Y4 Learning Sequence

Review of Column Addition & Subtraction

Learning Steps
Prior learning check & remediation/deepening of prior
Column addition to TO: no regrouping
Column addition to HTO: no regrouping
Column addition to HTO: regrouping ones to a ten
Column addition to HTO: regrouping tens to a hundred
Column addition to HTO: multiple regrouping
Column addition to HTO: VF, Think, GDS
PS Lesson: column addition (multi-step)
Column subtraction to TO: no exchanging
Column subtraction to TO: exchanging 1s for a 10
Column subtraction to HTO: exchanging 1s for a 10
Column subtraction to HTO: exchanging 10s for a 100
Column subtraction to HTO: multiple exchanges
Column subtraction to THTO exchanging from 100s to 10s
Column subtraction to THTO exchanging from 1000s to 100s
Column subtraction to THTO multiple exchanges
Column subtraction to HTO: VF, Think, GDS
Mixed addition & subtraction practice
PS Lesson: column subtraction (multi-step)
Approximation to check
Inverse to check
Assessment
Pause & Stretch: re-assessment & deepening as required

Y4 Learning Sequence

Numbers to 10,000

Learning Steps
Prior learning check & remediation/deepening of prior
Composition of 10,000
Represent numbers to 10,000
Partition to THTO
Value of digits to 10,000
Number lines
1, 10, 100, 1000 more & less
PS Lesson: PV and value of digits (more than possibility)
Compare numbers to 10,000
Order numbers to 10,000
PS Lesson: compare & order (visual)
Column addition to 10,000: same PV
Column addition to 10,000: different
Column subtraction to 10,000: same PV
Column subtraction to 10,000: different
PS Lesson: column addition & subtraction (multi-step & multi-domain - stats)
Find two multiples a number is between
Find the midpoints between two numbers
Round 2-digit numbers to nearest 10
Round 3-digit numbers to nearest 100
Round 4-digit numbers to nearest 1,000
Round 3-digit numbers to nearest 10
Round 4-digit numbers to the nearest 10
Round 4-digit numbers to the nearest 100
Mixed rounding
PS Lesson: rounding (working backwards)
Assessment
Pause & Stretch: re-assessment & deepening as required

Y4 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
PS Lesson: perimeter (working backwards)
Assessment
Pause & Stretch: re-assessment & deepening as required
PS Skills Lesson: working collaboratively

Y4 Learning Sequence

3, 6, 9 and 7 Times Tables

Learning Steps
Prior learning check & remediation/deepening of prior
x3 counting & repeated addition
x3 using adjacent facts
x3 commutative property
x3 distributive property
x3 inverse facts
x3 rules of divisibility and patterns
x6 counting & repeated addition
x6 deriving facts from x3 table
x6 using adjacent facts
x6 commutative property
x6 distributive property
x6 inverse facts
x6 rules of divisibility and patterns
x9 counting & repeated addition
x9 deriving facts from x3 and x6 table
x9 using adjacent facts
x9 commutative property
x9 distributive property
x9 inverse facts
x9 rules of divisibility and patterns
x7 counting & repeated addition
x7 using adjacent facts
x7 commutative property
x7 distributive property
x7 inverse facts
Assessment
Pause & Stretch: re-assessment & deepening as required
PS Skills Lesson: working systematically

Y4 Learning Sequence

Multiplicative Relationships

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
PS Skills Lesson: finding starting points

Y4 Learning Sequence

Fractions

Learning Steps
Prior learning check & remediation/deepening of prior
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
Mixed number – improper fraction conversion – varied practice & think
PS Lesson: mixed/improper (real-life word)
Compare and order mixed when the 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
PS Lesson: compare fractions (rules and patterns)
Add proper fractions through the whole
Add mixed numbers not bridging the whole
Add mixed numbers bridging the whole
Add mixed numbers VF & Think
Add mixed numbers using number lines
PS Lesson: add mixed numbers (open-ended)
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 proper fractions from wholes and mixed numbers VF & Think
Subtract mixed numbers from mixed numbers – not bridging the whole
Subtract mixed numbers from mixed numbers – bridging the whole
Subtract mixed numbers from mixed numbers VF & Think
Find the difference between mixed numbers using number lines
Add and subtract mixed numbers - mixed practice
PS Lesson: add and subtract mixed numbers (multi-step)
Assessment
Pause & Stretch: re-assessment & deepening as required
PS Skills Lesson: visualising

Y4 Learning Sequence

Geometric Reasoning

Learning Steps
Prior learning check & remediation/deepening of prior
Describe positions using coordinates in the first quadrant
Plot coordinates in the first quadrant
Translate on a grid
Describe a translation
PS Lesson: position & direction (logic)
Complete a symmetrical pattern
Compose symmetrical shapes from two congruent shapes
Folding for symmetry in 2d shapes
Lines of symmetry using a mirror
Reflect polygons over a line of symmetry
Pupils reflect polygons that are dissected by a line of symmetry
Reflect polygons in the first quadrant
Identify types of triangles
Symmetry in triangles
PS Lesson: symmetry (rules and patterns)
Assessment
Pause & Stretch: re-assessment & deepening as required
PS Skills Lesson: conjecture & generalising

Y4 Learning Sequence

Time

Learning Steps
Prior learning check & remediation/deepening of prior
Roman Numerals I to XII
Reading the time using Roman Numerals
Match analogue time to digital time
Use am and pm
PS Lesson: time (working backwards)
Assessment
Pause & Stretch: re-assessment & deepening as required