

1st Class *Maths and Me* Progression Continua Overview

This document outlines the Learning Experiences for each of the Strand Units for progression milestone (e), and where they are covered in *Maths and Me*.

Algebra > Patterns, Rules and Relationships

Learning Experiences in Progression Continua (e)	<i>Maths and Me</i> 1st Class
Explores patterns and numerical relationships in addition and subtraction facts up to at least 10. (U&C)	Unit 2 Addition and Subtraction 1, Many lessons
Recognises odd and even number patterns in a hundred square. (U&C)	Unit 11 Patterns, Many lessons
Begins to explore the commutative property (swapping the order of the numbers being added and still getting the same total) of addition. (U&C)	Unit 2 Addition and Subtraction 1, Lesson 2 Unit 8 Addition and Subtraction 2, Many lessons Unit 12 Addition and Subtraction 3, Many lessons
Describes the structure of growing and shrinking pattern. (C)	Unit 11 Patterns, Lesson 3, 4
Explains and argues the commutative property of addition facts (swapping the order of the numbers being added and still getting the same total). (C)	Unit 2 Addition and Subtraction 1, Lesson 2 Unit 8 Addition and Subtraction 2, Lesson 5 Unit 12 Addition and Subtraction 3, Many lessons
Records the quantitative information provided in a story or problem in pictorial or graphical form. (C)	Unit 8 Addition and Subtraction 2, Many lessons Unit 12 Addition and Subtraction 3, Many lessons Unit 18 Number Sentences, Lesson 1, 2 Unit 19 Addition and Subtraction 4, Many lessons
Compares alternative perspectives on patterns. (R)	Unit 11 Patterns, Lesson 2
Demonstrates the commutative property of addition with proof(s) (For example: drawing a diagram or using concrete materials). (R)	Unit 2 Addition and Subtraction 1, Many lessons Unit 8 Addition and Subtraction 2, Lesson 4 Unit 12 Addition and Subtraction 3, Many lessons
Describes or shows why a rule describes a pattern. (R)	Unit 11 Patterns, Lesson 2
Represents situations that involve the addition and subtraction of whole numbers, using objects, pictures and symbols. (A&PS)	Unit 2 Addition and Subtraction 1, Many lessons Unit 8 Addition and Subtraction 2, Many lessons Unit 12 Addition and Subtraction 3, Many lessons Unit 18 Number Sentences, Lesson 1, 2 Unit 19 Addition and Subtraction 4, Many lessons

Algebra > Expressions and Equations

Learning Experiences in Progression Continua (e)	Maths and Me 1st Class
Uses symbols for equals to, not equals to, less than and greater than, as relational symbols. (U&C)	Unit 2 Addition and Subtraction 1, Many lessons Unit 7 Numbers to 100, Lesson 5 Unit 12 Addition and Subtraction 3, Many lessons Unit 15 Money, Lesson 4, 5 Unit 18 Number Sentences, Many lessons Unit 19 Addition and Subtraction 4, Many lessons
Uses number facts and/or simple computation to find the missing value in a number sentence. (U&C)	Unit 18 Number Sentences, Many lessons
Translates verbal one-step problems into written addition or subtraction number sentences or expressions [and vice versa]. (C)	Unit 2 Addition and Subtraction 1, Many lessons Unit 8 Addition and Subtraction 2, Many lessons Unit 12 Addition and Subtraction 3, Many lessons Unit 18 Number Sentences, Many lessons Unit 19 Addition and Subtraction 4, Many lessons
Selects appropriate operational or relational symbols to make an expression true. (R)	Unit 2 Addition and Subtraction 1, Many lessons Unit 7 Numbers to 100, Many lessons Unit 8 Addition and Subtraction 2, Many lessons Unit 12 Addition and Subtraction 3, Many lessons Unit 15 Money, Lesson 4, 5 Unit 18 Number Sentences, Many lessons Unit 19 Addition and Subtraction 4, Many lessons
Recognises the function of operational symbols [+ , -] and relational symbols [= , > , < , ≠] and how this function remains the same in all contexts. (R)	Unit 2 Addition and Subtraction 1, Many lessons Unit 7 Numbers to 100, Many lessons Unit 8 Addition and Subtraction 2, Many lessons Unit 12 Addition and Subtraction 3, Many lessons Unit 18 Number Sentences, Lesson 1, 2 Unit 19 Addition and Subtraction 4, Many lessons
Tells the story of simple number sentences or expressions, verbally or using appropriate models (For example: diagrams or concrete materials). (A&PS)	Unit 2 Addition and Subtraction 1, Many lessons Unit 8 Addition and Subtraction 2, Many lessons Unit 12 Addition and Subtraction 3, Many lessons Unit 18 Number Sentences, Lesson 1, 2 Unit 19 Addition and Subtraction 4, Many lessons

