COUNT BY FRACTIONS, DESCRIBING PATTERNS.

INVESTIGATIONS OVERVIEW PAGE

THIS PAGE IS A SUMMARY OF THE INVESTIGATIONS THAT STUDENTS MAY ENGAGE IN TO DEEPEN THEIR RELATIONAL UNDERSTANDING. INVESTIGATIONS WITH INSTRUCTIONS TO STUDENTS FOLLOW ON SUBSEQUENT PAGES.

- In pairs, children select cards to create a fraction to use as the first term and to use as the fraction by which the terms increase or decrease. Children record a number pattern that starts from the first term that increases or decreases by the second number, record their number pattern on a number line. They describe a rule to describe the way the pattern repeats. They use the rule to find further terms. Reflection: How can we create patterns with fractions that increase or decrease?

- In pairs, children create rules involving multiples of a fraction. For example, 'Start with $\frac{1}{4}$, and repeatedly add $\frac{1}{4}$', and 'Record the multiples of $\frac{1}{4}$'. Children record the number pattern from the rule on a number line. Children use the rule describing the way the pattern repeats to work out further terms.Reflection: How can we create patterns with fractions that increase or decrease from a rule?

Count By Fractions, Describing Patterns

Select cards to make a fraction that is neither too easy nor too challenging.

Use the fraction as the first term in an increasing number pattern, and repeatedly add the fraction.

Record the pattern on a number line.

Identify the part that repeats.

Describe a rule to describe the way the pattern repeats.

Use the rule to find the next term.

Select cards to make a fraction that is neither too easy nor too challenging.

Record a whole number as the first term in a decreasing number pattern, and repeatedly subtract the fraction.

Record the pattern on a number line.

Identify the part that repeats.

Describe a rule to describe the way the pattern repeats.

Use the rule to find the next term.

Reflection: How can we create patterns with fractions that increase or decrease?

Count By Fractions, Describing Patterns

Create a rule involving multiples of a fraction. For example, 'Start with $\frac{1}{4}$, and repeatedly add $\frac{1}{4}$, OR 'Record the multiples of $\frac{1}{4}$.

Record the number pattern on a number line.

Use the rule describing the way the pattern repeats

Work out further terms using the rule.

Reflection: How can we create patterns with fractions that increase or decrease?