



NCCA

An Chomhairle Náisiúnta
Curriculum agus Measúnachta
National Council for
Curriculum and Assessment

Senior Cycle Level 2 Learning Programme: Numeracy

Curriculum area and modules

For consultation

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Introduction

The Senior Cycle Level 2 Learning Programme (SCL2LP) consists of a range of curriculum areas, each designed on a modular basis. There are six curriculum areas at the heart of the SCL2LP: Numeracy; Communication and Literacy; My Life, My Finance; Personal Care; Preparation for Life after School; and, Electives.

The curriculum area of Numeracy consists of four modules. It is designed for a minimum of 240 hours of teaching time/class contact time over two years. Each module is designed for approximately 60 hours of teaching time/class contact time.

Module title	Recommended time in hours
Understanding number and money	60
Understanding and managing time	60
Understanding measurement, location and position	60
Understanding numbers, shape and pattern	60

Rationale

Numeracy is the ability to use mathematical understanding, applications and skills to solve problems and meet the demands of day-to-day life. To do this, students need to be able to think and communicate quantitatively; to make sense of data; to have a spatial awareness; to understand patterns and sequences; to reason mathematically, all in a variety of real-world contexts.

The development of students' numeracy contributes to the development of key competencies in senior cycle and vice-versa. When this happens, all learning across senior cycle is supported and the development of important life skills that are essential to student independence are promoted. Students stand to benefit in many ways as they progress in learning pathways, the world of work, and their adult lives.

Continuity and progression

This curriculum area is designed to consolidate and progress students' competency in numeracy from junior cycle, as well as providing students with a sense of achievement and confidence in their learning. Students are given opportunities to demonstrate how learning acquired in these modules can be linked to prior learning, to other modules and subjects. Students will apply their learning across the curriculum in areas such as money management, PE and culinary skills. This helps to reinforce learning and progress students' ability to use mathematical understanding, applications and skills to solve problems and meet the demands of day-to-day life. Students may go on to adult services, further education and/or employment having developed essential skills for understanding and engaging with the world around them.

Teaching and learning

Students engage in learning through real-world examples while using the appropriate and correct numerical language and symbols. Opportunities to use digital technologies and concrete materials in classes can further support student learning. Some students may require the use of assistive technology.

Module: Understanding number and money

Module descriptor

To understand money, students must first understand number. The aim of this module is to enable students to understand the concept of number and money, how to quantify money, to conduct transactions confidently in their daily lives and appreciate the importance of managing money. Students recognise that numbers designate an amount or quantity, including money. Students explore money to realise and recognise that money has a worth and value.

Students learn about	Students should be able to
Numbers Students learn to count, read, express numbers and engage with the many ways number can be used.	<ul style="list-style-type: none">a. Give examples of numbers in the real worldb. Count by gesturing, touching and verbalisingc. Interpret or show numbers in tens and ones, such as: 14 as one ten and four ones, 25 as two tens and five onesd. Identify how many zeros for tens, hundreds and thousandse. Estimate quantities to the nearest value in real world contexts in 10s or 100sf. Use numbers to designate an amount or quantityg. Identify situations where it is appropriate to add or subtract numbers and complete the operationh. Identify, recognise and use symbols for addition and subtraction
Money Students learn to recognise money, appreciate that money has value and conduct transactions. The necessity of examining bills and receipts is explored here with different costs associated with items of different value.	<ul style="list-style-type: none">i. Describe the purpose of moneyj. Recognise and identify paper notes and coink. Sort coins and paper notes into groups to create a total amountl. Recognise that different coins and paper notes have different values in a shopping experiencem. Engage in transactions using moneyn. Engage in the addition and subtraction of moneyo. Calculate the total cost of a list of itemsp. Check for correct change given against receiptq. Round off prices to nearest one, ten, fifty, hundred euror. Estimate a bill or a receipt and estimate change dues. Interpret a bill or a receiptt. Plan and estimate the time and savings required to attend an event or purchase an itemu. Recognise that money is received and spent in different waysv. Use an app to make a payment or transfer money.

Module: Understanding and managing time

Module descriptor

The aim of this module is to enable students to be aware of the passing of time, read the time, understand different times of the day, use the language of time and develop confidence in using various instruments that tell or depict information related to time, such as digital clocks, timetables or stop watches. This in turn supports students to develop an awareness of keeping track of time. Students may use calendars, visuals, schedules, timetables, plans of work, timers and clocks to support them in understanding and managing their time.

