

Learning Journey - Mathematics

First Year – September 2018 onwards

Engage with learning outcomes in the Unifying Strand and the Contextual Strands

Learning is supported by formative assessment

Second Year – September 2019 onwards

Engage with learning outcomes in the Unifying Strand and the Contextual Strands

Learning is supported by formative assessment

CBA 1: Mathematical Investigation
SLAR Meeting

Results of CBA 1 reported using Descriptors

Third Year – September 2020 onwards

Engage with learning outcomes in the Unifying Strand and the Contextual Strands

Learning is supported by formative assessment

CBA 2: Statistical Investigation
SLAR Meeting

Results of CBA 2 reported using Descriptors

Assessment Task (10% of Final Examination mark)
Final Examination



Where can I get more information?

- www.curriculumonline.ie – This is the website of the National Council for Curriculum and Assessment (NCCA) where you will find key documents such as the Mathematics specification, Guidelines for the Classroom- Based Assessments and the Assessment Task.
- www.juniorcycle.ie - Here you can find the Assessment Toolkit which is designed to support and assist teachers in their work on Junior Cycle assessment.
- www.jct.ie – This is the website of the JCT schools' support service. JCT's aim is to support schools in their implementation of the new Framework for Junior Cycle through the provision of appropriate high quality continuing professional development for school leaders and teachers, and the provision of effective teaching and learning resources.
- Within your own subject department in your own school. Collaboration with teaching colleagues is promoted through SLAR meetings and professional time allocations.
- JCT has a team of full-time advisors who can be contacted by email at: info@jct.ie

Follow us on Twitter [@JCforTeachers](https://twitter.com/JCforTeachers) and directly with the Mathematics Team using [#jctmaths](https://twitter.com/jctmaths)

An tSraith Shóisearach do Mhúinteoirí

Junior **CYCLE**
for teachers

Junior
Cycle
Information
on
Mathematics



Junior Cycle Mathematics aims to encourage students in their:

- Conceptual understanding – comprehension of mathematical concepts, operations and relations
- Procedural fluency – skill in carrying out procedures, flexibly, accurately, efficiently and appropriately
- Strategic competence – ability to formulate, represent and solve mathematical problems in both familiar and unfamiliar contexts
- Adaptive reasoning – capacity for logical thought, reflection, explanation, justification and communication
- Productive disposition—habitual inclination to see mathematics as sensible, useful, and worthwhile, coupled with a belief in diligence, perseverance and one's own efficacy.

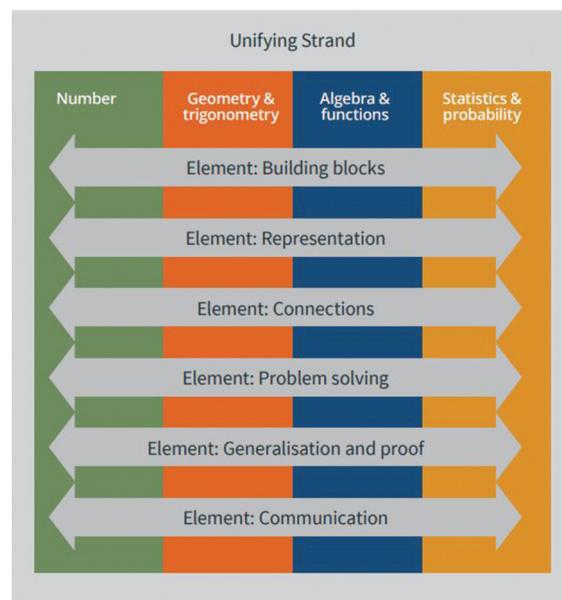
Structure of the Specification

Overview: The specification for junior cycle mathematics focuses on developing students' ability to think logically, strategically, critically, and creatively through the **Unifying Strand** and the four **Contextual Strands: Number; Geometry and Trigonometry; Algebra and Functions; and Statistics and Probability**.

The **Unifying Strand** permeates the Contextual Strands. It is composed of the six elements of the specification. There is no specific content linked to the Unifying Strand; rather, its learning outcomes underpin the rest of the specification. Each learning outcome in this strand is applicable to all activities and content of the other four strands – for example, students should be able to draw on their

mathematical knowledge and skills to solve a problem or to communicate mathematics.

Furthermore, the elements of this strand are interdependent, so that students should develop the different skills associated with each element in unison rather than in isolation.



Learning Outcomes

Learning outcomes describe **the knowledge, understanding, skills and values** students should be able to demonstrate after their three years of Junior Cycle. The Mathematics specification identifies 34 learning outcomes.

Students will experience learning outcomes through rich problem-solving tasks and engaging learning experiences. The specification stresses that the learning outcomes are for three years and therefore the learning outcomes focused on at a point in time will not have been 'completed' but will continue to support students' learning of mathematics up to the end of junior cycle.

Classroom-Based Assessments (CBAs) are completed during normal class time. CBAs aim to create opportunities for students to demonstrate their learning in areas that are difficult to capture in a timed pen and paper exam.

The first CBA takes place in second year when students will engage in a mathematical investigation using the problem-solving cycle. The second CBA takes place in third year when students will engage in a statistical investigation using the statistical enquiry cycle. After each CBA teachers will award a provisional descriptor based on the Features of Quality as set out in the Assessment Guidelines. Teachers will engage in a Subject Learning and Assessment Review (SLAR) meeting to share and discuss samples of their assessments of student work and build a common understanding about the quality of student learning. Provisional descriptors may or may not be amended following the SLAR meeting. Descriptors are communicated to parents using the school's reporting system and are recorded for entry on the Junior Cycle Profile of Achievement (JCPA).

An Assessment Task (AT) takes place in third year. The AT is specified by the NCCA and is related to the learning outcomes on which CBA2 is based. The content and format of the AT may vary from year to year. The AT is sent to the State Examinations Commission (SEC) along with the Final Examination for correction. The AT accounts for 10% of the Final Examination mark.

Results of the CBAs and the SEC result are recorded on the Junior Cycle Profile of Achievement (JCPA).