

## Welcome to our Grade 6 Mathematics Second Semester!

We will be learning mathematics using many resources including a variety of materials, manipulatives, technology and a textbook. We will also use problem solving, inquiry, cooperative learning, performance tasks, and real-world applications to enhance your child's learning experience.

## ISM School-Wide Student Goals

At International School Manila, we expect students to work to the best of their ability to be:

*Effective communicators:* who can interact through a range of modes of communication and for a variety of purposes.

*Knowledgeable and Skilled Learners:* who continually acquire useful knowledge and skills while developing understanding(s) across a broad and balanced range of contexts.

*Self-directed and Balanced Individuals:* who strive to achieve their personal best and understand the importance of intellectual, physical and emotional balance.

*Inquiring and Reflective Problem Solvers:* who can think critically and creatively to make informed decisions and then take appropriate action.

*Responsible, Caring and Ethical Contributors:* who can empathize and be tolerant of differences and are committed to make a positive impact on their communities and environment.

## Course Requirements

1. Students are expected to have the following supplies with them every day:

- Textbook
- Planner (supplied by the school)
- Math notebook, 5mm grid (spiral 100 leaves, 8.5in x 11in )
- Lined notebook (spiral 60 leaves, 8.5 x 11)
- Clear file folder (blue)
- Pencil, eraser and ruler with centimetre markings
- Calculator

Most days, these items will be kept in the classroom or their locker. Periodically, students will also need to bring coloured pencils, compass and protractor to class.

2. Students will be expected to participate in class activities, discussions, group work, and performance tasks.

3. It is the student's responsibility to find out what work was missed during absences. Check with the teacher or a classmate.

## Textbook

- McDougal Littell Course 1

## Assessment and Reporting

At ISM, we believe that grades should reflect the level of understanding and achievement towards determined standards and that student behaviors (effort, participation, adherence to class rules, etc.) should be included separately. Therefore, the Math grade will consist of two separate grading categories. These include *Achievement* and *Learning Habits* and both will be reported on the semester report.

Within the *Achievement* and *Learning Habits* categories, grades will be reported on in subcategories to provide further information to parents and students regarding strengths and areas for growth. Within the *Achievement* category, students will be assessed on *Knowledge and Understanding* (What do you know?), *Transfer of Learning* (How can you apply what you know?), and *Communication of Learning* (How can you communicate what you know?). Within the *Learning Habits* category, students will be assessed on *Organization*, *Engagement* and *Collaboration*.

Grades will be reported on a scale of 7 – 1 with 7 and 6 representing *exemplary* achievement and learning habits, 5 and 4 representing *proficient* achievement and learning habits, 3 and 2 representing *developing* achievement and learning habits and a 1 representing *emerging* achievement and learning habits. All rubrics will reflect this scale, and grade boundaries for quiz and test type assessments will be determined by teacher teams on a case by case basis. Only summative assessments will be included in the *Achievement* grade. *Learning Habits* will be both self and teacher assessed at least three times per semester.

The type of assessment, work time spent on task, and its level of challenge to a student determine the weighting of an assignment. Students will demonstrate their *Knowledge and Understanding*, *Transfer of Learning* and *Communication of Learning* through tests and quizzes, projects, performance tasks, and class work.

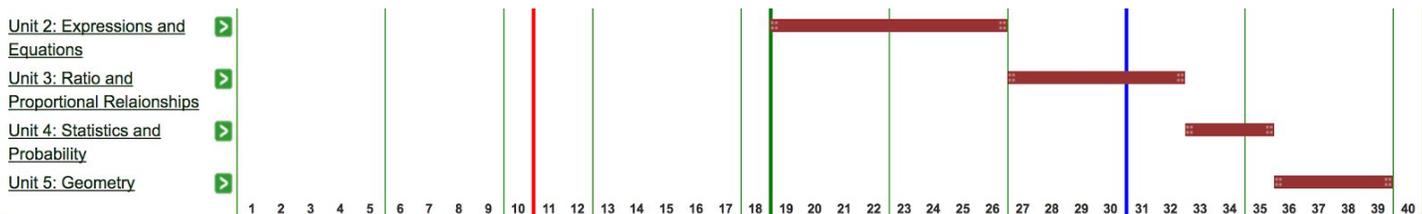
## Course Description of Semester II

**Unit 2: Expressions and Equations** - In this unit, students understand the use of variables in mathematical expressions. They write expressions and equations that correspond to given situations, evaluate expressions, and use expressions and formulas to solve problems. Students understand that expressions in different forms can be equivalent, and they use the properties of operations to rewrite expressions in equivalent forms. Students know that the solutions of an equation are the values of the variables that make the equation true. Students use properties of operations and the idea of maintaining the equality of both sides of an equation to solve simple one-step equations. Students construct and analyze tables, such as tables of quantities that are in equivalent ratios, and they use equations (such as  $3x = y$ ) to describe relationships between quantities.

