

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



September 15, 2015

Division Memorandum No. 17/ s. 2015

2015 DIVISION ELEMENTARY MATHEMATICS OLYMPICS

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

- 1. This Division will conduct the **2015 Division Elementary Mathematics Olympics** with the theme "*Mathematics Drives Careers*" on September 29, 2015 (Tuesday), 7:30 A.M. at Francisco Homes Elementary School.
- 2. The activity aims to:
 - a. promote interest and appreciation in Mathematics among elementary pupils;
 - b. encourage pupils to strive for excellence in Mathematics;
 - c. provide pupils 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. Sudoku Challenge
 - d. Strategic Intervention Materials (SIMs) in Math
- Each school shall send the following :
 - a. Two (2) pupils per grade level;
 - b. One (1) additional pupil (Sudoku Challenge) from grade 5 or grade 6; and
 - c. At most two (2) entries for Strategic Intervention Materials (SIMs) Contest.
- Inclosure No. 1 contains the contest guidelines.
- 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 is an individual contest.

2. The quiz shall consist of the following items per grade level with corresponding time allotment:

Grade Level	Number of Items	Time Allotment
Grade 1-Grade 2	25 items	75 minutes
Grade 3-Grade 4	30 items	75 minutes
Grade 5-Grade 6	40 items	90 minutes

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. Top three (3) scorers per District will be awarded as District Winners if they meet the "hurdle rate" which is 40% of the total number of items.

6. Top five (5) scorers among the contestants will be declared Division Winners.

7. The decision of the judges is final and unappealable.

B. Math Puzzles

- 1. Math Puzzles in Grade 3 and Grade 4 levels are group contest.
- 2. Each team will work as one to solve the given puzzles.
- 3. Team with the highest points in Math Puzzles will be declared winner

C. Sudoku Challenge

- 1. Sudoku Challenge will use the 2 levels only Easy and Medium. The Hard and Evil level will not be used in this contest.
- 2. This is an individual contest. All Math contestants from Grade 5 and Grade 6 can join the Sudoku Challenge.
- 3. The first set of Sudoku will be the level Medium. If no body beats the time in the first set then the level Easy will be given.
- 4. Participants who can beat the specified time will be declared winners.

Criteria in the Evaluation of Instructional Materials

CONTENT

- 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
- 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.
- 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.