:** Know simple fractions in everyday use.
Whāinga Ako *Learning Outcomes*	• Share a whole into equal parts. • Put equal parts (units) together to make one whole. • Count or add fractional parts to make one whole.
Reo Matatini Pāngarau *Mathematical Language*	Whole, half, halves, thirds, fraction, share, fair, divide, same as, equal, more than, less than.
Tohatoha Whakaaro/Wā Hononga *Sharing back/ Connect*	Select students to share who have split their whole into two equal parts. **Connect**: Use a glass of water to show where the halfway mark is. Have the students describe what you have done as two halves and reinforce that the two halves make one whole glass of water.

Kōrero Tautoko *Teacher Notes*	• During the launch, revisit the concept of sharing something with someone else in a fair way. Link across to sharing a glass of juice with someone else. Launch the problem and then have the students engage in a hands-on, bus stop activity where they explore what half looks like using different media including liquids. • Have bottles, cups, glasses of water, playdough, ribbon or string, multilink blocks (to represent possible food and drink items). • Facilitate the students to notice that when talking about fractions we always refer to the unit whole as one or one whole and halves (not two pieces or bits). Have them 7 Level 1 - Year 1: Fractions explain using materials what they did and ending with "of my one whole …" • Monitor for students using vocabulary like two bits or two pieces and informally revoice as two halves and that they are both the same and equal. • Record using the word half before introducing notation • For the independent task, you will need containers that are the same size and shape and water.
Ngohe whakaharatau *Independent Tasks*	Whirihia tētahi ipu, whakakī mā te wai. Riringihia tētahi hautoru o te wai ki te ipu tuarua. He aha te wai e toe ana i te ipu tuatahi? He aha te wai i te ipu tuarua? He aha tō kitenga? Tāngia he pikitia hei whakaatu ou mahi me te tohua tētahi hautoru ki te ipu tuatahi me te 2 hautoru ki te ipu tuarua.
Ngā matapae *Anticipations*	

Rapanga 4	Kia tapahi ngā taare pepa kia rua me takaihia te pepa kia orite ngā wāhanga e rua. Ka taea e koe te whakamārama e hia ngā takainga kia hanga te tare? I tutuki ngā tapanga? Me whakarite kia whakamārama. Pehea e toru ngā tare? Ka taea te takaihia te pepa kia toru orite ngā wahanga? Me whakarite kia whakamārama?
Whakaaro Matua Pāngarau *Big Ideas*	Numbers can be described in many different ways including as fractions. The whole is important in naming fractions. A fraction is relative to the size of the whole or unit A comparison of a part to the whole can be represented using a fraction. A fraction describes the division of a whole (region, set, segment) into equal parts. The bottom number in a fraction tells how many equal parts the whole or unit is divided into. The top number tells how many equal parts are indicated.
Hononga ki te Marau	Ka mōhio ki ngā hautau māmā, pērā i ngā haurua me ngā hauwhā: ○ te tuhi i ngā tohu hautau ○ te tikanga o te taurunga me te tauraro o tētahi hautau māmā ○ te raupapa hautau māmā ○ te whakatauira i te hautau (pērā i te hurihanga 3/2)
Hononga Marautanga *Curriculum Links*	**NA1-1:** Use a range of counting, grouping, and equal-sharing strategies with whole numbers and fractions. **NA1-4:** Communicate and explain counting, grouping, and equal sharing strategies, using words, numbers, and pictures. **NA2-1:** Use simple additive strategies with whole numbers and fractions. **NA2-5:** Know simple fractions in everyday use.
Whāinga Ako *Learning Outcomes*	• Share a whole into equal parts. • Put equal parts (units) together to make one whole. • Count or add fractional parts to make one whole.
Reo Matatini Pāngarau *Mathematical Language*	Whole, half, halves, thirds, fraction, share, fair, divide, same as, equal, more than, less than.
Tohatoha Whakaaro/Wā Hononga *Sharing back/ Connect*	Select students to share who have shown different ways of showing two equal parts and then three equal parts and can explain and show how each section in the fold is equal to the others. **Connect:** On a sheet of paper have the students draw two long thin rectangles to represent their paper strips. Have them re-represent on their rectangle the two equal sections on the first strip and the equal three sections on the second strip. Have them explain and justify how they know that the other parts are all the same length.

