



Republic of the Philippines  
**Department of Education**  
 SCHOOLS DIVISION OF MARINDUQUE

Office of the Schools Division Superintendent

October 1, 2025

**DIVISION MEMORANDUM**

No. **103**, s. 2025

**DIVISION ONLINE ORIENTATION ON NUMBERACE COMPETITION**

**TO:** Assistant Schools Division Superintendent  
 Chief Education Supervisors, CID/OIC-CES, SGOD  
 Public Schools District Supervisors  
 Public & Private Elementary & Integrated School Heads  
 All Others Concerned

1. In preparation for the Division Festival of Talents for School Year 2025-2026, this Office, through the Curriculum Implementation Division, shall conduct an Online Orientation on NumbeRace Competition as one of the new event categories under STEMazing on October 22, 2025 at 9 a.m. via MS Team link **bit.ly/ORIENTATION-NUMBERACE-COMPETITION**.
2. Participants in this activity are the Public Schools District Supervisors, District Elementary Mathematics Coordinators and Consultants, Elementary School Heads, one (1) KS2 Mathematics teacher for small schools and two (2) KS2 Mathematics teachers for medium and big schools in both public and private schools in the division.
3. Attached are the Implementing Guidelines on NumbeRace, Scoring Guide, Presentation Rubric, Sample Challenges, and Sample Scoring Sheet for advance information and guidance.
4. Further, teacher-participants are reminded to adhere to non-disruption of classes policy as stipulated in DepEd Order No. 9, s. 2005 titled "Instituting Measures to Increase Time-on-Task and Ensuring Compliance Therewith".
5. Immediate and wide dissemination of the contents of this Memorandum is desired.

**LYNN G. MENDOZA, EdD**  
 OIC, Schools Division Superintendent

Reference: None  
 Encl: As stated  
 To be indicated in the Perpetual Index  
 Under the following subjects

CONTESTS                      LEARNERS  
 LEARNING AREA, MATHEMATICS



Implementing Guidelines for STEMazing  
2025 Festival of Talents  
**NumbeRace**

The categories, components, number of learner-participants and teacher-coaches, and time allotment for STEMazing per school are provided as follows:

Category	Mode of Delivery	No. of Learner-Participant	No. of Teacher-Coach	Time Allotment
NumbeRace	in-person	2	1	2.5 hours
<b>Total</b>		<b>2</b>	<b>1</b>	

**NumbeRace**

<b>COMPONENT AREA</b>	MATHEMATICS AND PROBLEM SOLVING
<b>KEY STAGE</b>	Key Stage 2: Grades 4-6
<b>EVENT TITLE</b>	NumbeRace
<b>NO. OF PARTICIPANT/S</b>	2 learners per team (choose participants from KS 2; only one learner per grade level is allowed, e.g. the team is composed of 1 Grade 4 and 1 Grade 6 learner)
<b>TIME ALLOTMENT</b>	2.5 hours total Navigation round: 1.25 hours Final round: 1.25 hours
<b>PERFORMANCE STANDARD</b>	The learners: <ul style="list-style-type: none"> <li>• demonstrate proficiency in applying mathematical concepts to solve authentic real-world challenges;</li> <li>• exhibit analytical and strategic thinking skills in approaching complex mathematical problems;</li> <li>• manifest effective communication and collaborative skills in mathematical discourse and team problem solving; and</li> <li>• show mastery in integrating concepts across various mathematical domains (Number &amp; Number Sense, Measurement and Geometry, Data and Probability) in practical applications</li> </ul>
<b>21<sup>ST</sup> CENTURY SKILL/S</b>	Critical Thinking and Problem Solving Collaboration and Communication Digital Literacy
<b>CREATIVE INDUSTRIES DOMAIN</b>	<ul style="list-style-type: none"> <li>▪ Digital Interactive Media Domain (through educational gaming and interactive mathematical applications)</li> <li>▪ Creative Services Domain (through creative research and development, cultural and recreational services)</li> <li>▪ Design Domain (through the creation of solutions that address mathematical and spatial problems)</li> <li>▪ Audiovisual Media Domain (through educational content</li> </ul>

