Cake Fractions

Purpose:
The purpose of this activity is to help your child to order fractions that have the same denominator. For example: $\frac{1}{8}$, $\frac{3}{8}$, $\frac{7}{8}$, $\frac{2}{8}$, $\frac{5}{8}$.

What you need:
- A drawing of a pizza, or a cake, or use this activity when you are about to eat a pizza or a piece of cake.
- Small pieces of card or paper to write the fractions on.

What to do:
- Cut the cake or pizza into any number of equal sized pieces. For example 8 equal sized pieces to represent eighths.
- Ask your child about the way the cake has been cut:
    How many pieces have I cut this into? Count together.
    How much of the cake is one piece? For example, if the cake is cut into 8 equal size pieces, each piece is one eighth of the cake.
    If you ate three pieces how much of the cake would you have eaten? 3 eighths
    If you ate seven pieces how much of the cake would you have eaten? 7 eighths
    If you ate five pieces how much of the cake would you have eaten? 5 eighths
    If you ate two pieces how much of the cake would you have eaten? 2 eighths
- Encourage your child to see that if the cake has been cut into 8 pieces and you are going to eat 2 of them, then you are going to eat 2 out of the 8 pieces the cake is cut into. Help them to link the "2 out of 8" with the numbers in the fraction $\frac{2}{8}$.
- If your child is having trouble, ask them to show you the fractions using pizza or cake.
    Show me three eighths. Three pieces of cake
    Now show me one 2 eighths. Two pieces of cake
    Which is larger?
- Write each fraction as you talk about it on a piece of card. If your child is confident ask them to write the fraction.
- Lay out the cards with the fractions written on them randomly on the table. Ask the child to order the fraction from smallest to largest. For example: $\frac{1}{8}$, $\frac{2}{8}$, $\frac{3}{8}$, $\frac{5}{8}$, $\frac{7}{8}$.
- Ask your child about the way they have ordered the fractions. This may help them clarify their ideas.
    Can you explain to me why you have ordered them like that?
- Repeat the activity at a later time with another pizza or cake (real or paper) using a different number of pieces.

Once your child can order the fractions confidently, try repeating this activity without the pizza or cake to help them think about the size of the pieces. For example: Give the child a set of cards with the fractions $\frac{1}{11}$, $\frac{3}{11}$, $\frac{6}{11}$, $\frac{8}{11}$, $\frac{9}{11}$, written on them. Mix the cards up and ask the child to order them from smallest to largest.

What to expect your child to do:
- Use the pieces of pizza or cake (real or paper) to help them think about the way the fractions should be ordered.
- Link the numbers in the fraction with the pieces of cake. For example, 2 out of the 8 pieces of cake, can be shown as $\frac{2}{8}$.

He Kupu Māori

fractions	hautau
denominator	tauraro
numerator	taurunga
order	raupapa (-hia)
half	hauwaru
third	hautoru
quarter	hauwhā
fifth	haurima
sixth	hauono
eighth	hauwaru
tenth	hautekau

He Whakawhitinga Kōrero:

- E hia ngā wāhanga o te keke? *(How many pieces of the cake are there?)*
- He ōrite te rahi o ia wāhanga? *(Are each of the pieces equal in size?)*
- Pēhea nei te rahi o ia wāhanga? *(How big is each piece?)*
  Hei tauira – mēnā e waru ngā wāhanga ōrite o te keke, he hauwaru te rahi o ia wāhanga.
  (For example, if the cake is cut into 8 equal size pieces, each piece is one eighth of the cake.)
- Ki te kai koe i ētahi wāhanga e toru, pēhea nei te rahi o te keke kua kainga e koe?
  Ko te toru hauwaru.
  (If you ate three pieces how much of the cake would you have eaten? 3 eighths)
- Ki te kai koe i ētahi wāhanga e whitu, pēhea nei te rahi o te keke kua kainga e koe?
  Ko te whitu hauwaru.
  (If you ate seven pieces how much of the cake would you have eaten? 7 eighths)
- Ki te kai koe i ētahi wāhanga e rima, pēhea nei te rahi o te keke kua kainga e koe?
  Ko te rima hauwaru.
  (If you ate five pieces how much of the cake would you have eaten? 5 eighths)
- Ki te kai koe i ētahi wāhanga e rua, pēhea nei te rahi o te keke kua kainga e koe?
  Ko te rua hauwaru.
  (If you ate two pieces how much of the cake would you have eaten? 2 eighths)
- Mēnā ka kainga e Māmā e rua o ngā wāhanga e waru, he pēhea nei te rahi o te keke ka kainga e ia? Ko te rua hauwaru $\frac{2}{8}$.

  (If Mum ate two pieces, how much cake would she have eaten? 2 eighths)
- Koinei te hautau e whakaatu ana i te rahi o te keke ka kainga e Māmā: $\frac{2}{8}$. E tohu ana te

  rua i te aha? Koirā te maha o ngā wāhanga ka kainga e ia.
  E tohu ana te waru i te aha? Koirā te maha katoa o ngā wāhanga ōrite o te keke.
  (This is the fraction showing the amount of cake Mum ate. What does the 2 signify? The number of pieces she ate. What does the 8 signify? The total number of equal parts.)
- Whakaaturia mai te toru hauwaru o te keke. *(Show me 3 eighths of the cake.)*
- Whakaaturia mai te rua hauwaru o te keke. *(Show me 2 eighths of the cake.)*
- Ko tēhea te hautau nui ake – te toru hauwaru, te rua hauwaru rānei? *(Which farction is bigger – 3 eighths or 2 eighths?)*
- Raupapahia ēnei hautau, mai i te iti ki te rahi: Hei tauira: $\frac{1}{8}$, $\frac{2}{8}$, $\frac{3}{8}$, $\frac{5}{8}$, $\frac{7}{8}$. *(Put these*

  fractions in order from smallest to biggest.)
- Whakamāramahia mai he aha i pēnā ai tō raupapa i ngā hautau. *(Explain why you ordered the fractions like that.)*