

NSW Mathematics

EP Curriculum Map

Stage 3

Number and Algebra

Whole Numbers 1

Content Descriptor	Lesson Names
Recognise, represent and order numbers to at least tens of millions	<ul style="list-style-type: none"> Place Values Number Lines Expanding Numbers Introduction to Rounding Ordering Positive Integers
Identify and describe factors and multiples of whole numbers and use them to solve problems	<ul style="list-style-type: none"> Factors Highest Common Factor Identifying Factors Multiples Applications of Multiples Lowest Common Multiple

Whole Numbers 2

Content Descriptor	Lesson Names
Investigate everyday situations that use integers; locate and represent these numbers on a number line	<ul style="list-style-type: none"> Introduction to Negative Numbers Negative Integers Negative Numbers on the Number Line Ordering Negative Integers
Identify and describe properties of prime, composite, square and triangular numbers	<ul style="list-style-type: none"> Square Numbers Calculating Square Numbers Triangular Numbers Prime Numbers Composite Numbers Factor Trees

Addition and Subtraction 1

Content Descriptor	Lesson Names
Use efficient mental and written strategies and	<ul style="list-style-type: none"> Addition

apply appropriate digital technologies to solve problems	<ul style="list-style-type: none"> • Subtraction
Use estimation and rounding to check the reasonableness of answers to calculations	<ul style="list-style-type: none"> • Introduction to Rounding
	<ul style="list-style-type: none"> • Budgeting • Making a Budget

Addition and Subtraction 2

Content Descriptor	Lesson Names
Select and apply efficient mental and written strategies and appropriate digital technologies to solve problems involving addition and subtraction with whole numbers	<ul style="list-style-type: none"> • Addition • Applying Addition and Subtraction • Subtraction • The Subtraction Algorithm

Multiplication and Division 1

Content Descriptor	Lesson Names
Solve problems involving multiplication of large numbers by one- or two-digit numbers using efficient mental and written strategies and appropriate digital technologies	<ul style="list-style-type: none"> • Multiplication Using Place Value • Multiplying Big Numbers • Multiplication Using Rounding and Compensation
Solve problems involving division by a one-digit number, including those that result in a remainder	<ul style="list-style-type: none"> • Division in Parts • Long Division
Use estimation and rounding to check the reasonableness of answers to calculations	<ul style="list-style-type: none"> • Introduction to Rounding

Multiplication and Division 2

Content Descriptor	Lesson Names
Select and apply efficient mental and written strategies, and appropriate digital technologies, to solve problems involving multiplication and division with whole numbers	<ul style="list-style-type: none"> • Column Multiplication • Applying Multiplication and Division
Explore the use of brackets and the order of operations to write number sentences	<ul style="list-style-type: none"> • Order of Operations • Preserving Order of Operations

Fractions and Decimals 1

Content Descriptor	Lesson Names
Compare and order common unit fractions and locate and represent them on a number line	<ul style="list-style-type: none"> • Unit Fractions • Fractions on a Number Line
Investigate strategies to solve problems involving	<ul style="list-style-type: none"> • Proper and Improper Fractions

addition and subtraction of fractions with the same denominator	<ul style="list-style-type: none"> • Mixed Numbers • Adding Fractions with the Same Denominator • Adding Mixed Numbers with the Same Denominator • Adding Whole Numbers and Fractions • Subtracting Fractions from One Whole • Subtracting Fractions from Whole Numbers • Subtracting Fractions with the Same Denominator
Recognise that the place value system can be extended beyond hundredths	<ul style="list-style-type: none"> • Introduction to Decimals • Tenths • Hundredths • Thousandths and Beyond
Compare, order and represent decimals	<ul style="list-style-type: none"> • Comparing Decimals

Fractions and Decimals 2

Content Descriptor	Lesson Names
Compare fractions with related denominators and locate and represent them on a number line	<ul style="list-style-type: none"> • Fractions and Number Lines • Comparing Fractions • Equivalent Fractions • Simplifying Fractions
Solve problems involving addition and subtraction of fractions with the same or related denominators	<ul style="list-style-type: none"> • Adding Fractions with Related Denominators • Adding Fractions with the Same Denominator • Adding Mixed Numbers with the Same Denominator • Subtracting Fractions with Related Denominators • Subtracting Fractions with the Same Denominator • Subtracting Mixed Numbers with the Same Denominator
Find a simple fraction of a quantity where the result is a whole number, with and without the use of digital technologies	<ul style="list-style-type: none"> • Fraction of a Quantity
Add and subtract decimals, with and without the use of digital technologies, and use estimation and rounding to check the reasonableness of answers	<ul style="list-style-type: none"> • Adding Decimals • Applications of Adding Decimals • Subtracting Decimals • Applications of Subtracting Decimals •
Multiply decimals by whole numbers and perform divisions by non-zero whole numbers where the results are terminating decimals, with and without the use of digital technologies	<ul style="list-style-type: none"> • Dividing Decimals • Multiplying Decimals

