Federation of Golden Flatts and Lynnfield Primary Schools
Maths Medium-Term Plan: Year 3-4 (Year A)
Autumn Term

Place Value	Position & Direction	Add & Subtract	Assessment	Length & Perimeter
4 weeks	2 weeks	5 weeks	1 week	3 weeks

NC

Units cover objectives from both year groups – where necessary

Small Steps

Place Value	Position & Direction	Add & Subtract	Assessment	Length & Perimeter
• Represent numbers to HTO • Partition numbers to HTO • Value of digits to HTO • Number Line to HTO • PS Lesson: value of digits (more than one possibility) • Represent numbers to THTO • Partition THTO • Value of digits to THTO • Numberlines • 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 L Lesson: compare & order (visual) • Round numbers to nearest 10 • Round numbers to nearest 100 • Round numbers to nearest 1000 • Round to nearest 10, 100, 100 within others (e.g. 424 to nearest 10 / 3908 to nearest 100) • PS Lesson: rounding • Assessment, Pause & Stretch	• Reading coordinates in the first quadrant • Plotting coordinates in the first quadrant • Translating points • Describing translations • PS Lesson: coordinates/translation (logic) • Assessment • Pause & Stretch • PS Skills Lesson: trial & improvement	• Addition concrete phase (no regroup and regroup) – calculation policy • Addition pictorial phase (no regroup & regroup) – calculation policy • Abstract – no regrouping • Abstract – 1 piece of regrouping • Abstract – 2 pieces of regrouping • Abstract – mixed • PS Lesson: columnar addition (more than one possibility) • subtraction concrete phase (no exchange and exchange) – calculation policy • subtraction pictorial phase (no exchange & exchange) – calculation policy • Abstract – no exchanging • Abstract – 1 piece of exchanging • Abstract – 2 pieces of exchanging • Abstract – mixed • PS Lesson: columnar subtraction (multi-step) • Assessment • Pause & Stretch • PS Skills Lesson: trial & improvement	• Monday: arithmetic paper • Tuesday: reasoning paper • Wednesday: fluency checks • Thursday: unpick arithmetic paper • Friday: unpick reasoning paper	• Millimetres & Centimetres (Including Conversion) • Millimetres & Centimetres (Mixed) • Centimetres & Metres (Including Conversion) • Centimetres & Metres (Mixed) • Kilometres • PS Lesson: converting Units Of Length (real-life word / multi-step) • Adding Lengths • Subtracting Lengths • PS Lesson: length Calculations (real-life word / multi-step) • Calculating Rectilinear Perimeter (2L + 2B) • Calculating Rectilinear Perimeter 2(L + B) • Decision making on calculating perimeter • Calculating Regular Shape Perimeter • PS Lesson: perimeter (real-life word / multi-step) • Assessment • Pause & Stretch • PS Skills Lesson: working systematically

