DEPARTMENT OF EDUCATION
Region III
DIVISION OF CITY SCHOOLS
City of San Jose del Monte

September 15, 2015

Division Memorandum
No. 172 s. 2015

2015 DIVISION SECONDARY MATHEMATICS OLYMPICS

To: Education Program Supervisors
Public Schools District Supervisors
Public Secondary School Heads

1. This Division will conduct the **2015 Division Secondary Mathematics Olympics** with the theme **"*Mathematics Drives Careers*"** on October 1, 2015 (Thursday), 7:30 A.M. at San Martin National High School.

2. The activity aims to:
   a. promote interest and appreciation in Mathematics among secondary students;
   b. encourage students to strive for excellence in Mathematics;
   c. provide students opportunities to leadership and cooperative undertaking;
   d. select the Best Strategic Intervention Materials (SIMs) in Mathematics; and
   e. foster camaraderie among math contestants.

3. The categories for Mathematics Olympics are as follows:
   a. Math Quiz
   b. Math Puzzles
   c. Math Trail
   d. Math Equalizers
   e. Sudoku Challenge
   f. Math Birit
   g. Strategic Intervention Materials (SIMs) in Math

4. Each school shall send the following :
   a. Three (3) students per grade level;
   b. Two (2) additional students (Math Birit & Sudoku Challenge) from any grade level; and
   c. At most three (3) entries for Strategic Intervention Materials (SIMs) Contest.

5. Inclosure No. 1 contains the contest guidelines.

6. Inclosure No. 2 presents the criteria in the evaluation of Instructional Materials.

7. Inclosure No. 3 describes the theme.

8. School Heads are encouraged to give their usual support to ensure the success of this activity.

9. Immediate and wide dissemination of this Memorandum is desired.

GERMELINA H. PASCUAL, CESO V
Schools Division Superintendent

CONTEST GUIDELINES

A. Math Quiz

1. Mathematics Quiz in all grade levels has an individual and group category.
2. The quiz shall consist of 40 items per grade level and the time allotment is 90 minutes or 1 ½ hour.
3. Only the final answer shall be written on the test question. Extra sheets of papers shall be provided by the proctor if needed.
4. No calculator is allowed during the test proper. All mobile phones of contestants shall be turned off while the test is going on.
5. Only the top 5 students in the individual category and top 3 groups in the group category shall be declared winners.
6. The decision of the judges is final and unappealable.

B. Math Puzzles, Math Trail, & Math Equalizers

1. Math Puzzles, Math Trail, and Math Equalizers in all grade/year levels are group contest.
2. The composition of each group per year level consists of students from different schools. Students will draw a number to identify their group. Each group will work as a team.
3. Team with the highest points in Math Puzzles, Math Trail, and Math Equalizer per year grade/level will be declared winners.
4. Each school shall bring Equalizer and mathematical instruments/devices for Math Trail.

C. Sudoku Challenge

1. Sudoku Challenge will use the 3 levels only – Easy, Medium, and Hard. The Evil level will not be used in this contest.
2. This is an individual contest. All Math contestants regardless of grade level can join the Sudoku Challenge.
3. The first set of Sudoku will be the level Hard. If no body beats the time in the first set then the level Medium will be given. Again, If no one wins in second set, then the Easy level will be given.
4. Participants who can beat the specified time will be declared winners.

D. Math Birit

1. Math Birit is an individual contest.
2. Each school has one entry for this category (any grade level).
3. The criteria for judging are as follows:

Criteria for Judging	Percentage (%)
Voice Quality (Birit Voice)	**35%**
Content/Message (Relevance in Math)	**25%**
Timing	**20%**
Stage Presence	**10%**
Time Limit (3 to 5 minutes)	**10%**
Total	**100%**

Criteria in the Evaluation of Instructional Materials

CONTENT

1. Aligns with curriculum and standards, and is current, valid and reliable, with real-world examples .
2. Age appropriate and is designed to meet the needs of individual learners from various skills levels.
3. In-depth and enhances conceptual understanding and engages higher order of thinking skills.
4. Free from bias.
5. Promotes manipulation of data and digital information, and encourages personal responsibility for learning.

EQUITY AND ACCESSIBILITY

1. Materials are durable, easily stored, transported and are universally accessible
2. Materials are easily updated and are adaptable and customizable to match the resources of the school.
3. Materials work properly without purchase of additional components
4. Materials can be used by all students without extensive supervision or special assistance
5. Materials meet the requirements and accepted technical standards.

ASSESSMENT

1. There is an observable performance that is relevant to real world experience and that can be used to measure student engagement
2. Assessment methods are appropriate and suited to the learning objectives
3. Assessment is suited to goals and student ability and easily assesses what has been learned.
4. The materials keep an on-going record of students' progress and allows the teacher full access to individual student monitoring of activities, assignments, assessments, and grades.
5. There are pre and post assessments, and positive, meaningful feedback and prescriptive guides for remediation are provided.

ORGANIZATION AND PRESENTATION

1. Content and directions are clear and understandable and distinguish between important and trivial information.
2. Materials are easy to navigate through.
3. Requirements for the instructors are clearly stated.
4. There are provisions for the practice of old and new skills, and for students to enter and exit materials easily.
5. Materials are interactive and provide high quality sensory experiences for all users.

INSTRUCTIONAL DESIGN AND SUPPORT

1. The delivery method is used appropriately and successfully engages the student.
2. Technical procedures, such as installation and setup are easy and error free.
3. Technical specifications and limitations are adequately described and noted.
4. Adequate professional development is provided, with reasonable time and numerous opportunities.
5. Assistance is readily available at any point in the website and many supplemental resources are available.

Description of the Theme: Mathematics Drives Careers

Careers in mathematics have received critical attention from the press in the recent years, and the job title "mathematician" has been on top of the several lists of best professions. Nevertheless, information about what one can do with a background in mathematics is not widely known, despite the fact that in today's economy much depends on mathematics, statistics, and computing. Indeed, existing companies have been founded on mathematical concepts, such as Google with its search engine.

Where do people trained in mathematics/ statistics work?

Every student, no matter what the level of his academic background, eventually asks the question, what can I do with my degree? A common answer for students with degrees in the mathematical sciences is "teach mathematics" at some level. For students with a degree at the doctoral level the common answer is "find a position at a university and continue to conduct mathematical research." Both of these options can certainly lead to satisfying careers. In addition, there are many other career choices ---one that utilizes training in the mathematical and statistical sciences---ones that have impact on solutions to real world problems.

People trained in the mathematical sciences work across the spectrum of businesses and industries. What makes many of the jobs they fill less obvious is that often they do not have "mathematics" or "mathematician" or "statistician" in the title, even though training in the mathematical sciences is essential for the position.

Today, the mathematical sciences continue to provide a pathway to many career areas. We see increasing demand for people trained in data science – an interdisciplinary field that involves mathematics, statistics, and computer science. And as much more of our world has become quantified and digitized, mathematics has found its way into many new areas. Even motion picture production, with the increase in animation and digital special effects, now relies on mathematics and those specifically trained in the field.