Kōrero Tautoko *Teacher Notes*	● During the launch revisit the need for students ensuring equal size parts through talking with them about sharing a chocolate bar or Tim Tam biscuit fairly. Make links to the 9 Level 1 - Year 1: Fractions ways they used a number line to show their measurement of length and when representing numbers on a numberline. ● Have examples of joined paper dolls cut out to show the students. Have strips of paper by cutting 2 cm wide pieces lengthwise from A4 sheets, other concrete material to use to measure pieces (but not rulers), larger paper for students to draw representations on, pens. ● Facilitate the students to notice the way in which different students have used measures to ensure equal parts including using concrete materials and their fingers. ● Ensure in the activity that students recognise that folding a strip of paper into equal parts is using partitioning as they did in number. Here, instead of dividing a group of objects into equal groups as they did in number activities using folding, they are illustrating dividing a length into equal parts. Link to the use of the number line as divided into equal parts (usually as whole parts but this lays foundations for them to see fractions between whole numbers). ● Teachers notate for students in both words and numbers what they show with their representations. Emphasise the whole and that the bottom number represents how many parts the whole has been divided into and the top number represents how many parts of the whole they have. ● Monitor for students using vocabulary which emphasises fair and equal and halves and thirds and sharing or dividing into equal parts. ● Notice students who use different ways to ensure equal parts including using concrete materials and their fingers and use the language of fractions. ● Expect students to represent using the folds and strips of paper but re-represent as drawings and equal sections or parts.
Ngohe whakaharatau *Independent Tasks*	Whakamahia he parāoa pokepoke kia rua ngā āhua e orite ana. Hauruatia te wāhanga tuatahi. E hia ngā wāhanga? Tāngia to pāraoa pokepoke me te whakaatu ngā wāhanga. Whakamahia he parāoa pokepoke kia whā ngā āhua e orite ana. Hauwhatia te wāhanga tuatahi. E hia ngā wāhanga? Tāngia to pāraoa pokepoke me te whakaatu ngā wāhanga.

Ngā matapae *Anticipations*	

Ngā matapae *Anticipations*	

Rapanga 5	Whakamahia te rauemi hautanga kia hanga te kōtahi ki ngā taputapu hautanga rerekē. Tuhia me te tā to whakaturanga. Me whakamārama me te taunakihia ngā take ka hanga ngā wāhanga ki te kōtahi.
Whakaaro Matua Pāngarau *Big Ideas*	Numbers can be described in many different ways including as fractions. The whole is important in naming fractions. A fraction is relative to the size of the whole or unit A comparison of a part to the whole can be represented using a fraction. A fraction describes the division of a whole (region, set, segment) into equal parts. The bottom number in a fraction tells how many equal parts the whole or unit is divided into. The top number tells how many equal parts are indicated.
Hononga ki te Marau	Ka mōhio ki ngā hautau māmā, pērā i ngā haurua me ngā hauwhā: ○ te tuhi i ngā tohu hautau ○ te tikanga o te taurunga me te tauraro o tētahi hautau māmā ○ te raupapa hautau māmā ○ te whakatauira i te hautau (pērā i te hurihanga 3/2)
Hononga Marautanga *Curriculum Links*	**NA1-1:** Use a range of counting, grouping, and equal-sharing strategies with whole numbers and fractions. **NA1-4:** Communicate and explain counting, grouping, and equal sharing strategies, using words, numbers, and pictures. **NA2-1:** Use simple additive strategies with whole numbers and fractions. **NA2-5:** Know simple fractions in everyday use. **NA2-6:** Communicate and interpret simple additive strategies, using words, diagrams (pictures), and symbols.
Whāinga Ako *Learning Outcomes*	• Share a whole into different parts. • Combine and recombine different units of fractions to make one whole. • Identify and recognise equivalent fractions
Reo Matatini Pāngarau *Mathematical Language*	Whole, half, halves, thirds, quarters, fraction, share, fair, divide, same as, equal.
Tohatoha Whakaaro/Wā Hononga *Sharing back/ Connect*	Select students to share who are able to represent and explain using the fraction tiles the different combinations which make one whole. Begin with those students who made combinations of the whole using the same size pieces (halves, thirds, quarters) and recorded the combinations as numbers or words. **Connect:** Select students who were able to represent and explain using the fraction tiles and different combinations which make one whole. (e.g., one half and two quarters). Explore and discuss why these make one whole.

