

WOLMER'S PREPARATORY SCHOOL
A PARENTS' GUIDE TO THE CURRICULUM
MATHEMATICS
GRADE 6
TERM 1 & 2

NUMBER:

Set Theory: Define a set (a well-defined collection of things, objects)

Identify:

- **Members of a set**
- **Equivalent} N.B. All equal sets are equivalent but not all equivalent**
- **Equal set sets are equal**
- **Finite Sets**
- **Infinite Sets**
- **Empty or Null Sets**
- **Disjoint Sets**
- **Subsets**
- **Elements in Set (cardinality)**
- **Elements in Union**
- **Elements in Intersection**

Draw and interpret Venn Diagrams to show set relationships including disjoint sets and subsets

ROMAN NUMERALS (Revision)

- **Read and write symbols in Roman Numeration System to represent any numbers using I V X L M**
- **Place Value to millions (Revision)**

EXPONENTS:

Write numbers in exponential form
Express Place Values using exponents

FACTORIZATION:

- **List ALL Prime Factors of given numbers**
- **Write a composite Number as a product of its primes**
- **Identify the H.C.F. of 2 or more numbers**
- **Use multiples and factors correctly**

RECIPROCAL (Revision)

Identify and write the reciprocals of any given number

FRACTIONS (Revision)

Division of fractions:

- **Divide a fraction by another fraction**
- **Divide a mixed number by a fraction**
- **Divide a mixed number by a whole number**
- **Divide a decimal fraction by another decimal fraction**
- **Divide a decimal by a whole or mixed number**
- **Divide a whole number by a fractional number**
- **Divide a decimal fraction by a power of ten**

Solve problems involving fractional number (4 operations)

RATIO:

- **Write ratio using the formal 3:7, 3 to 7 or $1/7$**
- **Write the equivalent ratios for a given ratio**
- **Calculate cost given number of objects and rate of change**
- **Solve problems involving ratio and proportion**

PERCENTAGE: (Revision)

- **Explain meaning of percentage**
- **Use symbols % correctly**
- **Apply the concept of ratio to percentage form**
- **Add or subtract using percentage form**
- **Calculate the given percentage of a number sum of money etc.**
- **Calculate the percentage of a given number eg. what percentage of 25 is 5**
- **Calculate the whole when a percentage is given**

Solve Problems:

- **requiring the conversion of fractions to percentage**
- **requiring the use of percentages**
- **using terms interest, rate of interest , Simple Interest**
- **Compute Simple Interest on a sum of money**

MEASUREMENT:

POLYGONS:

Calculate the Perimeter and area of regular and irregular polygons (revision)

Differentiate between the following units:

Square centimeters
Square metres
Hectare
Square Kilometre

Solve problems involving: a) **Area measures**
b) **Time, distance and speed**

Scale Drawing:

Interpret a simple scale drawing and calculate actual distances using the scale of a road map.

CIRCLE:

Know the relationships between the radius and the diameter of a circle.

ALGEBRA:

**Write mathematical sentences using symbols
Compose word problems and algebraic expressions
Solve Simple Equations and Inequalities**

GEOMETRY:

Classify, draw and name triangles and quadrilaterals

TRIANGLES

Equilateral

Scalene

Isosceles

QUADRILATERALS

Parallelograms

Rhombus

Rectangle

Square

- **Describe properties of plane and solid shapes**
- **Distinguish Similar Congruent and Symmetrical shapes**

LANGUAGE ARTS

Revision

- **Synonyms**
- **Homonyms**
- **Antonyms**
- **Homophones**

Use: root words

Prefixes

Suffixes and grammatical clues to derive meaning of words in content.

Identify and explain figures of speech.

- **Simile**
- **Metaphor**
- **Personification**

Observe the rules of subject and verb agreement

TENSES

- Present
- Past
- Future
- Continuous

Punctuation Signs: { . ? ‘ , ; : “ ” }

Identify and use correctly any one of the eight parts of speech.

Noun	Adjective
Pronoun	Conjunction
Verb	Interjection
Adverb	Preposition

- Identify and compose different types of sentences
- Use capital letters appropriately
- Compose paragraphs given beginning or ending
- Write friendly and business letters (emphasis on min parts and content)
- Complete simple forms eg. receipt, library cards, immigration forms etc.

SCIENCE

Revision of critical objectives from Grades 4 & 5

- Machines
- Forces and Motions
- Matter and Energy
- Rocks and Minerals
- Water
- Air
- Weather and climate
- Sense Organs (skin, nose, tongue)
- Nutrition
- Food/Energy chains

SENSE ORGANS – EYE AND EAR

- Identify parts of the ear – inside and outside
- Explain functions of parts of eye and ear
- Tell ways to protect and care for the eyes and ears
- Suggest ways of managing environmental hazards eg. noise pollution
- Tell how humans adapt to limited sight and limited hearing
- Give examples of the use of technology to enhance vision and hearing
- Compare eyes and ears of humans and other animals
- Investigate and describe the behaviour of light and sound in different materials
- Use correctly terms such as reflection, refraction, shadow, echo, eclipse, spectrum medium and transmission, luminous/nonluminous, illuminated

SYSTEMS – PLANTS

- **Identify parts of root, shoot, flower**
- **Explain function of Root system, shoot system, flower**
- **Identify reproductive structures of the plant**
- **Explain function of reproductive structures**

SYSTEMS – HUMANS

- **Describe, demonstrate and explain the process of movement and locomotion**
- **How bones and muscles work together in movement and locomotion**
- **Skeletal systems**
- **Identify parts of the Excretory System and Reproductive System**
- **State functions of parts of the Excretory and Excretory Organs (skin, kidney, lungs, intestine)**

SOCIAL STUDIES (1 -2)

Revision – Jamaica (Grade 4)
Our Caribbean Neighbours (Gd. 5)

PLANET EARTH AND ITS RESOURCES

- **What is the Solar System**

Define and use concepts:

Planets	
Spherical	universe
Moon	axis
Star	lunar
Orbit	ellipse
Revolution	
Comets	
Meteor	
Galaxy	

- **Identify, name and list planets in order of distance from the sun**
- **Group planets in a variety of ways (eg. inner, outer)**
- **Describe the movements of the planets around the sun**
- **Explain the difference in length of year of each planet**
- **Construct a model of the Solar System**
- **Describe structure of planet earth**
- **Classify landmasses and water bodies**
- **Locate and identify Continents, Oceans, Longest Rivers, Highest peaks, Mountain Ranges**
- **Explain how rotation and revolution of Earth affect daily life – seasons**
- **Relate movements of Earth to earthquakes, Volcanic eruptions**
- **Explain how climate and natural resources affect the way people live.**
- **Identify weather instruments and their uses**

- **Define and identify elements of weather**
- **Compare life of people , different climatic zones (Japan, Siberia, Ghana, New Zealand)**
- **Define and correctly terms:**
 - **deforestation**
 - **pollution**
 - **ozone**
 - **habitat**
 - **Greenhouse effect**
 - **Global warming**
 - **Acid rain**