Adding & Subtracting Across 10



### Learning Steps

### Prior learning check & remediation/deepening of prior

Add three addends

Add three addends efficiently

Add through 10 pictorially

Add through 10 abstractly

Subtract through 10 by splitting the subtrahend pictorially

Subtract through 10 by splitting the subtrahend abstractly

Subtract through 10 by splitting the minuend pictorially

Subtract through 10 by splitting the minuend abstractly

Mixed adding & subtracting through 10 practice

**PS Lesson:** bridging 10 (more than one possibility)

**Assessment** 

Numbers to 1,000



#### Learning Steps

### Prior learning check & remediation/deepening of prior

Composition of 100
Represent numbers to 1,000
Partition numbers to 1,000
Value of digits to 1,000
Number line to 1,000
1 more, 10 more, 100 more
1 less, 10 less, 100 less

PS Lesson: place value to 1,000 (more than one possibility)

Compare numbers to 1,000 Order numbers to 1,000

PS Lesson: compare & order (working backwards)

Measure length and height from zero using whole metres and cm

Measure length and height from zero using mm and cm

Equivalent lengths

Compare lengths

**PS Lesson:** length (real-life word)

Count forwards and backwards in multiples of 2, 20, 5, 50 and 25

Measure mass from zero up to 1kg using grams

Measure mass from zero above 1kg using whole kg and grams

Measure volume from zero up to 1 litre using ml

Measure volume from zero above 1 litre using whole litres and ml

PS Lesson: mass & capacity (real-life word)

#### **Assessment**

Pause & Stretch: re-assessment & deepening as required
PS Skills Lesson: trial & improvement

Right Angles



### Learning Steps

## Prior learning check & remediation/deepening of prior

Rotate two lines around a fixed point to make different sized angles
A right angle is a 'square corner' and identify them
A rectangle is a 4-sided polygon with four right angles
Cut rectangles and squares on the diagonal and investigate the shapes they make
Join four right angles at a point using different right-angled polygons
Investigate and draw other polygons with right angles

**PS Lesson:** right angles (visual problems)

**Assessment** 

Pause & Stretch: re-assessment & deepening as required

**PS Skills Lesson:** working collaboratively

Mental Addition & Subtraction



## Learning Steps

### Prior learning check & remediation/deepening of prior

Add 10/100 to 2 and 3-digit numbers

Add two 2-digit or 3-digit numbers using partitioning

Add two 2-digit or 3-digit numbers using adjusting

Add two 2-digit or 3-digit numbers using redistribution

Add two 2-digit or 3-digit numbers using near doubles

Addition strategy choice

**PS Lesson:** mental addition strategies

Subtract 10/100 from 2 and 3-digit numbers
Subtract two 2-digit or 3-digit numbers using partitioning
Subtract two 2-digit or 3-digit numbers by finding the difference
Subtraction strategy choice

Addition and subtraction can be used to describe the same additive fact Missing number equations (practising mental methods)

**PS Lesson:** rearranging equations (multi-step)

#### **Assessment**

Pause & Stretch: re-assessment & deepening as required PS Skills Lesson: working systematically

Column Addition



### Learning Steps

### Prior learning check & remediation/deepening of prior

Addition of 2-digit and 3-digit numbers: no regrouping
Addition of 2-digit regrouping 1s
Addition of 3-digit regrouping 1s
Addition of 3-digit numbers: regrouping 10s
Addition of 3-digit numbers: regrouping 10s and 1s

Addition of 3-digit numbers: mixed practice

Addition of 3-digit numbers: VF, Think, GDS

**PS Lesson:** column addition (real-life)

**Assessment** 

Pause & Stretch: re-assessment & deepening as required

**PS Skills Lesson:** finding starting points

2, 4, 8 Times Tables



### Learning Steps

### Prior learning check & remediation/deepening of prior

x4 counting & repeated addition
x4 deriving facts from x2 table
x4 using adjacent facts
x4 commutative property
x4 distributive property
x4 inverse facts

x4 rules of divisibility and patterns

**PS Lesson:** x4 facts (more than one possibility)

x8 counting & repeated addition
x8 deriving facts from x4 table
x8 using adjacent facts
x8 commutative property
x8 distributive property
x8 inverse facts

x8 rules of divisibility and patterns

**PS Lesson:** x8 facts (more than one possibility)

Scaled multiplication facts
Scaled division facts

**Assessment** 

Column Subtraction



# Learning Steps

### Prior learning check & remediation/deepening of prior

Subtraction of 2-digit and 3-digit numbers: no exchanging Subtraction of 2-digit and 3-digit numbers: exchanging 1s Subtraction of 3-digit numbers: exchanging 10s Subtraction of 3-digit numbers: exchanging 10s and 1s Subtraction of 3-digit numbers: zero in middle of minuend Subtraction of 3-digit numbers: mixed practice Subtraction of 3-digit numbers: VF, Think, GDS

**PS Lesson:** column subtraction (real-life)

Missing digit column subtraction
Approximation checks
Inverse checks
Missing number equations
Balancing number equations

**Assessment** 

Pause & Stretch: re-assessment & deepening as required

PS Skills Lesson: visualising

Fractions



### Learning Steps

#### Prior learning check & remediation/deepening of prior

Wholes, equal parts and unequal parts

Match fractions to division

Fraction notation for unit fractions

Order unit fractions by size of denominator

Find unit fractions of amounts

Find unit fractions of amounts varied practice

**PS Lesson:** unit fractions (visual problems)

Repeated addition of unit fractions to form non-unit fractions Repeated addition of unit fractions to form a whole Identify non-unit fractions

Order non-unit fractions with the same denominator Order non-unit fractions with the same numerator

**PS Lesson:** non-unit fractions (rules and patterns)

Add fractions with the same denominator

Add fractions with the same denominator – varied practice & think

Subtract fractions with the same denominator

Subtract fractions with the same denominator – varied practice & think

Subtract a fraction from the whole by converting the whole into matching denominator

Subtract a fraction from the whole – varied practice & think

**PS Lesson:** non-unit fractions (open-ended)

**Assessment** 





# Learning Steps

## Prior learning check & remediation/deepening of prior

Horizontal and vertical
Parallel lines
Quadrilaterals and parallel sides
Perpendicular lines

Quadrilaterals and perpendicular sides

**PS Lesson:** parallel & perpendicular (logic)

**Assessment** 

Pause & Stretch: re-assessment & deepening as required

PS Skills Lesson: conjecture & generalising

Time



## Learning Steps

Prior learning check & remediation/deepening of prior

O'clock

Half-past

Quarter past

Quarter to

O'clock, half-past, quarter past & to mixed practice

5 minutes past intervals

5 minutes to intervals

Time to 5 minutes mixed practice

**PS Lesson:** reading time (visual)

Direction of turns

Magnitude of turns

Direction & magnitude of turns together

Time durations: given start and finish

Time durations: given start and duration

Time durations: given finish and duration

Mixed durations practice

**PS Lesson:** time durations (working backwards)

**Assessment**