Orange Township Public Schools

Office of Mathematics and Science

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ASSESSMENT & DATA IN MATHEMTICS BULLETIN

ECR's

Reasoning and Modeling, as assessed on the NJSLA in Grades 3 – High School, engages students in problem solving experiences that call for the judging of reasonableness of numerical results, developing number sense and an understanding or numerical operations, communicating mathematical ideas and procedures, exploring the meaning and role of mathematical concepts, and applying mathematics in contexts outside of mathematics. As a district we've employed initiatives that emphasize problems solving such as the 5 Practices for Orchestrating Productive Mathematics Discussion, implementation of the TQE process, and the implementation of daily use of Mathematics Anchor Tasks and Content Routines. This school year, we are implementing Monthly Extended Constructed Response items (ECRs) that provide rich problem solving experiences in timed NJSLA-like settings. The first ECR will be released in October within all grades, with subsequent releases each month thereafter. These items are to be rubric scored, recorded in Genesis, and can be used in support of measuring SGO growth.

Benchmark Scoring

Weighting protocols are still in place for all Standards Mastery benchmark assessments in Mathematics in grades 3 - 8. The conversion table follows:

Interim Score	Converted Score
0 - 24	50
25 - 35	55
36 - 44	60
45 - 50	65
51 - 56	70
57 - 64	75
65 - 73	80
74 - 79	85
80 - 85	90
86 - 89	95
90 - 100	100

For High School benchmarks, the weight is 1.1 * the raw score (Guidance has been provided by the department.)

Extended Constructed Response Item (ECR) and **Performance Task Scoring**

Rubric Score	5-Point Scale	4-Point Scale	3-Point Scale
0	55	55	55
1	59	69	69
2	69	79	89
3	79	89	100
4	89	100	
5	100		

Preparing for the Data Reviews

In the area of Mathematics, the data reviews should reflect 3 data points

- **Attainment Data:**

  To measure academic performance based upon criterion for standards of what every student is expected to know (*NJSLA Data, Quarterly Benchmark Data from the Trackers (K-2) iReady Standards Mastery Assessment (3-8), and/or Edulastic (9-12*))

- **Baseline and/or Growth Data:**

  To measure academic growth based upon value adding factors including program, teacher, school, etc. (*NWEA Diagnostic Data, iReady Diagnostic Data*)

- **Reasoning & Modeling**

  Rubric scored data used to determine how students are meeting standards for college and career readiness specific to their ability to solve problems, reason abstractly and quantitatively, construct viable arguments, and/or model with mathematics (Summary of performance on the Monthly ECRs)

Should you have any questions, please contact the Department of Mathematics and Science.