Multiply and divide decimals by powers of 10	<ul style="list-style-type: none"> • Multiplying Decimals
Make connections between equivalent fractions, decimals and percentages	<ul style="list-style-type: none"> • Introduction to Percentages • Percentages and Decimals • Percentages, Decimals and Fractions • Converting Percentages
Investigate and calculate percentage discounts of 10%, 25% and 50% on sale items, with and without the use of digital technologies	<ul style="list-style-type: none"> • Discounts • Calculating Discounts • Percentages of a Number • Percentages, Decimals and Fractions

Patterns and Algebra 1

Content Descriptor	Lesson Names
Use equivalent number sentences involving multiplication and division to find unknown quantities	<ul style="list-style-type: none"> • Equivalent Number Sentences • Gaps in Number Sentences

Patterns and Algebra 2

Content Descriptor	Lesson Names
Continue and create sequences involving whole numbers, fractions and decimals; describe the rule used to create the sequence	<ul style="list-style-type: none"> • Identifying Relationships • Rules for Patterns • Using Rules to Continue Patterns
Introduce the cartesian-coordinate-system using all four quadrants	<ul style="list-style-type: none"> • Cartesian Planes • Describing Locations with Cartesian Planes • Describing Locations with Coordinates

Measurement and Geometry

Length 1

Content Descriptor	Lesson Names
Choose appropriate units of measurement for length	<ul style="list-style-type: none"> • Unit Prefixes • Units of Length • Units of Measurement • Estimating Measurements • Appropriate Units of Length
Calculate the perimeters of rectangles using familiar metric units	<ul style="list-style-type: none"> • Perimeter • Finding Perimeters

Length 2

Content Descriptor	Lesson Names
Connect decimal representations to the metric system	<ul style="list-style-type: none"> • Interpreting Units of Length



	<ul style="list-style-type: none">• Comparing Units of Length
Convert between common metric units of length	<ul style="list-style-type: none">• Converting Units of Length• Method for Converting Units of Length
Solve problems involving the comparison of lengths using appropriate units	<ul style="list-style-type: none">• Comparing Units of Length• Perimeter• Finding Perimeters

Area 1

Content Descriptor	Lesson Names
Choose appropriate units of measurement for area	<ul style="list-style-type: none">• Area• Units of Measurement• Hectares
Calculate the areas of rectangles using familiar metric units	<ul style="list-style-type: none">• Area of Rectangles

Area 2

Content Descriptor	Lesson Names
Solve problems involving the comparison of areas using appropriate units	<ul style="list-style-type: none">• Area of Triangles

Volume and Capacity 1

Content Descriptor	Lesson Names
Choose appropriate units of measurement for volume and capacity	<ul style="list-style-type: none">• Unit Prefixes• Units of Measurement

Volume and Capacity 2

Content Descriptor	Lesson Names
Connect volume and capacity and their units of measurement	<ul style="list-style-type: none">• Volume• Units of Capacity
Connect decimal representations to the metric system	<ul style="list-style-type: none">• Interpreting Units of Capacity• Capacity and Volume
Convert between common metric units of capacity	<ul style="list-style-type: none">• Converting Units of Capacity• Applications of Converting Units of Capacity
Calculate the volumes of rectangular prisms	<ul style="list-style-type: none">• Volume of Rectangular Prisms

Mass 1

Content Descriptor	Lesson Names
Choose appropriate units of measurement for mass	<ul style="list-style-type: none"> Unit Prefixes Units of Measurement Units of Mass Net Mass and Gross Mass

Mass 2

Content Descriptor	Lesson Names
Connect decimal representations to the metric system	<ul style="list-style-type: none"> Units of Mass Interpreting Units of Mass
Convert between common metric units of mass	<ul style="list-style-type: none"> Converting Units of Mass Applications of Converting Units of Mass

Time 1

Content Descriptor	Lesson Names
Compare 12- and 24-hour time systems and convert between them	<ul style="list-style-type: none"> 24-Hour Time Converting 12- and 24-Hour Time Time Zones
Determine and compare the duration of events	<ul style="list-style-type: none"> Recording Time Duration

Time 2

Content Descriptor	Lesson Names
Interpret and use timetables	<ul style="list-style-type: none"> Reading Timetables Timetables and Transport Using Multiple Timetables Personal Timetables
Draw and interpret timelines using a given scale	<ul style="list-style-type: none"> Timelines

