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# MATHEMATICS

# Junior Secondary Curriculum

April, 2022

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# SESSION OBJECTIVES

By the end of the session we should be able to identify:

- learning outcome for grade 7 mathematics,
- strands and sub strands in grade 7 mathematics,
- time allocation for mathematics,
- unique features of grade 7 mathematics,
- pedagogy to be used in teaching grade 7 mathematics.

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# KWL

- 1. What *I know* about ……
- 2. What *I want to know* about ……

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# Essence Statement

- Mathematics involves understanding numbers and the numerical operations used to develop strategies for mental mathematical problem-solving skills, estimation and computational fluency. We live in a world of space, shape and structures. ,Mathematics  is also  applied in the economic activities, scientific, social, religious and political worlds. It is therefore imperative that children are taught Mathematics from early years.
- It enhances the learner's competencies in mathematical skills as a foundation for Science, Technology, Engineering and Mathematics (STEM) and other pathways at Senior School. Mathematics also prepares the learner to have sufficient skills and competencies for application in solving problems in real life situations. This is in line with vision 2030 and sessional paper number 1 of 2019.

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# GENERAL LEARNING OUTCOMES

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By the end of the Junior Secondary School, the learner should be able to:

- Demonstrate mastery of number concepts by working out problems in day to day life
- Represent and apply algebraic expressions in different ways
- Apply measurement skills to find solutions to problems in a variety of contexts
- Use money and carry out financial transactions in real life situations
- Generate geometrical shapes and describe spatial relationships in different contexts
- Collect and organize data to inform and solve problems in real life situations
- Develop logical thinking, reasoning, communication and application skills through a mathematical approach to problem solving
- Apply mathematical ideas and concepts to other learning areas or subjects and in real life contexts.
- Develop confidence and interest in mathematics for further training and enjoyment.

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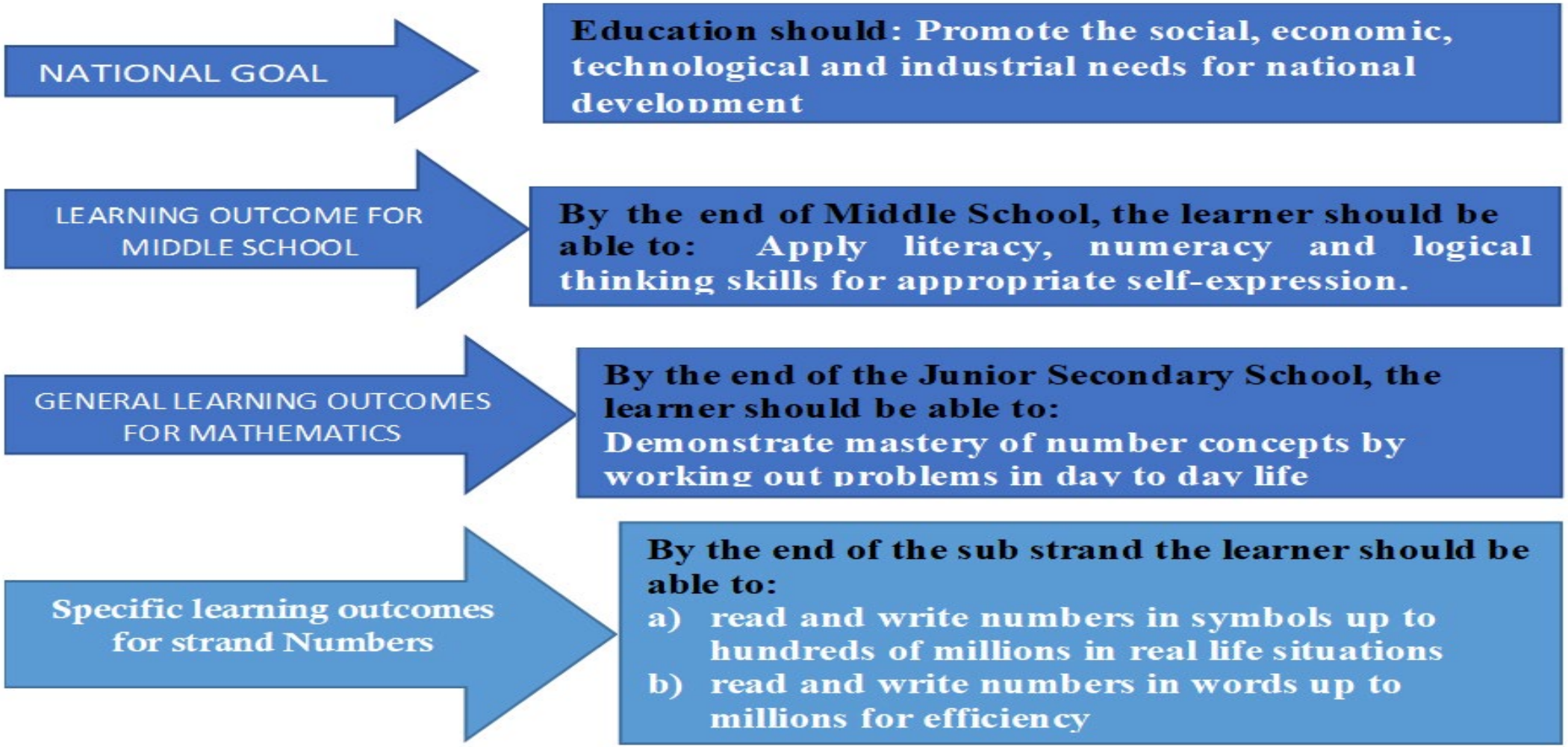
# Example of a relationship between national goals and specific learning outcomes

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# Summary of strands and sub strands

| | Strand | Sub strands |
|---|---|---|
| 1 | **Numbers** | (i) Whole Numbers (ii) Factors (iii) Fractions<br>(iv)Decimals (v) Squares and square roots |
| 2 | **Algebra** | (i) Algebraic Expressions (ii) Linear Equations Inequalities |
| 3 | **Measurement** | (i) Pythagorean Relationship (ii) Length (iii) Area<br>(iv) Volume and Capacity **(v)** Mass (vi) Time, distance and speed<br>(vii) Temperature (viii) Money |
| 4 | **Geometry** | (i)Angles (ii) Geometric constructions |
| 5 | **Data handling and probability** | (i) Data handling |

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# Time allocation

- The subject has been allocated 150 lessons per year
- This translates to 50 lessons per term, 5 lessons per week and a lesson per day.
- Teaching and learning time in a year will be about 30 weeks.
- The lessons have been distributed across the sub strands depending on the content to be covered.

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# Unique features

- More emphasis has been laid to the concept of numbers and measurements
- Linear inequalities is introduced at this stage unlike previous syllabus.
- No probability is handled at grade 7 but will be introduced at subsequent classes.
- More emphasis is laid on practical activities to give relevance to the subject

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# Pedagogy to be Used

- Inquiry based learning will be form the basis for the teaching and learning
- Varied experiences will be employed in line the multi intelligence theory.
- Each concept will be developed using learning activities to help develop the skills and competencies

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## Self-Reflection

1. I learnt…….

2. I need to learn more about…….

3.How I will apply what I have learnt

Suggestions I have for improvement of the session

*Upload your responses on*

*https://forms.office.com/r/7nHVcLMZrt*

*Facilitators to use this link to View Responses:*

*https://tinyurl.com/KWL-Facilitators*

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# THANK YOU FOR YOUR TIME

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