Data and Chance > Data

Learning Experiences in Progression Continua (e)	Maths and Me 1st Class
Explores and recognises different ways of collecting and representing data. (U&C)	Unit 4 Data 1, Many lessons Unit 16 Data 2, Many lessons
Uses simple tallying for recording of data. (U&C)	Unit 4 Data 1, Lesson 1
Recognises that data symbols hold and/or represent information or numerical value. (U&C)	Unit 4 Data 1, Lesson 3, 4 Unit 16 Data 2, Many lessons
Reads, interprets, poses questions about and discusses data displays such as concrete and visual charts (For example: pictograms) and graphs (For example: block graphs). (C)	Unit 4 Data 1, Lesson 2, 3, 4 Unit 16 Data 2, Many lessons
Differentiates information as useful or surplus to address questions of interest. (R)	Unit 16 Data 2, Lesson 1
Listens to others' interpretations of data investigations and compare with own interpretations. (R)	Unit 4 Data 1, Many lessons Unit 16 Data 2, Many lessons
Selects and applies appropriate methods of collecting, recording and representing data in different problem-solving scenarios. (A&PS)	Unit 16 Data 2, Many lessons

Measures > Measuring

Learning Experiences in Progression Continua (e)	Maths and Me 1st Class
Identifies commonalities and differences between measurable attributes and recognises the need for standard units of measurement. (U&C)	Unit 10 Measuring 1, Lesson 3 Unit 13 Measuring 2, Lesson 3, 6 Unit 17 Measuring 3, Many lessons
Identifies the appropriate measurement instruments and units for a given situation. (U&C)	Unit 10 Measuring 1, Lesson 2 Unit 13 Measuring 2, Lesson 2, 5 Unit 17 Measuring 3, Lesson 2
Recognises that units of measurement can simplify communication about measurement. (C)	Unit 10 Measuring 1, Lesson 3 Unit 13 Measuring 2, Lesson 3, 6 Unit 17 Measuring 3, Lesson 3
Collects and records measurement data in systematic ways (For example – by using lists, tables etc.) and compares results. (C)	Unit 10 Measuring 1, Lesson 2 Unit 13 Measuring 2, Lesson 2, 5 Unit 17 Measuring 3, Lesson 2
Explains and justifies the necessity of selecting the same unit when comparing two things. (R)	Unit 10 Measuring 1, Many lessons Unit 13 Measuring 2, Many lessons

	Unit 17 Measuring 3, Lesson 3
Assesses reasonableness of estimations and measurements with reference to previous measurements and personal benchmarks. (R)	Unit 10 Measuring 1, Many lessons Unit 13 Measuring 2, Many lessons Unit 17 Measuring 3, Many lessons
Identifies the appropriate attribute to measure for a given problem situation. (A&PS)	Unit 13 Measuring 2, Lesson 7 Unit 17 Measuring 3, Lesson 4
Selects and uses appropriate procedures, measures and equipment to measure attributes of length, weight, capacity and area. (A&PS)	Unit 10 Measuring 1, Many lessons Unit 13 Measuring 2, Lesson 7 and many lessons Unit 17 Measuring 3, Lesson 4