Kōrero Tautoko *Teacher Notes*	● During the launch, provide all students with a paper strip (the same length as they used in a previous lesson) and ask them to fold it into four equal parts. Link back and make comparisons to their paper strips from the previous lesson and the need for equal parts of the one whole. Name and record these as quarters. ● Provide students with fraction tiles for one whole, halves, quarters, and thirds. ● Teachers notate for students in both words and numbers what they show with their representations. Emphasise the whole and that the bottom number represents how many parts the whole has been divided into and the top number represents how many parts of the whole they have. ● Facilitate the students to notice the connection between the concrete representation and their recording in words and numbers. ● Notice students who notice equivalence in the fractional parts. Record these as number sentences using the equal sign. ● For the independent task, have available fraction tiles for whole, halves, thirds, and quarters. Have the words: halves, half, thirds, quarters, fourths, whole and their equivalent in numbers available as cards for students to use as they record their combinations to make one whole.
Ngohe whakaharatau *Independent Tasks*	Whakamahia te rauemi hautanga kia whakaatu ngā momo huinga rerekē ki te kōtahi. Tāngia ou momo hei nama, hei kupu hoki e whakaatu ana te kōtahi.
Ngā matapae *Anticipations*	

Rapanga 6	Whakamahia te rauemi hautanga kia hanga te kōtahi iti iho ki ngā taputapu hautanga rerekē. Tuhia me te tā to whakaaturanga. Me whakamārama me te taunakihia ngā take ka hanga ngā wāhanga ki te kōtahi iti iho.
	Whakamahia te rauemi hautanga kia hanga he mea nui ake i te kōtahi ki ngā taputapu hautanga rerekē. Tuhia me te tā to whakaaturanga. Me whakamārama me te taunakihia ngā take ka hanga ngā wāhanga ki te kōtahi nui ake.
Whakaaro Matua Pāngarau *Big Ideas*	Numbers can be described in many different ways including as fractions. The whole is important in naming fractions. A fraction is relative to the size of the whole or unit. A comparison of a part to the whole can be represented using a fraction. A fraction describes the division of a whole (region, set, segment) into equal parts. The bottom number in a fraction tells how many equal parts the whole or unit is divided into. The top number tells how many equal parts are indicated.
Hononga ki te Marau	Ka mōhio ki ngā hautau māmā, pērā i ngā haurua me ngā hauwhā: - te tuhi i ngā tohu hautau - te tikanga o te taurunga me te tauraro o tētahi hautau māmā - te raupapa hautau māmā - te whakatauira i te hautau (pērā i te hurihanga 3/2)
Hononga Marautanga *Curriculum Links*	**NA1-1:** Use a range of counting, grouping, and equal-sharing strategies with whole numbers and fractions. **NA1-4:** Communicate and explain counting, grouping, and equal sharing strategies, using words, numbers, and pictures. **NA2-1:** Use simple additive strategies with whole numbers and fractions. **NA2-5:** Know simple fractions in everyday use.
Whāinga Ako *Learning Outcomes*	• Share a whole into equal parts. • Put equal parts (units) together to make one whole. • Count or add fractional parts to make one whole.
Reo Matatini Pāngarau *Mathematical Language*	Whole, half, halves, thirds, fourths, quarters, fraction, share, fair, divide, same as, equal, more than, less than.

