

Essential Numeracy Skills and Understanding

Counting, cardinality, and quantity

Subitizing

Compose and decompose number (Addn/subtr), fact families, number bonds (part-part-whole)

One more, one less, two more, two less

Comparing numbers

Rekenreks, ten frames

Making ten

Using place value, counting ten as a single unit

Number path, number line

Ten more, ten less

Understands hundreds chart and patterns within hundreds chart

Number system and place value

Two digit addition and subtraction

Strategies for addition and subtraction

Multiply and divide

Compose and decompose number by factors

Strategies for addition, subtraction (larger numbers) multiplication and division

Fractions of a whole, of a set, fractions as a number

Modeling and representing fractions

Equivalent fractions

Comparing fractions

Factors and Multiples

Addition strategies:

Using place value, making friendly numbers, compensating, using bench marks and open number lines, adding in chunks, using doubles, near doubles, decomposing by place value, algorithm.

Subtraction: Constant difference, subtracting in chunks, benchmarks and open number lines, compensating, using friendly numbers, algorithm.

Multiplication strategies:

Doubling, skip counting,

Four (double double)

Eight (double double double) ,

Six (mult by three then double)

multiplication by factors of ten,

Nines, elevens

Fives (mult by ten and take half)

Multiplying using partial product (compose and decompose number), area model multiplication, "Fact families" (mult and div), doubling and halving factors.

Division strategies: Dividing in chunks, halving, working from multiplication, compensation, division by factors of ten, algorithm.