	development)	
<b>DESCRIPTION</b>	NumbeRace is a two-phase mathematical adventure competition designed for Grades 4-6 learners that combines physical exploration, mathematical investigation, and problem-solving in real-world contexts.	
<b>TECHNICAL SPECIFICATIONS</b>		
<b>A. MATERIALS, TOOLS, AND EQUIPMENT</b>	<p>To be provided by the participants:</p> <ul style="list-style-type: none"> <li>● Basic CASIO calculator (e.g., mx12b)</li> <li>● Measuring tools (ruler, tape measure, protractor, etc.)</li> <li>● Writing materials</li> <li>● Digital device for QR codes (<b>if allowed by organizers</b>)</li> <li>● Safety equipment (as specified in orientation)</li> </ul>	<p>To be provided by the event organizers:</p> <ul style="list-style-type: none"> <li>● Team identification badges</li> <li>● Station markers and QR code printouts</li> <li>● Scoring sheets and evaluation forms</li> <li>● Investigation tools and materials</li> <li>● Data collection forms</li> <li>● Emergency and first aid equipment</li> <li>● Digital tracking system</li> <li>● Maps and route guides</li> </ul>
<b>B. VENUE</b>	<p>School grounds or designated competition area with:</p> <ul style="list-style-type: none"> <li>● Multiple checkpoint stations</li> <li>● Investigation areas</li> <li>● Presentation space</li> <li>● Rest areas and first aid stations</li> <li>● Emergency assembly points</li> </ul>	
<b>CRITERIA FOR JUDGING</b>	Accuracy (60%) and speed (40%)	
<b>EVENT RULES AND MECHANICS</b>		
<p><b>A. Pre-Competition Requirements</b></p> <p>1. Teams must complete registration one (1) week before the event Registration Process (1 Week Before)</p> <ul style="list-style-type: none"> <li>● <u>Submission of School Team Registration Forms including the following:</u> <ul style="list-style-type: none"> <li>○ School number and name</li> <li>○ Name of School Head</li> <li>○ Name of Coach</li> </ul> </li> <li>● Team Composition Details: <ul style="list-style-type: none"> <li>○ Official team name representing the school</li> <li>○ Grade levels of members (one each from Grades 4-6)</li> <li>○ Certified true copy of school records proving grade levels</li> <li>○ School team coach/adviser information with designation</li> </ul> </li> </ul> <p>2. Mandatory orientation session before the competition proper 1-hour mandatory session covering:</p> <ul style="list-style-type: none"> <li>● Competition mechanics</li> <li>● Safety protocols</li> <li>● Equipment usage</li> </ul>		

- Scoring system
- Emergency procedures
- Hands-on practice activities
- Q&A portion
- Equipment familiarization

#### 4. Equipment and Documentation Verification

- Pre-Event Documentation Checklist:

- Team Registration Form
- Individual Participant Forms
- Medical Certificates
- Consent Forms
- Equipment Checklist

- Equipment Inspection:

- Basic calculator
- Measuring tools
- Writing materials
- Digital devices (if allowed)
- Safety equipment

#### B. Competition Structure

- **Navigation Round**

*(This may be done in batches if the space is limited.)*

- Individuals and teams navigate through multiple stations
- Solve challenges at each station:
  - Station 1: Individual Challenge
  - Station 2: Individual Challenge
  - Stations 3 to 5: Team Challenges
- For stations 1 and 2, representatives may ask to be replaced by the other team member when they cannot answer the individual challenge assigned to them. There will be an additional 30-second penalty for the replacement.

- A **Checkpoint Marshall** at each station will validate the team's answer. If the answer is incorrect, the teams are allowed to retry until the maximum number of attempts is consumed.

- The maximum time allotted to complete the challenges in the navigation round is 75 minutes.

- **Final Round**

*(This may be done in batches if the space is limited.)*

- Teams will go through team challenges from Stations 6 to 10. There will be no individual challenges in the final round.
- The maximum time allotted to complete the challenges in the final round is 75 minutes.

Challenges include:

- Application of mathematical concepts and analysis of real-world data,
- Developing mathematical solutions and solving problems, and
- Presenting solutions and findings.

***At the end of the competition, the group with the highest cumulative score will be declared the overall champion. In case of a tie, a tie-breaker question will be given.***

**C. Safety and Compliance**

General Safety Protocols

- Teams must stay within designated safe zones
- Mandatory use of specified safety equipment
- Access to water stations and rest areas
- Compliance with station-specific safety guidelines

Supervision and Support

- Station Masters present at each checkpoint
- Medical team on standby throughout the competition
- Safety Officer overseeing all activities
- Technical support team for digital components

Emergency Response Procedures

- Medical emergency response protocol
- Weather emergency contingency plans
- Technical failure backup systems
- Lost team search and recovery procedure

Incident Management

- Immediate reporting to Safety Officer
- Documentation through incident report forms
- Implementation of appropriate response measures
- Post-incident analysis and documentation

**D. Scoring and Awards**

Scoring System Implementation

- Digital real-time scoring through station verification
- Individual judge scoring followed by panel consensus
- Final verification by Head Judge and Technical Committee

Award Categories

• **Main Awards:**

- Overall Champion (Trophy + Certificates)
- First Runner-up (Medals + Certificates)
- Second Runner-up (Medals + Certificates)

• **Special Awards:**

- Best Navigation Team
- Outstanding Investigation
- Excellence in Calculation
- Innovation Award
- Team Spirit Award

• **Recognition:**

- Certificates of participation for all competing students
- Certificates of appreciation for all coaches

**E. Documentation Requirements**

1. Team registration forms
2. Medical and consent forms
3. Competition worksheets
4. Final presentation materials

**SCORING GUIDE:**  
**Stations 1 to 9**

<b>ACCURACY (60%)</b>		<b>SPEED (40%)</b>	
Obtained the correct answer in 1 trial	60	Submitted the correct answer in the shortest time	40
Obtained the correct answer in 2 trials	57	<i>The score will depend on the rank of the participants/team based on the time of submission of correct answers.</i>	38
Obtained the correct answer in 3 trials	54		36
Obtained the correct answer in 4 trials	51		34
Obtained the correct answer in 5 trials	48		32
Obtained the correct answer in 6 trials	45		30
Obtained the correct answer in 7 trials	42		28
Obtained the correct answer in 8 trials	39		26
Obtained the correct answer in 9 trials	36		24
Obtained the correct answer in 10 trials	33		22
Unable to obtain the correct answer in 10 trials			0

