



Whole Numbers and Operations

Note to teachers: The proposed number of periods is intended to be flexible. Teachers are encouraged to modify it in accordance with the students' needs, learning pace, and the school's timetable.

Unit 1	Whole Numbers and Operations	Number of Periods
	Identify place values of digits up to one hundred thousand (100,000)	3
	Read numbers up to one hundred thousand (100,000)	
	Write numbers up to one hundred thousand (100,000)	
	Write numbers in words up to one hundred thousand (100,000)	
	Compare and order numbers up to 5 digits	2
	Add numbers up to 5 digits	3
	Solve real-life number stories involving addition of numbers up to 5 digits	
	Subtract numbers up to 5 digits	3
	Solve real-life situations involving subtraction of numbers up to 5 digits	
	Multiply numbers up to 5 digit by numbers up to 3 digits	3
	Solve real-life situations involving multiplication of numbers up to 5 digits by 3-digit	
	Divide numbers up to 4 digit by numbers up to 2 digit	3
	Solve real-life situations involving division of numbers up to 4 digit by a number up to 2 digits	
	Solve real-life situations using appropriate operations of addition, subtraction, multiplication and division of numbers up to 2 digits	3
	Recognise a given increasing and decreasing pattern by stating a pattern rule	4
	Describe the pattern found in a given table or chart	
	Complete the given increasing and decreasing number sequence	
		24



Resources

Suggested manipulatives that can be used to create interest and create a link to the topic.

- Hundred thousand place value mat
- Hundred thousand place value grid display poster
- Activity Cards having numerals on one side and their names on the other side.

Front		Black	
1	2	ONE	TWO
3	4	THREE	FOUR
5	6	FIVE	SIX

Suggested manipulatives that can be used to create interest and create a link to the topic.

- Counters
- White board
- Number cards with digits
- Chart Papers
- Paper chits
- Addition and subtraction number cards.

$$23 + 23$$

$$50 - 32$$

Suggested manipulatives that can be used to create interest and create a link to the topic.

- Array cards
- Multiplication and division cards

$$1 \times 9$$

$$2 \times 9$$

$$36 \div 6$$

$$30 \div 6$$





Factors and Multiples

Unit 2	Factors and Multiples	Number of Periods
	Identify divisibility rules for 2, 3, 5, and 10	4
	Use divisibility tests for 2, 3, 5, and 10 on numbers up to 5 digits	
	Identify and differentiate 2-digit prime and composite numbers	4
	Find factors of a number up to 50	7
	List the first ten multiples of a 1-digit number	
	Differentiate between factors and multiples	
	Factorise a number by using prime factors	
	Determine common factors of two or more 2-digit numbers	
	Determine common multiples of two or more 2-digit numbers	
		15

Resources

Suggested manipulatives that can be used to create interest and create a link to the topic.

- Array cards
- Counters
- Multiplication table charts/cards
- Worksheets
- Activity Cards

Number	Divisible by 2	Divisible by 3	Divisible by 5	Divisible by 10
18702	Yes	Yes	No	No
24900				
15672				
87534				
42207				
59345				



3

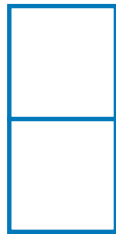
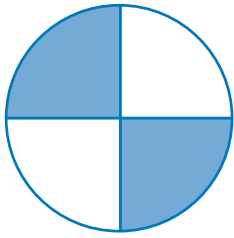
Fractions

Unit 3	Fractions	Number of Periods
	Recognise like and unlike fractions	1
	Compare two unlike fractions by converting them to equivalent fractions with the same denominator	2
	Simplify fractions to the lowest form	2
	Identify (unit, proper, improper) fractions and mixed numbers	1
	Convert improper fractions to mixed numbers and vice versa	3
	Arrange fractions in ascending and descending order	1
	Add fractions with like denominators	2
	Subtract fractions with like denominators	2
	Multiply a fraction (proper, Improper) and mixed number by a whole number	3
	Multiply two fractions (proper, Improper) and mixed numbers	
	Divide a fraction (proper, Improper) and mixed numbers by a whole number	2
	Analyse real life situations involving fractions by identifying appropriate number operations	2
		21

Resources

Suggested manipulatives that can be used to create interest and create a link to the topic.

