NJSLA Grade 5 Mathematics

Lesson 2: Pre-Assessment of Type I Questions

Rationale

- In order to ensure that students perform at their personal best, students need to understand the format of the items associated with each domain and develop efficient strategies for responding to each item. This pre-assessment provides instructors with a view of students' content knowledge and ability to apply this knowledge in the test setting.

- This is a CLASSROOM assessment with the purpose of gathering information to gauge student strengths and weaknesses based on content, perception and analyzing processes. The goal of this lesson is to inform instruction and is not considered a District Benchmark Assessment.

Goal

- To identify items that present the greatest challenge for each student and the class as a whole

Objective

- Students will complete the Pre-Assessment of Type I Questions that represents the 5 CCSS domains and various styles of questions.

Materials

- Pre-Assessment of Type I Questions - Attached

- ***Pre-Assessment Student Profile***

- Class Folder Labeled: Lesson 2: Pre-Assessment of Type I Questions. (At the end of the lesson, place the class papers in the folder. If students used graph paper, please have students attach the graph paper to their pre-assessments.)

Procedures for the Pre-assessment of Type I Questions

- Be sure all students have a pencil, graph paper, and a pre-assessment. Highlighters can be provided. **NO Calculator**

- Place tests face-down on desks.

- Remind the students of test-taking posture and etiquette, such as sitting up straight and using EVERY available second.

- Provide a reasonable amount of time in which most students can complete the task.
- If a student is spending too much time on any given item, encourage him or her to complete the items with which he or she is confident and then return to the items that are less familiar later.
- At the conclusion, ask for student feedback and reactions to taking the pre-assessment.

Teacher & Teachers' Aide Observations During the Pre-Assessment

Be sure to circulate the classroom and monitor students while they are completing the pre-assessment.

- Which students are using their time wisely?
- Which students seem alert with good posture and energy?
- Which students are skipping items and need to be reminded to complete the skipped item?
- Which students skipped an item but completed the item at a later time?
- Which students are spending too much time on one particular item?
- Which students seem to be making small mathematical errors that could easily be fixed with a mini-lesson?

Assessment or Check for Understanding

- Use the answer key to score the students responses. Look for patterns of errors.

Follow-Up

- In order to initiate students' understanding of any type of mathematics item, whenever students are presented with an item, ask them to identify what kind of question it represents represents (Operations and Algebraic Thinking, Number and Operations in Base Ten, Number and Operations – Fractions, Measurement and Data, or Geometry).
- In order to initiate students' understanding of any type of mathematics item, whenever students are presented with an item, ask them to identify what style of question it represents (selected response items-select all that apply, category sort, menu choices, and constructed-response items-create the answer).

Pre-Assessment of Type I Questions Student Profile

Goal

- As the data is entered on the chart, teachers and students will be able to view student and class strengths and weaknesses. The Pre-assessment Student Profile provides a visual "snapshot" of students' initial performance as it pertains to strategies that foster and support student success with taking the NJSLA.

Procedures

- List the students for each class (A pre-assessment student profile is necessary for each class.)
- For each student, a plus (+) sign or negative (−) sign is placed in each column.

Pre-Assessment Student Profile Key Terms Briefly Explained:

Time: Which students lose time determining answers?

Approach: Which student relies on one approach too frequently? Did the student use mathematical models, methods and strategies from the Common Core State Standards?

Skill: Look for patterns of errors; do not simply comment, "Made a mistake." Note specific behaviors such as calculation errors.

Content: Which students just don't know a particular content area? (e.g. absolute value, prime numbers, translations)

Skipping: Which students are skipping tough items and returning to them later?

Plugging: When possible, are students taking the answer choices and plugging them into the question?

Comments: Are there any special or specific thoughts for a student? e.g. student frustration, low energy, lack of focus, completed assessment with ease, confident   Note: Comments aren't necessary for every student.