Multiplication & Division	Assessment	Area
10 weeks	1 week	2 weeks

NC

Units cover objectives from both year groups – where necessary

Small Steps

Multiplication & Division	Assessment	Area
• Multiples of 10 • Scaled facts x10, x5, x2 • Scaled facts x4 • Scaled facts x8 • Scaled facts x 3 • Scaled facts ÷10, ÷5, ÷2 • Scaled facts ÷4 • Scaled facts ÷ 8 • Scaled facts ÷ 3 • Mixed x and ÷ scaled facts • PS Lesson: multiples of 10 / related calculations (rules and patterns) • TO x O concrete stage from calculation policy • TO x O pictorial stage from calculation policy • TO x O abstract stage 1 from calculation policy • TO x O abstract stage 2 from calculation policy • TO x O abstract stage 2 from calculation policy • TO x O abstract stage 2 from calculation policy • PS Lesson: 2 x 1 multiplication (rules and patterns) • Linking multiplication and division • TO ÷ O concrete stage • TO ÷ O pictorial stage no remainders – number line include VF • TO ÷ O pictorial stage with remainders – number line include VF • TO ÷ O abstract stage with remainders – number line include VF • TO ÷ O abstract stage with remainders – number line include VF • PS Lesson: division TO ÷ O (working backwards) • Scaling (bar models) • PS Lesson: bar models (real-life word) • Multiply by 10 • Multiply by 100 • divide by 10 • divide by 100 • PS Lesson: powers of 10 (working backwards) • Concrete phase from calculation policy (no regrouping and regrouping) • pictorial phase from calculation policy (no regrouping and regrouping) • Abstract: Expanded Short multiplication 3 x 1(top right model of calculation policy) • Abstract: Short multiplication 3 x 1 no regrouping (bottom right model of calculation policy) • Abstract: Short multiplication 3 x 1 & 1 piece of regrouping (bottom right model of calculation policy) • Abstract: Short multiplication 3 x 1 & 2 pieces of regrouping (bottom right model of calculation policy) • Abstract: Short multiplication 3 x 1 mixed practice of lessons 11 to 13 • PS Lesson: short multiplication (multi-step) • Concrete & pictorial from calculation policy • Abstract: Division 3 by 1 (no regroup or remainder) from calculation policy • Abstract: Division 3 by 1 (remainder but no regrouping within) from calculation policy • Abstract: Division 3 by 1 (remainder and regrouping within) from calculation policy • Abstract: Division 3 by 1 mixed from calculation policy • PS Lesson: division (rules and patterns) • Assessment, Pause & Stretch • PS Skills Lesson: working collaboratively	• Monday: arithmetic paper • Tuesday: reasoning paper • Wednesday: fluency checks • Thursday: unpick arithmetic paper • Friday: unpick reasoning paper	• What is area and Count squares? • Make shapes • Compare areas • PS Lesson: area (open-ended) • Assessment, Pause & Stretch • PS Skills Lesson: finding starting points

Fractions	Assessment	Decimals
7 weeks	1 week	3 weeks

NC

Units cover objectives from both year groups – where necessary

Small Steps

Fractions
- Wholes, equal parts and unequal parts
- Match fractions to division
- Match fractions to fraction notation
- Order unit fractions by size of denominator
- Repeated addition of unit fractions to form a non-unit fraction
- Repeated addition of unit fractions to form a whole
- Non-unit fractions
- Compare and order non-unit fractions with same denominator
- Compare and order non-unit fractions with same numerator
- Practice Lesson: fractional sense <1
- PS Lesson: fractional sense <1 (visual)
- Understand mixed numbers
- Understand improper fractions
- Mixed into improper
- improper into mixed
- Compare and order mixed numbers using fractional sense: same whole and unit fraction
- Compare and order mixed when wholes are different
- Compare and order mixed with same wholes and non-unit
- PS Lesson: fractional sense >1 (visual)
- Represent unit fractions of amounts as bar models
- Represent unit fractions of amounts as division equations
- Practice Lesson: fractions of amounts (unit)
- PS Lesson: fractions of amounts (real-life word / multi-step)
- Add fractions with same denominator (not making whole)
- Add fractions with same denominator (making whole)
- Add on fractions using a numberlines
- Add involving mixed numbers (2 lessons)
- Subtract fractions from fractions
- Subtract fractions from whole by converting whole to a fraction
- Subtract involving mixed numbers (2 lessons)
- Practice Lesson: add and subtract fractions
- PS Lesson: add and subtract fractions (real-life word / multi-step)
- Assessment
- Pause & Stretch
- PS Skills Lesson: visualising

Assessment
- Monday: arithmetic paper
- Tuesday: reasoning paper
- Wednesday: fluency checks
- Thursday: unpick arithmetic paper
- Friday: unpick reasoning paper

Decimals
- Tenths as fractions
- Tenths as decimals including PV Chart
- Tenths on numberlines
- Hundredths as fractions
- Hundredth as decimals including PV Chart
- Hundredth on numberlines
- Divide one and two digit numbers by 10
- Divide one and two digit numbers by 100
- Make a whole with tenths and hundredths
- Partition decimals
- Compare decimals
- Order decimals
- Round decimals with 1dp to nearest whole
- Assessment, Pause & Stretch
- PS Skills Lesson: generalising and conjecturing

Federation of Golden Flatts Primary Schools
Maths Medium-Term Plan: Year 3-4 **(Year B)**
Autumn Term