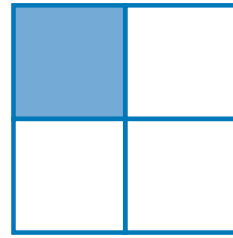
- Chits
- Blocks,
- Rubber bands,
- Fraction charts
- Fraction blocks
- Shape cutouts
- Worksheet



$$\frac{1}{4}$$

$$\frac{5}{10}$$

$$\frac{6}{10}$$



$$\frac{1}{4}$$

Resources

Suggested manipulatives that can be used to create interest and create a link to the topic.

- Fraction cards
- Shapes cutouts
- Chits

4

Decimals

Unit 4	Decimals	Number of Periods
	Recognise a decimal number as an alternative way of writing a fraction	2
	Express a decimal number as a fraction whose denominator is 10, 100 or 1000	
	Identify and recognise the place value of a digit in decimals (up to 3-decimal places)	2
	Convert a given fraction to a decimal if <ul style="list-style-type: none"> denominator of the fraction is 10, 100 or 1000. denominator of the fraction is not 10, 100 or 1000 but can be converted to 10,100 or 1000 	3
	Convert a decimal (up to 3-decimal places) to fraction	2
	Add and subtract 3-digit numbers (up to 2 decimal places)	3
	Multiply a 2-digit number (up to 1 decimal place) by 10, 100, and 1000	3
	Multiply a 2-digit number with 1 decimal place by a 1-digit number	
	Divide a 2-digit number with 1 decimal place by a 1-digit number	2
	Solve real-life situations involving 2-digit numbers using appropriate operations	2
	Round off a whole number to the nearest 10, 100, and 1000	2
	Round off decimal (with 1 or 2 decimal places) to the nearest whole number	
		21

Resources

Suggested manipulatives that can be used to create interest and create a link to the topic.

- Prepare Fraction number cards
- Prepare Decimal number cards

$$\frac{1}{4}$$

$$0.14$$

Measurements

Unit 5	Measurements	Number of Periods
	Use standard metric units to measure the length of different objects	3
	Convert larger to smaller metric units (2-digits numbers with one decimal place) • kilometers into meters • meters into centimetres • centimetres into millimeters	
	Add and subtract measures of length in same units	
	Use standard metric units to measure the mass of different objects	3
	Convert larger to smaller metric units (2-digits numbers with one decimal place) • kilograms into grams • grams into milligrams	
	Add and subtract measures of mass in same units	
	Use standard metric units to measure the capacity of different containers	3
	Convert larger to smaller metric units (2-digit numbers with one decimal place) liters into millilitres	
	Add and subtract measure of capacity in same units	
	Solve real life situations involving conversion, addition and subtraction of measures of length, mass and capacity	2
	Read and write the time using digital and analogue clocks on 12-hour and 24-hour format	2
	Convert hours to minutes and minutes to seconds	2
	Convert years to months, months to days, and weeks to days	
	Add and subtract measures of time without carrying and borrowing.	2
	Solve simple real-life situations involving conversion, addition and subtraction of time	
		23

Resources

Suggested manipulatives that can be used to create interest and create a link to the topic.

- Weighing balance
- Object of different sizes
- Ruler
- Metre stick
- Conversion chart
- Containers of different capacities
- Empty bottles

Suggested manipulatives that can be used to create interest and create a link to the topic.