Measures > Time

Learning Experiences in Progression Continua (e)	Maths and Me 1st Class
Recognises time in hours and half hours on analogue clocks. (U&C)	Unit 5 Time 1, Lesson 5, 6 Unit 14 Time 2, Many lessons
Recognises and identifies the time of significant daily events represented on analogue clocks. (U&C)	Unit 14 Time 2, Lesson 1
Explores the functionality of the calendar and identify dates. (U&C)	Unit 5 Time 1, Lesson 4
Communicates the sequence of events, days of the week, months of the year and seasons. (For example – 24 hours in a day, 7 days in a week, number of days in the month). (C)	Unit 5 Time 1, Lesson 2, 3 Unit 14 Time 2, Lesson 2
Reads and records time in one-hour and half hour intervals on analogue clocks. (C)	Unit 5 Time 1, Lesson 5, 6
Makes approximations of the present time or the time shown on analogue clocks using appropriate language. (C)	Unit 5 Time 1, Lesson 7
Becomes familiar with the movements of analogue clock hands in a clockwise direction. (R)	Unit 5 Time 1, Many lessons Unit 14 Time 2, Many lessons
Establishes and makes reasonable estimations of time. (R)	Unit 5 Time 1, Lesson 2, 7
Investigates the fractional representation of time on an analogue clock. (R)	Unit 5 Time 1, Lesson 6

Records time passing using a variety of devices and methods. (A&PS)	Unit 5 Time 1, Many lessons Unit 14 Time 2, Many lessons
Predicts and models how the face of an analogue clock will change over a specified time. (A&PS)	Unit 14 Time 2, Many lessons
Uses language of approximation to relate events which occur naturally throughout the day to various units of time. (A&PS)	Unit 14 Time 2, Lesson 2

Measures > Money

Learning Experiences in Progression Continua (e)	<i>Maths and Me 1st Class</i>
Recognises the relative value of coins, up to the value of at least €1. (U&C)	Unit 15 Money, Many lessons
Determines what can be bought for certain sums of money. (U&C)	Unit 15 Money, Many lessons
Explores a variety of ways to record calculations. (C)	Unit 15 Money, Many lessons
Uses the euro [€] and cent [c] symbol to represent money. (C)	Unit 15 Money, Lesson 2 and many lessons
Analyses different ways of combining coins/amounts to make particular sums. (R)	Unit 15 Money, Many lessons
Estimates values of undetermined amounts of money. (R)	Unit 15 Money, Many lessons
Exchanges money for goods / items in real-life or role play contexts. (A&PS)	Unit 15 Money, Lesson 7

Number > Numeration and Counting

Learning Experiences in Progression Continua (e)	Maths and Me 1st Class
Counts to at least 100, counting fluently across decades. (U&C)	Unit 1 Numbers to 30, Lesson 1, 2 Unit 7 Numbers to 100, Lesson 1
Skip counts multiples of twos, fives and tens from a given multiple using verbal, concrete and pictorial supports. (U&C)	Unit 1 Numbers to 30, Lesson 2 Unit 7 Numbers to 100, Lesson 2
Counts forwards and backwards in tens from any given number using verbal, concrete and pictorial supports. (U&C)	Unit 7 Numbers to 100, Lesson 2
Explores a range of approaches to support calculation strategies (For example: doubles, near doubles add one). (U&C)	Unit 2 Addition and Subtraction 1, Many lessons Unit 8 Addition and Subtraction 2, Many lessons Unit 12 Addition and Subtraction 3, Many lessons Unit 19 Addition and Subtraction 4, Many lessons
Explains and justifies choices of counting and calculation strategies used and compares with the choices of others. (C)	Unit 1 Numbers to 30, Many lessons Unit 2 Addition and Subtraction 1, Many lessons Unit 7 Numbers to 100, Lesson 1, 2 Unit 8 Addition and Subtraction 2, Many lessons Unit 12 Addition and Subtraction 3, Many lessons Unit 15 Money, Lesson 2 Unit 18 Number Sentences, Many lessons Unit 19 Addition and Subtraction 4, Many lessons
Uses knowledge of simple fact groups [doubles, bonds of 5 and 10, adding 10] to develop further calculation strategies (For example: near doubling, bridging through 5 and 10, add 1, add 0, compensation). (R)	Unit 2 Addition and Subtraction 1, Many lessons Unit 8 Addition and Subtraction 2, Many lessons Unit 12 Addition and Subtraction 3 Many lessons
Checks the reasonableness of calculations by comparing the final solution with the estimate. (R)	Unit 8 Addition and Subtraction 2, Many lessons Unit 12 Addition and Subtraction 3, Many lessons Unit 15 Money, Lesson 2 Unit 18 Number Sentences, Lesson 1, 2 Unit 19 Addition and Subtraction 4, Many lessons
Selects and uses a range of mental strategies to solve problems. (For example: change the numbers in the problem or reword the problem). (A&PS)	Unit 2 Addition and Subtraction 1, Many lessons Unit 7 Numbers to 100, Many lessons Unit 12 Addition and Subtraction 3, Many lessons Unit 18 Number Sentences, Many lessons
Uses skip counting to extend number patterns. (A&PS)	Unit 1 Numbers to 30, Lesson 3 Unit 7 Numbers to 100, Lesson 2

