

Y3-4 Learning Sequence

Adding & Subtracting Across 10

This is an 'over teach & deepen' unit that is covered in both Year A and Year B.

Year A has a measures theme for 'varied fluency' and 'think' tasks.

Year B has a statistics theme for 'varied fluency' and 'think' tasks.

Those who secured understanding in their first year of the unit, deepen in the second year.

Those who did not secure, revisit the unit in the second year but with a different theme.

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

Pause & Stretch: re-assessment & deepening as required

Y3-4 Learning Sequence

Numbers to 10,000

This is an 'over teach & deepen' unit that is covered in both Year A and Year B.

Year A has a statistics theme for 'varied fluency' and 'think' tasks.

Year B has a measures theme for 'varied fluency' and 'think' tasks.

Those who secured understanding in their first year of the unit, deepen in the second year.

Those who did not secure, revisit the unit in the second year but with a different theme.

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 lines to 1,000

PS Lesson: value of digits (more than one possibility)

Measure length in m and cm

Measure length in mm and cm

Equivalent lengths

Compare lengths

PS Lesson: length (real-life word)

Composition of 1,000

Represent numbers to 10,000

Partition numbers to 10,000

Value of digits to 10,000

Number lines to 10,000

1, 10, 100, 1000 more & less

PS Lesson: PV and value of digits (more than possibility)

Compare two numbers using $<$ $>$ $=$

Order sets of numbers

PS Lesson: order and compare (logic)

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)

Round to nearest 10

Round to nearest 100

Round to nearest 1,000

Round to the nearest 10, 100 & 1,000

PS Lesson: rounding (working backwards)

Assessment

Pause & Stretch: re-assessment & deepening as required

Y3-4 Learning Sequence

Column Addition & Subtraction

Learning Steps

Addition Prior learning check & remediation/deepening of prior

Addition of 2-digit numbers: no regrouping
 Addition of 3-digit numbers: no regrouping
 Practical lesson - 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: VF, Think, GDS
PS Lesson: column addition (real-life, multi-step)

Addition & Charts

Assessment

Pause & Stretch: re-assessment & deepening as required

Subtraction Prior learning check & remediation/deepening of prior

Subtraction of 2-digit and 3-digit numbers: no exchanging
 Subtraction of 2-digit numbers: exchanging 1s
 Subtraction of 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: exchanging from zero
 Subtraction of 3-digit numbers: VF, Think, GDS

PS Lesson: column subtraction (real-life)

Subtraction strategy choice
 Subtraction & Charts

Assessment

Pause & Stretch: re-assessment & deepening as required

Y3-4 Learning Sequence

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 distributive property
- x8 counting & repeated addition
- x8 deriving facts from x4 table
 - x8 using adjacent facts
 - x8 distributive property
- Scaled multiplication facts
- Scaled division facts

Assessment

Pause & Stretch: re-assessment & deepening as required

Y3-4 Learning Sequence

Multiplicative Relationships

This is an 'over teach & deepen' unit that is covered in both Year A and Year B.
Year A has a 'x3,6,9,7' theme.
Year B has a 'x2,4,8' theme.

Learning Steps

Prior learning check & remediation/deepening of prior

Understanding and using Gattegno Charts

Multiplying by 10 moving digits

Multiplying by 100 moving digits

Divide by 10 moving digits

Divide by 100 moving digits

Mixed practice lesson multiplying and dividing by 10/100

PS Lesson: multiplying and dividing by powers of 10 (open-ended)

Using known facts multiplication – scale of 10

Using known facts multiplication – scale of 100

Using known facts division – scale of 10

Using known facts division – scale of 100

Mixed practice Lesson – scaled multiplication & division facts

PS Lesson: place value and known facts (working backwards)

Interpret a division story with a remainder and represent it as an equation

Division with remainders

Division with remainders VF & Think

When there will and will not be a remainder in a division equation

PS Lesson: interpret remainders (working backwards)

Partition mental multiplication Strategy

Partition Mental multiplication strategy- varied practice

Double & half mental multiplication strategy

Double & half mental multiplication strategy- varied practice

Strategy choice

Partitioning as a mental division strategy

Partitioning as a mental division strategy - varied practice

Assessment

Pause & Stretch: re-assessment & deepening as required

Y3-4 Learning Sequence

Geometric Reasoning

Learning Steps

Prior learning check & remediation/deepening of prior

Read coordinates in the first quadrant

Plot coordinates in the first quadrant

Translate on a grid

Describe a translation

Complete a symmetrical pattern

Compose a symmetrical shape from 2 congruent shapes

Folding & mirrors for symmetry

Reflecting polygons over a line of symmetry

Triangles

Symmetry in triangles

Reflecting with coordinates

Assessment

Pause & Stretch: re-assessment & deepening as required

Y3-4 Learning Sequence

Fractions

This is an 'over teach & deepen' unit that is covered in both Year A and Year B.

Year A has a statistics theme for 'varied fluency' and 'think' tasks.

Year B has a measures theme for 'varied fluency' and 'think' tasks.

Those who secured understanding in their first year of the unit, deepen in the second year.

Those who did not secure, revisit the unit in the second year but with a different theme.

For the assessment – pause – stretch lessons for this unit, give Year 3 children the Y3 versions of these lessons and Year 4 children the Y4.

Learning Steps

Prior learning check & remediation/deepening of prior

- Fraction notation for unit fractions
- Order unit fractions by size of denominator
- Find unit fractions of amounts
- 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
- Add fractions with the same denominator
- Subtract fractions with the same denominator
- Subtract a fraction from the whole by converting the whole into matching denominator
- Understand mixed numbers
- Understand mixed numbers on a number line
- Understand improper fractions
- Convert improper fractions into mixed numbers
- Convert mixed numbers into improper fractions
- Compare and order mixed when whole number and the denominator of the fractional part is the same
- Compare mixed numbers when the whole number and the numerator of the fractional part is the same
- Add proper fractions through the whole
- Add mixed numbers not bridging the whole
- Add mixed numbers bridging the whole
- Add mixed numbers using number lines
- Subtract proper fractions from wholes
- Subtract proper fractions from mixed numbers – not bridging the whole
- Subtract proper fractions from mixed numbers – bridging the whole
- Subtract mixed numbers from mixed numbers – not bridging the whole
- Subtract mixed numbers from mixed numbers – bridging the whole
- Find the difference between mixed numbers using number lines

Assessment

Pause & Stretch: re-assessment & deepening as required

Y3-4 Learning Sequence

Perimeter

Learning Steps

Prior learning check & remediation/deepening of prior

Polygon v not

Regular v irregular polygons

What is perimeter?

Calculating rectilinear perimeter $(2L + 2B)$

Calculating rectilinear perimeter $2(L + B)$

Finding unknown lengths using known lengths and perimeter

Calculating regular shape perimeter using multiplication & division

PS Lesson: perimeter (working backwards)

Assessment

Pause & Stretch: re-assessment & deepening as required