Place Value	Money	Add & Subtract	Assessment	Properties of Shape
4 weeks	2 weeks	5 weeks	1 week	3 weeks

NC

Units cover objectives from both year groups – where necessary

Small Steps

Place Value	Money	Add & Subtract	Assessment	Properties of Shape
- Represent numbers to HTO - Partition numbers to HTO - Value of digits to HTO - Number Line to HTO - PS Lesson: value of digits (more than one possibility) - Represent numbers to THTO - Partition THTO - Value of digits to THTO - Numberlines 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: compare & order (visual) - Round numbers to nearest 10 - Round numbers to nearest 100 - Round numbers to nearest 1000 - Round to nearest 10, 100, 100 within others (e.g. 424 to nearest 10 / 3908 to nearest 100) - PS Lesson: rounding - Assessment, Pause & Stretch	- Money as decimals - Convert between pounds and pence - PS Lesson: converting between pounds and pence (more than one possibility) - Compare amounts of money - Estimate with money - Calculate with money – use calculation policy methods - PS Lesson: money problems real-life (multi-step) - Assessment - Pause & Stretch - PS Skills Lesson: trial & improvement	- Addition concrete phase (no regroup and regroup) – calculation policy - Addition pictorial phase (no regroup & regroup) – calculation policy - Abstract – no regrouping - Abstract – 1 piece of regrouping - Abstract – 2 pieces of regrouping - Abstract – mixed - PS Lesson: columnar addition (more than one possibility) - subtraction concrete phase (no exchange and exchange) – calculation policy - subtraction pictorial phase (no exchange & exchange) – calculation policy - Abstract – no exchanging - Abstract – 1 piece of exchanging - Abstract – 2 pieces of exchanging - Abstract – mixed - PS Lesson: columnar subtraction (multi-step) - Assessment - Pause & Stretch - PS Skills Lesson: trial & improvement	- Monday: arithmetic paper - Tuesday: reasoning paper - Wednesday: fluency checks - Thursday: unpick arithmetic paper - Friday: unpick reasoning paper	- Angles or not - Right angles - Classify right, acute and obtuse angles (use geostrips for input) - Draw right, acute and obtuse angles - Horizontal and vertical - Parallel lines - Perpendicular lines - Name and classify 2d shapes - Draw 2d shapes including measurements - Complete a symmetrical pattern - Folding for symmetry in 2d shapes - Lines of symmetry using a mirror - Reflect polygons over a line of symmetry - Name and classify 3d shapes - Make 3d shapes - PS Lesson: shapes (rules & patterns) - Assessment - Pause & Stretch - PS Skills Lesson: working systematically

Federation of Golden Flatts and Lynnfield Primary Schools
Maths Medium-Term Plan: 3-4 (Year B)
Spring Term