Number > Place Value and Base Ten

Learning Experiences in Progression Continua (e)	Maths and Me 1st Class
Composes and decomposes the structure of 2-digit whole numbers up to at least 99. (U&C)	Unit 1 Numbers to 30, Lesson 5 and many lessons Unit 7 Numbers to 100, Lesson 4 Unit 12 Addition and Subtraction 3, Many lessons Unit 19 Addition and Subtraction 4, Many lessons
Compares two 2-digit numbers and represents the relationship between these numbers using symbols and language (For example: $<$, $>$, and $=$). (U&C)	Unit 1 Numbers to 30, Lesson 6 Unit 7 Numbers to 100, Lesson 5
Demonstrates an ability to estimate various arrangements or models of numbers to 99. (U&C)	Unit 1 Numbers to 30, Many lessons Unit 7 Numbers to 100, Lesson 4
Identifies place value in 2-digit whole numbers up to at least 99, including zero as a placeholder. (U&C)	Unit 1 Numbers to 30, Lesson 5 and many lessons Unit 8 Addition and Subtraction 2, Many lessons Unit 12 Addition and Subtraction 3, Many lessons Unit 19 Addition and Subtraction 4, Many lessons
Models 2-digit numbers in terms of tens and ones. (C)	Unit 1 Numbers to 30, Many lessons Unit 2 Addition and Subtraction 1, Many lessons Unit 7 Numbers to 100, Lesson 3, 4 and many lessons Unit 8 Addition and Subtraction 2, Many lessons Unit 12 Addition and Subtraction 3, Many lessons Unit 19 Addition and Subtraction 4, Many lessons
Describes 2-digit numbers in terms of tens and ones. (C)	Unit 1 Numbers to 30, Many lessons Unit 2 Addition and Subtraction 1, Many lessons Unit 7 Numbers to 100, Lesson 4 and many lessons Unit 8 Addition and Subtraction 2, Many lessons Unit 12 Addition and Subtraction 3, Many lessons Unit 19 Addition and Subtraction 4, Many lessons
Investigates the efficiency of different estimation strategies, including rounding numbers to the nearest ten. (R)	Unit 7 Numbers to 100, Lesson 6
Orders 2-digit numbers (For example: from least to most, most to least). (R)	Unit 1 Numbers to 30, Lesson 6 and many lessons Unit 7 Numbers to 100, Lesson 5
Estimates the number of objects in a set from 0-20. (R)	Unit 1 Numbers to 30, Many lessons Unit 7 Numbers to 100, Many lessons
Explores a range of tasks including games, puzzles and real-life contexts involving 2-digit numbers. (A&PS)	Unit 1 Numbers to 30, Many lessons Unit 7 Numbers to 100, Lesson 7 and many lessons Unit 8 Addition and Subtraction 2, Many lessons Unit 12 Addition and Subtraction 3, Many lessons Unit 19 Addition and Subtraction 4, Many lessons