- Analogue clock
- Clock faces showing different time
- Class timetable
- Bus/train schedules





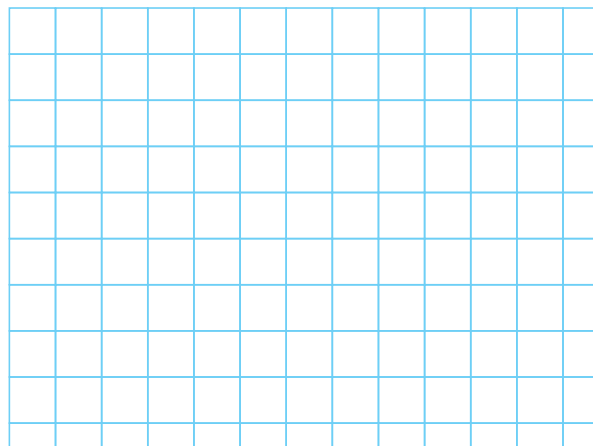
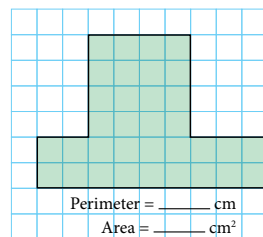
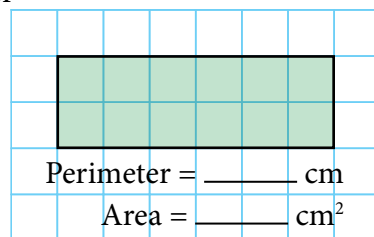
Perimeter and Area

Unit 6	Perimeter and Area	Number of Periods
	Find perimeter of a 2D figures on a square grid	3
	Recognise that perimeter is measured in units of length	
	Find area of 2D figures on a square grid	3
	Recognise that area of a square is measured in meter square and centimeter square	
		6

Resources

Suggested manipulatives that can be used to create interest and create a link to the topic.

- Blank paper chits
- Centimeter grid
- Square grid paper





Geometry

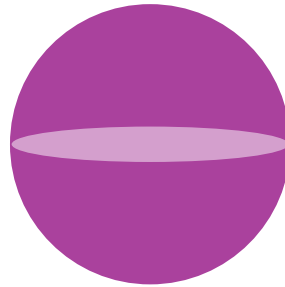
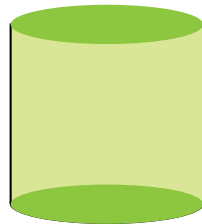
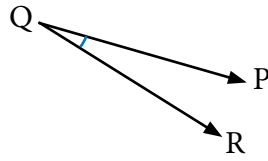
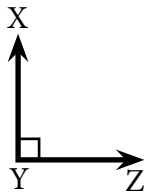
Unit 7	Geometry	Number of Periods
	Recognise and identify parallel and non-parallel lines	2
	Recognise an angle formed by intersection of two rays	3
	Measure angles in degree ($^{\circ}$) by using protractor	
	Measure angles using protractor where . upper scale of protractor reads the measure of angle from left to right . lower scale of protractor reads the measure of angle from right to left	
	Differentiate acute, obtuse and right angles	
	Draw an angle of the given measurement and use the symbol (\sphericalangle) to represent it	4
	Identify right angles in 2D shapes	2
	Describe radius, diameter and circumference of a circle	2
	Recognise lines of symmetry in two-dimensional (2D) shapes	3
	Complete a symmetrical figure with respect to a given line of symmetry on square grid/dot pattern	
	Compare and sort 3D objects (cubes, cuboids, pyramids, cylinder, cone, sphere)	3
		21

Resources

Suggested manipulatives that can be used to create interest and create a link to the topic.

- Centimeter grid
- Playdough



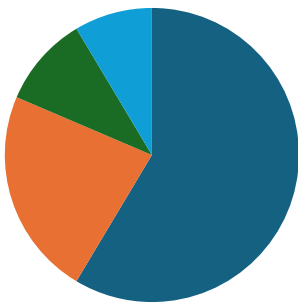


Unit 9	Data Handling	Number of Periods
	Read simple bar graphs given in horizontal and vertical form	3
	Interpret real life situations using data presented in bar graphs	
	Read line graph	3
	Interpret real life situations using data presented in line graphs	
	Read Pie Chart	3
	Interpret real life situations using data presented in Pie Chart	
		9

Resources

Suggested manipulatives that can be used to create interest and create a link to the topic.

Pie Chart



Bar Graph