**Unit 3: Ratios and Proportional Relationships** - In this unit, students use reasoning about multiplication and division to solve ratio and rate problems about quantities. By viewing equivalent ratios and rates as deriving from, and extending, pairs of rows (or columns) in the multiplication table, and by analyzing simple drawings that indicate the relative size of quantities, students connect their understanding of multiplication and division with ratios and rates. Thus students expand the scope of problems for which they can use multiplication and division to solve problems, and they connect ratios and fractions. Students solve a wide variety of problems involving ratios and rates.

**Unit 4: Statistics and Probability** - In Grade 6, students build on the knowledge and experiences in data analysis developed in earlier grades. They develop a deeper understanding of variability and more precise descriptions of data distributions, using numerical measures of center and spread, and terms such as cluster, peak, gap, symmetry, skew, and outlier. They begin to use histograms and box plots to represent and analyze data distributions. As in earlier grades, students view statistical reasoning as a four-step investigative process: formulate questions that can be answered with data, design and use a plan to collect relevant data, analyze the data with appropriate methods and interpret results and draw valid conclusions from the data that relate to the questions posed.

**Unit 5: Geometry** - Students in Grade 6 build on their work with area in elementary school by reasoning about relationships among shapes to determine area, surface area, and volume. They find areas of right triangles, other triangles, and special quadrilaterals by decomposing these shapes, rearranging or removing pieces, and relating the shapes to rectangles. Using these methods, students discuss, develop, and justify formulas for areas of triangles and parallelograms. Students find areas of polygons and surface area they can determine. They reason about right rectangular prisms with fractional side lengths to extend formulas for the volume of a right rectangular prism to fractional side lengths.



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### **Assessment Plan**

First semester's assessment plan is as follows. In Math, *Knowledge and Understanding* is worth 40% of the final grade. *Transfer of learning* is worth 40% of the final grade, and *Communication of Learning* is worth 20% of the final grade. Weighting of individual assignments is indicated through the number of X's in each column. Please note there may be adjustments to the Assessment Plan as the school year progresses.

<b>Semester II Summative Assessments</b>	<b>Approximate Dates</b>	<b>K&amp;U (40%)</b>	<b>ToL (40%)</b>	<b>CoL (20%)</b>
Unit 2: Expressions and Equations	February	XX	XX	X
Unit 3: Ratios and Proportional Relationships	April	XX	XX	X
Unit 4: Statistics and Probability	May	X	X	X
Unit 5: Geometry	June	X	X	X
Learning Habits	Throughout the Semester	Org	Eng	Col
		X	X	X

### **Homework Policy**

Every effort is made for students to complete assignments in class, but on occasion students may be required to complete their work at home. As stated in the MS Student Planner, approximately 40 minutes per week of homework for each core subject is recommended. This may include short tasks that can be completed in one evening or longer project-based tasks that are to be completed over a number of days. Some homework is intended as a review or preparation for an upcoming assessment. All assignments must be completed on time, and failure to do so will be reflected in the *Organization* component of the *Learning Habits* grade on the report card. Extenuating circumstances resulting in the last submission of work **must** be communicated to the teacher, preferably before the assignment is due.

### **Guides to Success in Grade 6 Mathematics**

- Come to class on time, with all supplies, prepared to actively participate.
- Review and study for tests and quizzes.
- **Participate** in class activities, discussions and group work.
- Use time wisely and **seek help when necessary**.

### **Tutorial**

Students are encouraged to attend tutorial if they have any questions or need help with their math lessons. They can use tutorial time for one-on-one tutoring, extra practice, or for answering questions. Students are always welcome and we *look forward to helping them succeed!* Tutorial classes occur during regular school hours on Monday and Thursday from 2:30 – 3:00.

### **Communication**

Communication is a vital link between student, teacher and parent to ensure productive learning. Parents should feel free to contact us should they have any questions or concerns regarding their child's progress in school. Parents have access to

Powerschool and can check for regular grade updates. To share concerns or to arrange a time to meet, please email us at [hamaguchi@ismanila.org](mailto:hamaguchi@ismanila.org) for **Mr. Hamaguchi** and [mcKnightd@ismanila.org](mailto:mcKnightd@ismanila.org) for **Mr. McKnight**. We are looking forward to a wonderful year. Please don't hesitate to contact us with any questions.