**PRESENTATION RUBRIC: Station 10**

	<b>Excellent (9-10 points)</b>	<b>Good (6-8 points)</b>	<b>Fair (3-5 points)</b>	<b>Needs Improvement (0-2 points)</b>	<b>Score</b>
<b>Delivery (30%)</b>	Holds the attention of the entire audience with the use of direct eye contact, seldom looking at notes	Consistent use of direct eye contact with the audience, but still pauses to check notes	Displays minimal eye contact with the audience, while reading mostly from the notes	Holds no eye contact with audience, as the entire report is read from notes	
<b>Content/ Organization (40%)</b>	Demonstrates full knowledge by presenting details with explanations and elaboration  Provides clear purpose and statements, examples and facts, and/or statistics or evidences	At ease with presenting details without much elaboration  Provides a somewhat clear purpose and statements, examples and facts, and/or statistics or evidences	Uncomfortable with presenting information and is able to present details but without elaboration  Provides weak purpose and statements, examples and facts, and/or statistics or evidences	Does not have a grasp of details during the presentation, cannot elaborate the information presented  Provides weak or no support of details in their answers; gives insufficient supporting facts or evidences	
<b>Expression and Audience Connection (30%)</b>	Demonstrates strong enthusiasm about topic during entire presentation  Raises audience understanding and awareness of the situation	Shows some enthusiastic feelings about topic  Raises audience understanding and awareness of most points	Shows little or mixed feelings about the topic being presented  Raises audience understanding and knowledge of some points	Shows no interest in the topic presented  Fails to provide understanding of knowledge of topic	
<b>TOTAL SCORE and FEEDBACK</b>					

**SAMPLE CHALLENGES:**

Challenge	Instructions
Sudoku <b>(Individual)</b>	
Tangram <b>(Individual)</b>	
Step by Step <b>(Team)</b>	<ol style="list-style-type: none"> <li>1. The player will measure the perimeter of a space using his/her foot.</li> <li>2. The number of steps will be multiplied by the measure of his/her foot in cm.</li> <li>3. The player who got the correct answer in the shortest time will get the highest score.</li> </ol>
Angle Hunt <b>(Team)</b>	<p>Given ten (10) minutes, the team will look for objects in the surroundings that demonstrate right, acute, and obtuse angles.</p>
Number Ninja <b>(Team)</b>	<ol style="list-style-type: none"> <li>1. Number sentences are written on the steps.</li> <li>2. The players must step on the number sentence with the least to greatest answer.</li> <li>3. If there is any number touched out of sequence, a penalty time is added. (+10 secs).</li> <li>4. The players may assist their teammates when moving from one step to the next step.</li> <li>5. The timer begins as soon as the first person steps in and stops when the last person crosses over the last step.</li> </ol>
Digit Cards <b>(Team)</b>	<ol style="list-style-type: none"> <li>1. Players will be given a random of 4-digit number.</li> <li>2. They will answer a set the questions <b>(minimum of 5 questions)</b> using the numbers provided.</li> </ol> <p><b>For example:</b>            Given number: 1234            Write the largest number: _____  <b>Possible answer: 4,321</b>            Write the largest prime number: _____  <b>Possible answer: 1,231</b></p>
Treasure Hunt <b>(Team)</b>	<p>The players will find hidden treasures that contain clues to solve the puzzle.</p>

<p>Survival Challenge <b>(Team)</b></p>	<ol style="list-style-type: none"> <li>1. Each team will be given Php 1000 and will be shown a list of grocery items.</li> <li>2. If there is a calamity, which of the following items will they purchase for them to survive <b>for two weeks.</b></li> </ol>
<p>Presentation <b>(Team)</b></p>	<ol style="list-style-type: none"> <li>1. The team will be given 3-5 minutes to present and justify their answer in the survival challenge.</li> <li>2. The judges will evaluate the presentation based on the reasoning and completeness of the details provided during the presentation.</li> </ol>

**SAMPLE SCORESHEET**

TEAM	ACCURACY	SPEED	TOTAL
<b>Station 1</b>			
<b>Example:</b> <b>A</b>	<i>completed the challenge in three trials</i> 54	<i>1st to complete the challenge</i> 40	<b>94</b>
<b>B</b>	<i>completed the challenge in one trial</i> 60	<i>3rd to complete the challenge</i> 36	<b>96</b>
<b>C</b>	<i>completed the challenge in nine trials</i> 36	<i>6th to complete the challenge</i> 30	<b>66</b>
<b>1</b>			
<b>2</b>			
<b>3</b>			
<b>4</b>			
<b>5</b>			
<b>6</b>			
<b>7</b>			
<b>8</b>			
<b>9</b>			
<b>10</b>			
<b>11</b>			
<b>12</b>			