Number > Sets and Operations

Learning Experiences in Progression Continua (e)	Maths and Me 1st Class
Combines and partitions sets of objects up to at least 20. (U&C)	Unit 2 Addition and Subtraction 1, Many lessons Unit 8 Addition and Subtraction 2, Many lessons Unit 12 Addition and Subtraction 3, Many lessons Unit 19 Addition and Subtraction 4, Many lessons
Explores and uses the zero property when performing calculations. (U&C)	Unit 2 Addition and Subtraction 1, Many lessons Unit 8 Addition and Subtraction 2, Many lessons Unit 12 Addition and Subtraction 3, Many lessons Unit 19 Addition and Subtraction 4, Many lessons
Adds within 100, including 2-digit + 1-digit and 2-digit + 2-digit. (U&C)	Unit 8 Addition and Subtraction 2, Lesson 6, 7 Unit 12 Addition and Subtraction 3, Many lessons Unit 18 Number Sentences, Many lessons
Subtracts numbers within 99, with and without renaming. (U&C)	Unit 2 , Addition and Subtraction 1, Lesson 5, 6 Unit 8 Addition and Subtraction 2, Many lessons Unit 12 Addition and Subtraction 3, Many lessons Unit 18 Number Sentences, Many lessons Unit 19 Addition and Subtraction 4, Many lessons
Fluently recalls addition and subtraction facts [bonds] to at least 10. (C)	Unit 2 Addition and Subtraction 1, Many lessons
Uses symbols +, -, = to convey addition and subtraction facts. (C)	Unit 2 Addition and Subtraction 1, Many lessons Unit 8 Addition and Subtraction 2, Many lessons Unit 12 Addition and Subtraction 3, Many lessons Unit 15 Money, Many lessons Unit 18 Number Sentences, Many lessons Unit 19 Addition and Subtraction 4, Many lessons
Records equivalent and non-equivalent sets 0-20 using <, > and =. (C)	Unit 1 Numbers to 30, Lesson 6 Unit 7 Numbers to 100, Lesson 5
Justifies and explains the commutative property in relation to addition facts (For example – $3+4=4+3$). (R)	Unit 2 Addition and Subtraction 1, Many lessons Unit 8 Addition and Subtraction 2, Many lessons Unit 12 Addition and Subtraction 3, Many lessons
Estimates totals and differences within 99. (R)	Unit 2 Addition and Subtraction 1, Many lessons Unit 8 Addition and Subtraction 2, Many lessons Unit 12 Addition and Subtraction 3, Many lessons Unit 18 Number Sentences, Many lessons Unit 19 Addition and Subtraction 4, Many lessons
Uses number sense to identify unreasonable and reasonable answers. (R)	Unit 2 Addition and Subtraction 1, Many lessons Unit 8 Addition and Subtraction 2, Many lessons Unit 12 , Addition and Subtraction 3, Many lessons Unit 18 Number Sentences, Many lessons Unit 19 Addition and Subtraction 4, Many lessons

Justifies the selection and use of operations [addition and subtraction] in a variety of contexts. (R)	Unit 2 , Addition and Subtraction 1, Many lessons Unit 8 Addition and Subtraction 2, Many lessons Unit 12 Addition and Subtraction 3, Many lessons Unit 18 Number Sentences, Many lessons Unit 19 Addition and Subtraction 4, Many lessons
Selects and shares mental strategies for addition and subtraction facts within 20. (A&PS)	Unit 2 Addition and Subtraction 1, Many lessons Unit 8 Addition and Subtraction 2, Many lessons Unit 12 Addition and Subtraction 3, Many lessons Unit 18 Number Sentences, Many lessons Unit 19 Addition and Subtraction 4, Many lessons
Constructs number sentences and number stories to solve problems involving addition and subtraction within 99. (A&PS)	Unit 2 Addition and Subtraction 1, Many lessons Unit 8 Addition and Subtraction 2, Many lessons Unit 12 Addition and Subtraction 3, Many lessons Unit 18 Number Sentences, Many lessons Unit 19 Addition and Subtraction 4, Many lessons
Solve tasks involving missing addends. (For example: $3 + \quad = 5$ and $3 + 2 + 1 = 4 + \quad$). (A&PS)	Unit 18 Number Sentences, Many lessons

Number > Fractions

Learning Experiences in Progression Continua (e)	Maths and Me 1st Class
Makes explicit connections between the parts that make up one whole. (U&C)	Unit 3 Fractions, Lesson 1
Establishes and identifies half of sets up to at least 20. (U&C)	Unit 3 Fractions, Lesson 5
Uses simple fraction names [halves and quarters] in real life situations. (U&C)	Unit 3 Fractions, Many lessons
Represents and records understanding of quarters using manipulatives, pictorially or by using symbols. (U&C)	Unit 3 Fractions, Lesson 3, 7
Explains unit fractions as one part of a whole. (U&C)	Unit 3 Fractions, Many lessons
Partitions an array of objects, a line segment or a shape into four equal shares. (R)	Unit 3 Fractions Lesson 3, 7
Demonstrates understanding that the greater the number of portions of a whole, the smaller the size of each equal share. (R)	Unit 3 Fractions, Lesson 2
Explores and solves a range of everyday problems involving partitioning. (A&PS)	Unit 3 Fractions, Many lessons