Multiplication & Division	Assessment	Statistics
10 weeks	1 week	2 weeks

NC

Units cover objectives from both year groups – where necessary

Small Steps

Multiplication & Division
- Multiples of 10
- Scaled facts x10, x5, x2
- Scaled facts x4
- Scaled facts x8
- Scaled facts x 3
- Scaled facts ÷10, ÷5, ÷2
- Scaled facts ÷4
- Scaled facts ÷ 8
- Scaled facts ÷ 3
- Mixed x and ÷ scaled facts
- PS Lesson: multiples of 10 / related calculations (rules and patterns)
- TO x O concrete stage from calculation policy
- TO x O pictorial stage from calculation policy
- TO x O abstract stage 1 from calculation policy
- TO x O abstract stage 2 from calculation policy
- TO x O abstract stage 2 from calculation policy
- TO x O abstract stage 2 from calculation policy
- PS Lesson: 2 x 1 multiplication (rules and patterns)
- Linking multiplication and division
- TO ÷ O concrete stage
- TO ÷ O pictorial stage no remainders – number line include VF
- TO ÷ O pictorial stage with remainders – number line include VF
- TO ÷ O abstract stage with remainders – number line include VF
- TO ÷ O abstract stage with remainders – number line include VF
- PS Lesson: division TO ÷ O (working backwards)
- Scaling (bar models)
- PS Lesson: bar models (real-life word)
- Multiply by 10
- Multiply by 100
- divide by 10
- divide by 100
- PS Lesson: powers of 10 (working backwards)
- Concrete phase from calculation policy (no regrouping and regrouping)
- pictorial phase from calculation policy (no regrouping and regrouping)
- Abstract: Expanded Short multiplication 3 x 1(top right model of calculation policy)
- Abstract: Short multiplication 3 x 1 no regrouping (bottom right model of calculation policy)
- Abstract: Short multiplication 3 x 1 & 1 piece of regrouping (bottom right model of calculation policy)
- Abstract: Short multiplication 3 x 1 & 2 pieces of regrouping (bottom right model of calculation policy)
- Abstract: Short multiplication 3 x 1 mixed practice of lessons 11 to 13
- PS Lesson: short multiplication (multi-step)
- Concrete & pictorial from calculation policy
- Abstract: Division 3 by 1 (no regroup or remainder) from calculation policy
- Abstract: Division 3 by 1 (remainder but no regrouping within) from calculation policy
- Abstract: Division 3 by 1 (remainder and regrouping within) from calculation policy
- Abstract: Division 3 by 1 mixed from calculation policy
- PS Lesson: division (rules and patterns)
- Assessment, Pause & Stretch
- PS Skills Lesson: working collaboratively

Assessment
- Monday: arithmetic paper
- Tuesday: reasoning paper
- Wednesday: fluency checks
- Thursday: unpick arithmetic paper
- Friday: unpick reasoning paper

Statistics
- Interpret Bar Charts
- Construct Bar Charts
- Interpret Line Charts
- Construct Line Charts
- PS Lesson: Statistics (working backwards)
- Assessment
- Pause & Stretch
- PS Skills Lesson: finding starting points

Fractions	Assessment	Time
7 weeks	1 week	3 weeks

NC

Units cover objectives from both year groups – where necessary

Small Steps

Fractions

- Wholes, equal parts and unequal parts
- Match fractions to division
- Match fractions to fraction notation
- Order unit fractions by size of denominator
- Repeated addition of unit fractions to form a non-unit fraction
- Repeated addition of unit fractions to form a whole
- Non-unit fractions
- Compare and order non-unit fractions with same denominator
- Compare and order non-unit fractions with same numerator
- Practice Lesson: fractional sense <1
- PS Lesson: fractional sense <1 (visual)
- Understand mixed numbers
- Understand improper fractions
- Mixed into improper
- improper into mixed
- Compare and order mixed numbers using fractional sense: same whole and unit fraction
- Compare and order mixed when wholes are different
- Compare and order mixed with same wholes and non-unit
- PS Lesson: fractional sense >1 (visual)
- Represent unit fractions of amounts as bar models
- Represent unit fractions of amounts as division equations
- Practice Lesson: fractions of amounts (unit)
- PS Lesson: fractions of amounts (real-life word / multi-step)
- Add fractions with same denominator (not making whole)
- Add fractions with same denominator (making whole)
- Add on fractions using a numberlines
- Add involving mixed numbers (2 lessons)
- Subtract fractions from fractions
- Subtract fractions from whole by converting whole to a fraction
- Subtract involving mixed numbers (2 lessons)
- Practice Lesson: add and subtract fractions
- PS Lesson: add and subtract fractions (real-life word / multi-step)
- Assessment
- Pause & Stretch
- PS Skills Lesson: visualising

Assessment

- Monday: arithmetic paper
- Tuesday: reasoning paper
- Wednesday: fluency checks
- Thursday: unpick arithmetic paper
- Friday: unpick reasoning paper

Time

- Tell the time on an analogue clock
- Tell the time on an analogue clock using Roman Numerals
- Read the time on digital clocks
- 12 hour 24 hours conversion
- 12 hour 24 hours conversion
- Convert hours into minutes (use ratio tables)
- Convert from minutes to seconds (use ration tables)
- Convert between days and weeks (use ratio tables)
- PS Lesson: units of time conversion (working backwards)
- Assessment
- Pause & Stretch
- PS Skills Lesson: conjecturing and visualising