Tohatoha Whakaaro/Wā Hononga *Sharing back/ Connect*	Select students to share who represented and explained using fraction tiles and other representations. Begin with those students who made combinations of less than the whole and more than a whole using the same size pieces (halves, thirds, quarters). **Connect:** Select students who were able to represent and explain using unlike fractions and different combinations to make less than or more than a whole. Record the solutions as addition for the students. Ask the students whether they notice any patterns or relationships (focus on equivalence).
Kōrero Tautoko *Teacher Notes*	● During the launch, revisit all the combinations they made for one whole in the previous lesson and independent task. ● Provide fraction tiles for one whole, halves, quarters, and thirds. ● Teachers notate for students and/or support students to record in both words and numbers what they show with their representations. Re-emphasise the whole and that the bottom number represents how many parts the whole has been divided into and the top number represents how many parts of the whole they have. ● Facilitate the students to connect to the concept of fractional numbers as less than one whole and more than one whole and record as using greater than, less than symbols and as addition equations with the equals sign.
Ngohe whakaharatau *Independent Tasks*	He tika, he hē rānei ēnei rerenga tau? $10 = 10$ $\frac{1}{2} + \frac{1}{2} = 1$ $3 + 2 = 2 + 3$ $6 = 3 + 1$ $2 = \frac{1}{2} + \frac{1}{2}$ $\frac{1}{2} = \frac{1}{4} + \frac{1}{2}$ Whakamāramahia ou whakaaro mēnā ka hē, ka tika rānei.
Ngā matapae *Anticipations*	

Rapanga 7	I tunu kēkē panana te kuia o Jayden rāua ko Martha. Ka tohua te kuia ki a rāua kia kai e toru ngā wahanga engari kia orite ngā wāhanga. E hia ngā wāhanga kēke panana ka kai rāua?
Whakaaro Matua Pāngarau *Big Ideas*	Numbers can be described in many different ways including as fractions. The whole is important in naming fractions. A fraction is relative to the size of the whole or unit A comparison of a part to the whole can be represented using a fraction. A fraction describes the division of a whole (region, set, segment) into equal parts. The bottom number in a fraction tells how many equal parts the whole or unit is divided into. The top number tells how many equal parts are indicated. The real-world actions for addition and subtraction of whole numbers are the same for operations with fractions and decimals.
Hononga ki te Marau	Ka mōhio ki ngā hautau māmā, pērā i ngā haurua me ngā hauwhā: ○ te tuhi i ngā tohu hautau ○ te tikanga o te taurunga me te tauraro o tētahi hautau māmā ○ te raupapa hautau māmā ○ te whakatauira i te hautau (pērā i te hurihanga 3/2)
Hononga Marautanga *Curriculum Links*	**NA1-1:** Use a range of counting, grouping, and equal-sharing strategies with whole numbers and fractions. **NA1-4:** Communicate and explain counting, grouping, and equal sharing strategies, using words, numbers, and pictures. **NA2-1:** Use simple additive strategies with whole numbers and fractions. **NA2-5:** Know simple fractions in everyday use.
Whāinga Ako *Learning Outcomes*	• Share whole parts equally • Solve problems that involve dividing a whole number into a fraction.
Reo Matatini Pāngarau *Mathematical Language*	Whole, half, halves, fraction, share, fair, divide, same as, equal.
Tohatoha Whakaaro/Wā Hononga *Sharing back/ Connect*	Select students to share who can explain equal sharing of the three slices of the banana bread using either materials or drawings to justify their reasoning **Connect** What about if Jayden and Martha had to share one slice of banana bread? What about if Jayden and Martha had to share five slices of banana bread? What pattern can you notice?

Kōrero Tautoko *Teacher Notes*	During the launch, discuss the context of the problem, make links to banana bread and its equivalent form other students know (e.g., date loaf) and times when students have had to share food in a fair way. Shift focus to what the problem is asking them to do. Emphasise the need for fair sharing as each getting an equal portion.
Ngohe whakaharatau *Independent Tasks*	Whakamahia te rauemi hautau kia hanga: Iti iho o te kōtahi Iti iho o te hawhe Kia orite ki te hawhe Nui ake i te hawhe engari iti iho i te kōtahi. Tāngia ou tauira hei kauwhata, hei kupu, hei wharite, hei nama (hautanga) hoki
Ngā matapae *Anticipations*	

Rapanga 8	I tunu panikeke tetahi Māmā me tana tamāhine. I kai te Māmā i tētahi panikeke, ā, i toha tana tamāhine e 5 ngā panikeke me āna tuahine e toru. E hia ngā panikkeke ka kai tana tamāhine me āna tuahine? Mēnā ka toha tētahi panikeke me tana tūngane, e hia ngā panikeke ka kai rātou?
Whakaaro Matua Pāngarau *Big Ideas*	Numbers can be described in many different ways including as fractions. The whole is important in naming fractions. A fraction is relative to the size of the whole or unit A comparison of a part to the whole can be represented using a fraction. A fraction describes the division of a whole (region, set, segment) into equal parts. The bottom number in a fraction tells how many equal parts the whole or unit is divided into. The top number tells how many equal parts are indicated. The real-world actions for addition and subtraction of whole numbers are the same for operations with fractions and decimals.