NJSLA Grade 5 Mathematics

Pre-Assessment of Type I Questions Student Profile

Students	Time	Approach	Skill	Content	Skipping	Plugging	Comments

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Lesson 2: Implement the Pre-Assessment of Type I Questions

NO Calculator

5.OA.1

1. Select the sequence of steps needed to simplify the expression.

$$(33 \div 11) + 82 - 4(7 - 4(7 - -5) \, 5)$$

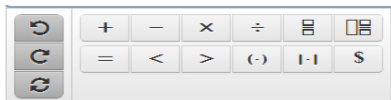| 162 | 3 + 82 - 8 | 3 + 82 − 4(2) | ᴦᴦ |

| 81(2) | 85 - 8 | 85 − 4(2) | 22 + 82 − 4(2) |

5.NBT.3.a

2. Select the expression equivalent to four and twenty-seven thousandths.

☐ A. 3 + 1.27

☐ B. 300,000 + 127,000

☐ C. 4 + 0.027

☐ D. 4 + 0.270

5.NF.1

3. Sam and Steven shared a pizza for lunch. Sam ate $\dfrac{1}{4}$ of the pizza and Steven ate $\dfrac{1}{6}$ of the pizza. How much of the pizza was left over? Enter **only** the fraction.

4. Which solution is true. $54 \times 32 = ?$

x	30	2
50	1500	100
4	1200	8

☐   2700   +   108   = 2,808

☐   54

    x 32

     108

  + 162

    270

☐   54   54

   x 30   x 2

   1500   100

  + 120   + 8

  1,620   +   108 = 1,728

5. Michael's mom bought 3 pizzas for Michael and his 4 friends at share at his birthday party. If each person had the same amount, what amount of a pizza did each person have? Choose the **two** correct fractions.

☐ A. $\dfrac{3}{4}$ ☐ B. $\dfrac{6}{10}$ ☐ C. $\dfrac{6}{8}$ ☐ D. $\dfrac{3}{5}$ ☐ E. $\dfrac{2}{5}$

	▼
rhombus	
rectangle	
trapezoid	

6. A square is a

7. Weston needs 18 feet of wood to build a border for his vegetable garden. The wood comes in various lengths. Which of the following **three** selections describe enough wood to complete the border?

☐ A. 8 pieces at 27 inches each.

☐ B. 12 pieces at 1 ½ feet each.

☐ C. 15 pieces at 15 inches each.

☐ D. 18 pieces at 1 foot each.

☐ E. 6 pieces at 2 ½ feet each.

8. The rule for Pattern Y is Add 3, and the rule for Pattern Z is Add 6.

	A	**B**	**C**	**D**	**E**	**F**	**G**	**H**	**I**
Pattern Y	0	3							
Pattern Z	0	6							

Extend both patterns. Which statements are true about the relationship between the two numbers in column H? Choose the **two** correct selections.

☐ A. The number from Pattern Y is 6 less than the number from pattern Z.

☐ B. The number from Pattern Y is twice as great as the number from pattern Z.

☐ C. The number from Pattern Y is half the number from pattern Z.

☐ D. The number from Pattern Y is 3 more than the number from pattern Z.

☐ E. The number from Pattern Z is twice as great as the number from pattern Y.

9. Select the description for each part of the coordinate plane. Write the selection in the box.
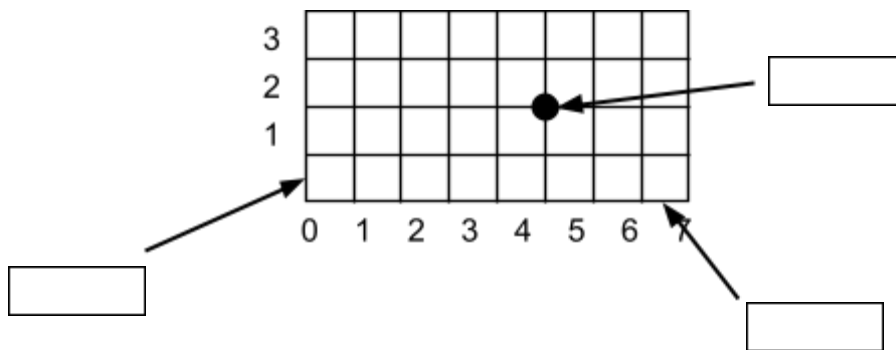
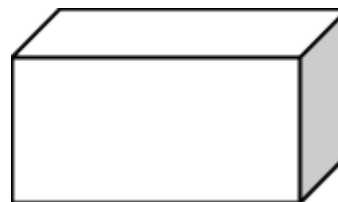| (5, 2) | x-axis | (1, 6) | y-axis | (2, 5) | (6, 1) |

10. Brynn has 24 cubic feet of sand to fill up her sandbox. What are the possible dimensions of the box? Use the formula $V = l \times w \times h$.

Choice	length	width	height
☐	2	3	4
☐	2	2	6
☐	1	3	9
☐	4	2	6
☐	8	3	1

11. Mary is making curtains for her bedroom. She needs 2 feet 4 inches of fabric per window. She has 4 windows. How many yards of fabric will she need to purchase to make curtains for all of her windows? Choose the **two** correct selections.