3D Space 1

Content Descriptor	Lesson Names
Compare, describe and name prisms and pyramids	<ul style="list-style-type: none"> 3D Solids Identifying Faces of Prisms and Pyramids Prisms Pyramids
Connect three-dimensional objects with their nets and other two-dimensional representations	<ul style="list-style-type: none"> Nets of Prisms Nets of Pyramids

3D Space 2

Content Descriptor	Lesson Names
Construct simple prisms and pyramids	<ul style="list-style-type: none"> • Drawing Prisms • Drawing Pyramids • Nets of Prisms • Nets of Pyramids • Prisms • Pyramids

2D Space 1

Content Descriptor	Lesson Names
Classify two-dimensional shapes and describe their features	<ul style="list-style-type: none"> • 2D Shapes • Quadrilaterals • Types of Triangles • Regular Polygons • Irregular Polygons
Describe translations, reflections and rotations of two-dimensional shapes	<ul style="list-style-type: none"> • Translation on a Grid • Reflection on a Grid • Rotation on a Grid
Identify line and rotational symmetries	<ul style="list-style-type: none"> • Identifying Rotational Symmetry • Order of Rotational Symmetry • Rotational Symmetry in Life • Line Symmetry • Line Symmetry in Life
Apply the enlargement transformation to familiar two-dimensional shapes and explore the properties of the resulting image compared with the original	<ul style="list-style-type: none"> • The Enlargement Transformation

2D Space 2

Content Descriptor	Lesson Names
Investigate the diagonals of two-dimensional shapes	<ul style="list-style-type: none"> •
Identify and name parts of circles	<ul style="list-style-type: none"> • Parts of a Circle • Circumference of Circles
Investigate combinations of translations, reflections and rotations, with and without the use of digital technologies	<ul style="list-style-type: none"> • Predicting Patterns • Reflection • Rotation • Translation

Angles 1

Content Descriptor	Lesson Names
Estimate, measure and compare angles using degrees	<ul style="list-style-type: none"> Angles Angles in the Real World Estimating the Size of Angles Measuring Acute and Obtuse Angles Measuring Reflex Angles
Construct angles using a protractor	<ul style="list-style-type: none"> Types of Angles Right Angles Other Common Angles

Angles 2

Content Descriptor	Lesson Names
Investigate, with and without the use of digital technologies, angles on a straight line, angles at a point, and vertically opposite angles; use the results to find unknown angles	<ul style="list-style-type: none"> Angles Around a Point Angles in Corners Angles on Straight Lines Vertically Opposite Angles

Position

Content Descriptor	Lesson Names
Use a grid-reference system to describe locations	<ul style="list-style-type: none"> Locations
Describe routes using landmarks and directional language	<ul style="list-style-type: none"> Describing Routes Describing Routes Using Landmarks

Statistics and Probability

Data 1

Content Descriptor	Lesson Names
Pose questions and collect categorical or numerical data by observation or survey	<ul style="list-style-type: none"> Collecting Data Surveys
Construct displays, including column graphs, dot plots and tables, appropriate for data type, with and without the use of digital technologies	<ul style="list-style-type: none"> Tally Marks Data Tables Column (Bar) Graphs Dot Plots Dot Plots and Tables Picture Graphs Picture Graphs and Data Tables Picture Graphs with Keys Line Graphs

Describe and interpret different data sets in context	<ul style="list-style-type: none"> • Column (Bar) Graphs • Dot Plots • Dot Plots and Tables • Picture Graphs • Picture Graphs and Data Tables • Picture Graphs with Keys • Line Graphs • Reading Column Graphs
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Data 2

Content Descriptor	Lesson Names
Interpret and compare a range of data displays, including side-by-side column graphs for two categorical variables	<ul style="list-style-type: none"> • Side-by-Side Column Graphs • Two-Way Tables
Interpret secondary data presented in digital media and elsewhere	<ul style="list-style-type: none"> • Misleading Data and Graphs

Chance 1

Content Descriptor	Lesson Names
List outcomes of chance experiments involving equally likely outcomes and represent probabilities of those outcomes using fractions	<ul style="list-style-type: none"> • The Probability of Outcomes • Equal and Unequal Outcomes • Probability as a Fraction • Chance Games
Recognise that probabilities range from 0 to 1	<ul style="list-style-type: none"> • The Likelihood Scale • Likelihood of Events

Chance 2

Content Descriptor	Lesson Names
Compare observed frequencies across experiments with expected frequencies	<ul style="list-style-type: none"> • Probability Experiments • Observed Outcomes vs. Expected Outcomes
Describe probabilities using fractions, decimals and percentages	<ul style="list-style-type: none"> • Proportional Reasoning • Writing Probabilities
Conduct chance experiments with both small and large numbers of trials using appropriate digital technologies	<ul style="list-style-type: none"> • Probability Experiments