Hononga ki te Marau	Ka mōhio ki ngā hautau māmā, pērā i ngā haurua me ngā hauwhā:
	   ○ te tuhi i ngā tohu hautau
	   ○ te tikanga o te taurunga me te tauraro o tētahi hautau māmā
	   ○ te raupapa hautau māmā
	   ○ te whakatauira i te hautau (pērā i te hurihanga 3/2)

Hononga Marautanga *Curriculum Links*	**NA1-1:** Use a range of counting, grouping, and equal-sharing strategies with whole numbers and fractions. **NA1-4:** Communicate and explain counting, grouping, and equal sharing strategies, using words, numbers, and pictures. **NA2-1:** Use simple additive strategies with whole numbers and fractions. **NA2-5:** Know simple fractions in everyday use
Whāinga Ako *Learning Outcomes*	• Share whole parts equally • Solve problems that involve dividing a whole number into a fraction.
Reo Matatini Pāngarau *Mathematical Language*	Whole, half, fourths, quarters, fraction, share, fair, divide.
Tohatoha Whakaaro/Wā Hononga *Sharing back/ Connect*	Select students to share who can explain equal sharing of the five panikeke using drawings to justify their reasoning. **Connect:** What if Māmā had to share one panikeke with one tamāhine ? One panikeke with two tuahine? One panikeke with three tūngane? What pattern can you notice?

Kōrero Tautoko *Teacher Notes*	- During the launch, discuss the context of the problem, make links to panikeke and their equivalent form other students know (e.g. parāoa - parai, scones, muffins) and times when students have had to share food in a fair way. Shift focus to what the problem is asking them to do. Emphasise the need for fair sharing as each getting an equal portion - Have concrete material available if needed for students to select (e.g., fraction tiles, playdough). - Facilitate the students to notice that fair sharing of a whole into quarters means four equal size pieces of the one whole. - Monitor for students using vocabulary of fractions (e.g., one whole panikeke and quarters of one whole panikeke). - Expect students to represent using drawings and as needed re-represent using materials. Notate for the students the solutions as addition using either numbers or words to make the whole, parts of the whole and the total panikeke. - Notice students who draw on multiplicative thinking (i.e., means they immediately see $1 \div 4 =$ so each person gets either 1 or five quarters). - For the independent task have fraction tiles for the whole, quarters, thirds, halves and add in eighths and paper and pen.
Ngohe whakaharatau *Independent Tasks*	I tunu pārāoa tētahi Pāpā. Pehea te nui o tau pāraoa mēnā ka toha: Kōtahi he kotinga ki ngā tangata e rua. E rua ngā kotinga ki ngā tangata e rua. Kōtahi he kotinga ki ngā tangata e whā. E rua ngā kotinga ki ngā tangata e wha. Kōtahi he kotinga ki ngā tangata e toru. E rua ngā kotinga ki ngā tangata e toru. Kōtahi he kotinga ki ngā tangata e waru. E rua ngā kotinga ki ngā tangata e waru. Tā me te tuhi ngā whakamārama.
Ngā matapae *Anticipations*	

