2024 Year 7/8 Unit Outline
Mathematics

Teacher(s): Opu Hoque, Alex Van De Rhee, Stuart Gilding

Faculty: Inclusive Education - Mathematics **Unit Duration:** Semester 1 & 2

The Australian Curriculum: Mathematics is central to the learning, development and prospects of all young Australians. Mathematics provides students with essential mathematical knowledge, skills, procedures and processes in number, algebra, measurement, space, statistics and probability. It develops the numeracy capabilities that all students need in their personal, work and civic lives, and provides the fundamentals on which mathematical specialties and professional applications of mathematics are built. Mathematics provides opportunities for students to apply their mathematical understanding creatively and efficiently. It enables teachers to help students become self-motivated, confident learners through practice, inquiry, and active participation in relevant and challenging experiences.

'P' Unit Description:
A **'P' unit** indicates your child has been provided with a learning program that does not align exactly with the year level content prescribed in the Australian Curriculum.
Mathematics content is organised under 6 interrelated strands:
Number
Algebra
Measurement
Space
Statistics
Probability

Meeting the needs of diverse learners
Mathematics responds to the diversity of students in the mathematics classroom by connecting familiar experiences and objects in students' lives. Familiar objects and situations add meaning to any mathematics exploration and help all students understand and use what they have learnt. Responding to student diversity also provides opportunities to deepen students' understanding of mathematics and its applications. Strategies that could support the diverse needs of students in mathematics include providing:

- exposure to mathematical tasks to engage the intellect and interest of students
- classroom discourse that promotes the investigation and growth of mathematical ideas
- technology and other tools to access and pursue mathematical investigations and other problem-solving tasks
- experience with mathematical concepts using multisensory methods to stimulate thinking skills
- access to familiar objects to represent and solve mathematical problems; coins, blocks, counters, buttons or other small objects can be used to demonstrate concepts such as greater than, less than and equal to, counting, adding, subtracting, sharing, grouping and fractions
- scaffolding procedures and processes using step-by-step instruction, demonstrating how to solve mathematical problems.

Essential Learnings from the Australian Curriculum:
1. Creates and uses algorithms to identify and explain patterns in the factors and multiples of numbers
2. Connects number names, numerals and quantities, and orders numbers to at least 120
3. Uses their proficiency with addition and multiplication facts to add and subtract, multiply and divide numbers efficiently
4. Creates and interprets grid references
5. Plans and conducts statistical investigations that collect nominal and ordinal categorical and discrete numerical data using digital tools
6. Represents unit fractions and their multiples in different ways
7. Uses scaled instruments and appropriate units to measure length, mass, capacity and temperature

Materials and Equipment Required: Students are expected to arrive at every class with a class book/folder to write notes for that subject, a writing instrument and a Chromebook or similar, appropriate electronic device.

Absences from Class: Students who miss classes due to absence or excursions must negotiate with the class teacher to catch up missed work.

Use of IT in Class: A Google Classroom has been set up for this class. Students will be required to log into this Google Classroom regularly to access course material. Students must bring a personal device (not a smartphone) to all lessons, however, the use of these devices in class will be at the discretion of the teacher.

Homework: All students will be given multiple opportunities to demonstrate growth in proficiency levels across all Essential Learnings during class time. Students may use time at home to complete additional enrichment and extension activities that demonstrate further growth in proficiency levels, or to catch up on missed or unfinished classwork.

Late Work: Extensions may be negotiated with individual teachers before the due date

Plagiarism: Plagiarism is copying or using another's work and claiming it as your own. This includes copying, cutting and pasting text or using ideas directly from a text, the internet or some other source without appropriate referencing. If this happens, work may not be graded and students will be asked to discuss the assessment with the classroom teacher and Executive Teacher for that subject. Parents may be contacted as part of this process.

Assessment Portfolio: This contains evidence of work from the opportunities the students have been provided to demonstrate elements of the achievement standard.

Portfolio Assessment Tasks for this subject will include:	**Week / Date Due**	**Essential Learning**
1. Class Tasks	**Ongoing**	All
2. Real Life Project Based Learning Tasks	**Ongoing**	All
3. End of Topic Summative Assessment	**Ongoing**	All

A-E Reporting Grade Descriptors These are the grades and grade descriptors for reporting at the end of each Semester.

A demonstrating **excellent** achievement of what is expected (Consistently achieving excellent growth in proficiency in each of the Essential Learnings)

B demonstrating a **high** achievement of what is expected (Consistently achieving high growth in proficiency in each of the Essential Learnings)

C demonstrating **satisfactory** achievement of what is expected (Achieving satisfactory growth in proficiency across each of the Essential Learnings)

D demonstrating **partial** achievement of what is expected (Achieving partial growth in proficiency across each of the Essential Learnings)

E demonstrating **limited** achievement of what is expected (Achieving limited growth in proficiency across each of the Essential Learnings)

S **status** is awarded where unavoidable circumstances have prevented assessment. Must be negotiated with the Principal.

Grade Descriptors and the "C" grade

In ACT public schools the Australian Curriculum Achievement Standard is aligned with a 'C' grade. The 'C' grade indicates that your child has demonstrated a satisfactory level of knowledge, understanding and skill in relation to the Achievement Standard.

Appeals

A student must initiate an appeal for any grade with their subject teacher. If a student is dissatisfied with that initial process, they must pursue further appeal through the Faculty Executive Teacher for that subject.

Executive Teacher

Jenelle Reynolds **2/02/2024**

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