☐ A. She needs more than 6 yards.

☐ B. She needs less than 4 yards.

☐ C. She needs about 7 yards.

☐ D. She needs about 9 yards.

☐ E. She needs more than 3 yards.

12. The graph below shows the number of people who went to the library this week.

Library Visitors
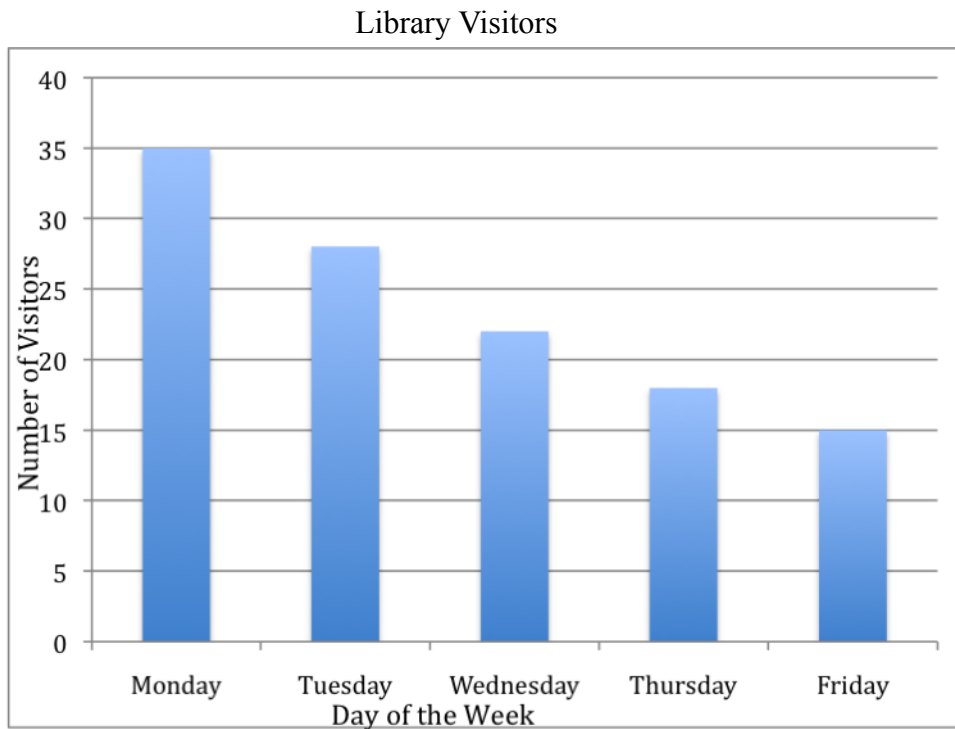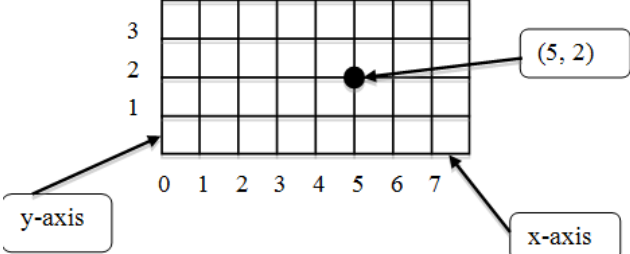

Which of the **three** following statements are true about this graph?

☐ A. More people went to the library on Wednesday than on Tuesday.

☐ B. Monday's attendance was more than twice the attendance on Friday.

☐ C. The greatest attendance at the library was on Monday.

☐ D. Library attendance decreased from Monday to Friday.

☐ E. Library attendance increased from Wednesday to Friday.

Lesson 2: Implement Pre-Assessment of Type I Questions

Item	Answer
1	$(33 \div 11) + 82 - 4(7-5)$ $3 + 82 - 4(2)$ $3 + 82 - 8$ $85 - 8$ 77
2	C
3	$\dfrac{7}{12}$ or equivalent
4	$\begin{array}{r} 54 \\ \times\ \ 30 \\ \hline 1500 \\ +\ 120 \\ \hline 1{,}620 \end{array}$ $+$ $\begin{array}{r} 54 \\ \times\ 2 \\ \hline 100 \\ +\ \ 8 \\ \hline 108 \end{array}$ $= 1{,}728$
5	B D
6	rectangle
7	A B D
8	C E
9	
10	A B E
11	B E
12	B C D