Rapanga 9	I tākaaro tahi a Ayla rāua ko Zack i tētahi kēmu motoka. Tuatahi, i tā tētahi raina timatanga me tētahi raina whakamutunga ,ā , i pana rāua i ā rāua motoka kia tutuki ki te raina whakamutunga. I tae hawhe te motoka a Ayla, ā, i tae hauwha te motoka a Zack. Kei a wai te motoka i tae tata ki te raina whakamutunga? Taunakihia tō whakamārama mā te tā pikitia o ngā raina. Tuarua, i tae hauwha te motoka a Ayla, ā, i tae e rua hautoru te motoka a Zack. Kei a wai te motoka i tae tata ki te raina whakamutunga? Taunakihia tō whakamārama mā te tā pikitia o ngā raina. Tuatoru. i tae e wha ngā hauwhā te motoka a Ayla, ā, i tae e rua haurua te motoka a Zack. Kei a wai te motoka i tae tata ki te raina whakamutunga? Taunakihia tō whakamārama mā te tā pikitia o ngā raina.
Whakaaro Matua Pāngarau *Big Ideas*	Numbers can be described in many different ways including as fractions. The whole is important in naming fractions. A fraction is relative to the size of the whole or unit. A comparison of a part to the whole can be represented using a fraction. A fraction describes the division of a whole (region, set, segment) into equal parts. The bottom number in a fraction tells how many equal parts the whole or unit is divided into. The top number tells how many equal parts are indicated. A fraction describes division (= a ÷ b, a & b are integers & b - 0), and it can be interpreted on the number line in two ways. For example, = 2 ÷ 3. On the number line, 2 ÷ 3 can be interpreted as 2 segments where each is 1/3 of a unit (2 x) or of 2 whole units (x 2); each is associated with the same point on the number line. Each fraction can be associated with a unique point on a numberline. There is no least or greatest fraction on the number line.
Hononga ki te Marau	Ka mōhio ki ngā hautau māmā, pērā i ngā haurua me ngā hauwhā: 　○　te tuhi i ngā tohu hautau 　○　te tikanga o te taurunga me te tauraro o tētahi hautau māmā 　○　te raupapa hautau māmā 　○　te whakatauira i te hautau (pērā i te hurihanga 3/2)
Hononga Marautanga *Curriculum Links*	**NA1-1:** Use a range of counting, grouping, and equal-sharing strategies with whole numbers and fractions. **NA1-4:** Communicate and explain counting, grouping, and equal sharing strategies, using words, numbers, and pictures. **NA2-1:** Use simple additive strategies with whole numbers and fractions. **NA2-5:** Know simple fractions in everyday use.
Whāinga Ako *Learning Outcomes*	• Show fractions on a number line

Reo Matatini Pāngarau *Mathematical Language*	Whole, half, halves, thirds, fraction, divide, mixed numbers.
Tohatoha Whakaaro/Wā Hononga ***Sharing back/ Connect***	Select students to share who can explain equal sharing of the line into appropriate fractions using drawings to justify their reasoning. **Connect:** What if Ayla's car reached 3 halves of the line? How could you draw a line to show that? What if Ayla's car reached 5 fourths of the line. How could you draw a line to show that? What if Ayla's car reached 4 thirds of the line. How could you draw a line to show that? What other ways could you divide your line so that it shows equal parts?
Kōrero Tautoko ***Teacher Notes***	• During the launch, discuss the context of the problem, and draw other possible contexts (marbles, balls) but emphasise that there always needs to be a star and finish line for fairness. Shift focus to what the problem is asking them to do. Emphasise the need for fair sharing of the line according to the fraction the line is divided into. • Have copies of blank lines available if needed. Have drawing paper and pens available. Have accessible fraction strips and fraction tiles but do not direct students to use them unless they need to use them to justify their reasoning. • Facilitate the students to notice that a line can be divided into many different parts according to the fractions being referred to and that the line can extend past one whole. • Notice students who draw on multiplicative thinking (i.e., means they immediately see $1 \div 4 = ¼$ so each person gets either $1¼$ or five quarters). • For the independent task have copies of the attached worksheet available
Ngohe whakaharatau ***Independent Tasks***	See attached worksheet in copy masters

