

District Numeracy Assessment Procedure

Administration Procedure Print problems and student response sheets from the website. See website for important copying specifications.

Assessment could be administered over multiple sessions or multiple days

PART I. SETTING THE STAGE

Teacher says prompts shown in *italics* below.

A. Activation Activity: "Think-Pair-Share"

- 1. Teacher Prompt: These problems have been created so that there is no right answer
- 2. Teacher Prompt: Read problem 1. What do you notice about the problem?
- 3. Students discuss in pairs. Then they share some ideas with the whole class.
- 4. Teacher Prompt: What do you wonder about the problem?
- 5. Students discuss in pairs. Then they share some ideas with the whole class.
- 6. Repeat for steps 1-4 for problem 2.

B. Activation Activity: "Collaborative Problem Solving" (minimum 15 minutes)

- 1. Students select a problem
- 2. Teacher forms random groups of 3 based on problems selected by each student. A group of 2 students is acceptable.
- 3. Students collaboratively solve the problem in a way that can be shared with other students. This could include whiteboards, chart paper, chalkboards, windows, smartboards, etc.
- Students' ideas are shared.

PART II. BEGINNING THE ASSESSMENT

Students now work independently. Teacher hands out student response sheets; one sheet per student. Students turn in their response sheet to the problem they selected and follow along. Teacher says prompts in *italics*.

A. Overall Instructions

- 1. Teacher Prompt: Turn the response sheet over to the problem you chose. You only need to pick one question.
- 2. Teacher Prompt: Remember these problems have been created so that **there is no right answer**, so it is important that you explain your thinking. Please write your answers in the boxes provided.

B. Purpose

1. Teacher Prompt: The purpose of this numeracy task is to learn more about your thinking when you solve problems. I want to see what you can already do, and what you still need to learn. Do your very best work.

C. Interpret

- 1. Teacher Prompt: The Interpret section is about understanding the problem. What is this problem asking you to do? What information is important? What assumptions are you making?
- 2. Clarify expectations: This section is asking you to think about the problem and make some decisions about the information you were given.

D. Apply

- 1. Teacher Prompt: The Apply section is about finding a way to solve the problem. What are your steps or plan?
- 2. Clarify expectations: This section is asking you to explain how you are going to solve the problem.

E. Solve

- 1. Teacher Prompt: The Solve section is about showing your thinking of the math you did to solve the problem.
- 2. Clarify expectations: In this section you can use words, pictures, numbers or equations to show the thinking you used to solve the problem.

F. Analyze

- 1. Teacher Prompt: *The Analyze section is about justifying your solution. How is your solution stronger or weaker than other possible solutions?*
- 2. Clarify expectations: This section is asking you to think about the decisions you made in your solution and explain why you made those choices.

G. Share your solution in words

1. Teacher Prompt: The Share Your Solution section is where you will write your answer in sentence form.

PART III. COMPLETING THE ASSESSMENT

A. Students work

1. Students work through the response sheet individually. Note: Students may highlight or write on it.

B. Conclude

1. Collect student response sheets.

PART IV. ASSESS AND RECORD

- 1. Read responses to questions.
- 2. Consider the rubric and exemplars to determine achievement for each question.
- 3. Indicate achievement for each section by checking corresponding boxes on rubric for the student.
- 4. Indicate overall achievement by checking the corresponding box on the rubric. Note: Collaborative marking with a colleague may be helpful.
- 5. Record scores in EdPlan.

PART V. FOLLOWING-UP

A. Whole Class/Grade Analysis

- 1. Look for patterns of strengths and difficulties across and within the numeracy cycle.
- 2. Discuss class strengths and difficulties in general with students.
- 3. Use this information to plan for future instruction.

B. Individual Analysis

- 1. Make a note of students who are emerging (1) or developing (2) in their performance, so you can look for opportunities to provide additional support.
- 2. You may wish to return assessments to students. Have students review and set/record personal goals.