Students learn about	Students should be able to
<p>Reading and measuring time</p> <p>Students show awareness of daily patterns while applying basic knowledge of time to everyday activities and events.</p>	<ul style="list-style-type: none">a. Recognise different instruments for telling the timeb. Identify times on an analogue clockc. Read the time from a digital clockd. Examine time in 12 hour and 24 hour formatse. Recognise or identify the difference between a.m. and p.m.f. Use language related to time in different settingsg. Recognise key times of the day on a clockh. Recognise how many seconds in a minute, minutes in an hour, hours in a day, days in a week, weeks in a month, months in a yeari. Interpret and use a timelinej. Interpret and use a timetablek. Demonstrate the ability to calculate and interpret the passage of time.
<p>Time management</p> <p>Students develop strategies to plan and manage time as part of their daily routines. They learn to recognise dates presented in different formats using aids to support planning and time management.</p>	<ul style="list-style-type: none">l. Identify and use time management skills such as: adapt to be ready on time, prepare before a given time, allow time to clear upm. Identify and sequence events in their daily routine using associated language and aidn. Estimate and predict the time needed to undertake an activity or tasko. Undertake an activity within a prescribed time and predict when a given amount of time has passedp. Use a calendar or timetable, in any format, for forward planningq. Use a transport timetable to calculate how long a journey will taker. Plan an entire day's activity using time, including journey timess. Recognise dates in a variety of formats.

Module: Understanding measurement, location and position

Module descriptor

This module focuses on the importance of measurement of length, distance, capacity and weight¹ and position and location in a student's everyday world. Students identify and use terms, language and symbols of measurement for length, distance, weight and location as well making calculations and measurements. In doing so, students develop their spatial awareness. They learn how language, visuals, symbols can be used to describe and show direction.

Students learn about	Students should be able to
<p>Measurement</p> <p>Students identify and use terms, language and symbols of measurement for length, distance, capacity and weight as well as calculating and describing findings with appropriate language.</p>	<ol style="list-style-type: none"> Handle and evaluate everyday objects for physical differences Read, understand and use terms, language and symbols to describe units of length, distance, capacity and weight Interpret metric units of measurement for length, distance, capacity and weight Measure and record the length of an object and the distance between two objects with appropriate support Compare and contrast the length, height, distance, capacity and weight of objects and record results appropriately Identify relationships between the length, height, distance, capacity and weight of two items Compare, contrast and order objects according to length, height and weight Select and use appropriate measuring tools to record and present length, distance, capacity and weight Understand the importance of accuracy in measurement of length, height, distance capacity and weight in real world scenarios.
<p>Position and Location</p> <p>Students use spatial awareness for the purpose of orientation and navigation in school and local community. Students also explore the movements of different parts of the body and ways in which the body can move.</p>	<ol style="list-style-type: none"> Demonstrate an awareness of the position of their body in space Demonstrate direction and movement while using one's body Use appropriate vocabulary and gestures to describe positions such as on top of, at the bottom, inside, underneath, to the right of, to the left of Draw and use a simple map Locate key locations of one's community while using a map and describe and show the location Calculate and record the distance between two places on a map

¹ Mass is the measurement of matter an object contains while weight is the gravitational pull on a object. The term weight has been used here as in schools many students use, and are familiar with, the term weight, as opposed to mass.

- g. Show the location of an object on a simple grid system
- h. Recognise one's location in the community and use simple maps and routes to track and experience movement
- i. Plan, describe and prepare a journey for a day trip or event.

Module: Understanding number, shape and pattern

Module descriptor

The aim of this module is to further students' understanding of how number can be used in real world contexts and scenarios. Students learn about the relationship between numbers and fractions through engagement in everyday activities that involve sharing and connecting. Students learn about identifying number and its applications to shape. Students learn to recognise shapes and express measurement of shapes and objects in terms of fractions.

Students learn about	Students should be able to
<p>Understanding number</p> <p>Students progress from addition and subtraction to engaging with word problems and multiplication. Division is introduced to support the understanding of fractions.</p>	<ul style="list-style-type: none"> a. Identify natural numbers from 0 to 100 b. Identify word problems where it is appropriate to add or subtract numbers c. Use addition or subtraction to check answers to word problems d. Identify, recognise and use symbols for multiplication and division e. Identify situations where one would multiply or divide and engage in the multiplication or division operation in real world contexts f. Construct any sentence using $+$ $-$ \div $=$ x or words g. Recognise and name equal parts of a whole such as halves, quarters, thirds h. Connect halves and quarters to equal sharing and to groups i. Identify, name and express fractions of a quantity such as length, weight and capacity j. Identify, name and express fractions of a quantity such as time, an amount or a shape k. Engage with a fraction chart and identify equal fractions l. Demonstrate the rules of equal sharing in real world scenarios.
<p>Understanding number through shape and pattern</p> <p>Students explore shape in their environment and language associated with shape and pattern.</p>	<ul style="list-style-type: none"> m. Interpret data presented in simple tables, bar charts, pie charts or patterns n. Recognise and name 2D or 3D shapes o. Recognise shapes and patterns in their environment and community p. Use language and symbols to describe shapes and patterns q. Plan and construct a 2D shape with support and guidelines r. Identify, recognise or name angles according to their size.