Ngā matapae *Anticipations*	

Ngā matapae *Anticipations*	

Rapanga 10	Kei a wai te mea nui ake? Kei a wai te mea iti iho?
	Kei a Alefosio he hawhe pereti o te ika mata, kei a Kahi he hautoru o te pereti ika mata.
	Kei a wai te mea nui ake? Kei a wai te mea iti iho?
	Me whakamārama ou kitenge mā te pikitia.
	Kei a Alefosio he pereti hauwha o te ika mata, kei a Kahi e rua hautoru o te pereti ika mata.
	Kei a wai te mea nui ake? Kei a wai te mea iti iho?
	Me whakamārama ou kitenge mā te pikitia.
	Kei a Alefosio he pereti toru hauwha o te ika mata, kei a Kahi he hautoru o te pereti ika mata.
	Kei a wai te mea nui ake? Kei a wai te mea iti iho?
	Me whakamārama ou kitenge mā te pikitia.
Whakaaro Matua Pāngarau *Big Ideas*	Numbers can be described in many different ways including as fractions. The whole is important in naming fractions. A fraction is relative to the size of the whole or unit. A comparison of a part to the whole can be represented using a fraction. A fraction describes the division of a whole (region, set, segment) into equal parts. The bottom number in a fraction tells how many equal parts the whole or unit is divided into. The top number tells how many equal parts are indicated. A fraction describes division ($= a \div b$, a & b are integers & b - 0), and it can be interpreted on the number line in two ways. For example, $= 2 \div 3$. On the number line, $2 \div 3$ can be interpreted as 2 segments where each is 1/3 of a unit (2 x) or of 2 whole units (x 2); each is associated with the same point on the number line. Each fraction can be associated with a unique point on a numberline. There is no least or greatest fraction on the number line.

Hononga ki te Marau	Ka mōhio ki ngā hautau māmā, pērā i ngā haurua me ngā hauwhā:
	   ○ te tuhi i ngā tohu hautau
	   ○ te tikanga o te taurunga me te tauraro o tētahi hautau māmā
	   ○ te raupapa hautau māmā
	   ○ te whakatauira i te hautau (pērā i te hurihanga 3/2)

Hononga Marautanga *Curriculum Links*	**NA1-1:** Use a range of counting, grouping, and equal-sharing strategies with whole numbers and fractions. **NA1-4:** Communicate and explain counting, grouping, and equal sharing strategies, using words, numbers, and pictures. **NA2-1:** Use simple additive strategies with whole numbers and fractions. **NA2-5:** Know simple fractions in everyday use. Kei a wai te mea nui ake? Kei a wai te mea iti iho?
Whāinga Ako *Learning Outcomes*	• Identify and compare different unit fractions • Recognise equivalent fractions
Reo Matatini Pāngarau *Mathematical Language*	Whole, half, halves, thirds, fourths, quarters, fraction, same as, equal, more than, less than.
Tohatoha Whakaaro/Wā Hononga *Sharing back/ Connect*	Select students to share who are to make comparisons of the different fraction sizes using representations to justify their reasoning. These could include drawings of plates or lengths or fraction strips. **Connect:** Bigger, smaller or the same? $\frac{1}{4}$ or $\frac{1}{2}$ $\frac{4}{4}$ or $\frac{5}{4}$ $\frac{3}{3}$ or $\frac{2}{2}$ $\frac{1}{3}$ or $\frac{1}{2}$
Kōrero Tautoko *Teacher Notes*	● During the warmup, revisit representing different fractions (Halves, quarters, thirds) using fraction strips, blank lines and drawings. ● During the launch discuss what ota'ika is. Have students describe food that they eat (raw fish) which is similar but is given an alternative name. ● Have copies of blank lines available if needed. Have drawing paper and pens available. Have accessible fraction strips and fraction tiles but do not direct students to use them unless they want to use them to justify their reasoning. ● Facilitate the students to notice that when making comparisons we use models or representation of the same size.

Ngohe whakaharatau *Independent Tasks*	Titiro ki ēnei hautanga i raro iho nei,ā, tohua he tauira o ia hautau. Nā, tā ngā tohu > (nui ake), < (iti iho), = kia tika ngā whārite. $\frac{1}{2}$ and $\frac{2}{3}$ $\frac{5}{4}$ and $\frac{2}{2}$ $\frac{2}{2}$ and $\frac{2}{3}$ $\frac{4}{4}$ and $\frac{3}{3}$ $\frac{3}{4}$ or $\frac{1}{2}$ $\frac{1}{2}$ or $\frac{1}{4}$
Ngā matapae *Anticipations*	