Investigates quarters of different geometric shapes. (A&PS)	Unit 3 Fractions, Lesson 3
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Shape and Space > Spatial Awareness and Location

Learning Experiences in Progression Continua (e)	<i>Maths and Me 1st Class</i>
Describes direction [to the right/left or clockwise/ anticlockwise] and amount of turn [whole, half, quarter and three-quarter turns]. (U&C)	Unit 9 Location and Transformation, Many lessons
Associates the cardinal directions [North, South, East and West] with the appropriate directions in relation to the classroom and school environment. (U&C)	Unit 9 Location and Transformation, Lesson 3
Records movement from one location to another using a simple map. (C)	Unit 9 Location and Transformation, Lesson 3
Creates drawings or models of familiar locations, which attend to the relative size and position of key elements. (C)	Unit 9 Location and Transformation, Lesson 3
Visualises the result of following a sequence of directions on a map or plan. (R)	Unit 9 Location and Transformation, Lesson 3
Deduces and identifies where, in a series of steps, the wrong direction may have been taken. (R)	Unit 9 Location and Transformation, Many lessons
Relates clockwise movements to the clock face. (R)	Unit 9 Location and Transformation, Lesson 2 and many lessons
Recognises that some directions are relative to current position and orientation (For example: right/left; up/down; backward/ forward). (R)	Unit 9 Location and Transformation, Lesson 1
Solves problems and plays games involving simple maps or grids. (A&PS)	Unit 9 Location and Transformation, Lesson 1
Creates a set of simple instructions to direct movement for a given purpose. (A&PS)	Unit 9 Location and Transformation, Lesson 1

Shape and Space > Shape

Learning Experiences in Progression Continua (e)	Maths and Me 1st Class
Compares properties [For example – faces, sides, corners, vertices] of shapes. (U&C)	Unit 6 Shapes, Many lessons
Models 2-D and 3-D shapes using materials or through drawing. (U&C)	Unit 6 Shapes, Many lessons
Analyses and discusses the results of shape sorting activities, using appropriate mathematical language. (C)	Unit 6 Shapes, Many lessons
Describes the key differences and similarities of shapes according to their properties. (C)	Unit 6 Shapes, Many lessons
Compares and contrasts shapes and shape families based on their properties. (R)	Unit 6 Shapes, Many lessons
Sorts an increased range of shapes according to at least two properties. (R)	Unit 6 Shapes, Many lessons
Deconstructs and reconstructs everyday items (For example using containers or packaging). (A&PS)	Unit 6 Shapes, Lesson 8
Combines and partitions 2-D shapes (For example: using tangrams/ pattern blocks). (A&PS)	Unit 6 Shapes, Lesson 5
Presents a wide range of purposes for the potential use of 2-D and 3-D shapes. (A&PS)	Unit 6 Shapes, Many lessons
Sorts 2-D shapes according to whether they contain right angles or not. (A&PS)	Unit 6 Shapes, Lesson 5

Shape and Space > Transformation

Learning Experiences in Progression Continua (e)	<i>Maths and Me 1st Class</i>
Recognises and identifies known shapes when repeated, rotated or reflected. (U&C)	Unit 9 Location and Transformation, Lesson 5
Identifies shapes and combinations of shapes which tessellate in the environment. (U&C)	Unit 9 Location and Transformation, Lesson 6
Understands and uses the terms reflect, rotate and translate to describe relevant shape movements. (C)	Unit 9 Location and Transformation, Lesson 5
Selects appropriate materials/digital tools to draw and label shape movements. (C)	Unit 9 Location and Transformation, Lesson 5
Makes predictions and explains in simple terms why some shapes tessellate (For example: referring to right angles or other familiar properties). (R)	Unit 9 Location and Transformation, Lesson 6
Transforms shapes in various ways in meaningful contexts, including art (For example – printing and paper folding). (A&PS)	Unit 9 Location and Transformation, Many lessons
Identifies lines of symmetry and reflected lines or shapes in images or illustrations. (A&PS)	Unit 9 Location and Transformation, Lesson 4
Explores position and space with a range of polyominoes (Definition of polyominoes: shapes formed by joining one or more equal squares edge to edge). (A&PS)	Unit 9 Location and Transformation, Lesson 5