Name Date

Authentic Assessment

Chapter

1

1. Alec, a transfer student, just moved to Green Middle School and missed the teaching of absolute value and operations with integers. You agree to help him and you plan to work together at the library after school.
2. \_\_\_/ 4 points
3. \_\_\_/ 4 points
4. \_\_\_/ 4 points
5. \_\_\_/ 4 points
6. \_\_\_/ 14 points

**Total: \_\_\_\_\_/30 points**

**Complete the following on a piece of notebook paper or a Google Doc. Be sure to label each section. Make sure that ALL work is neat and complete.**

a. Choose two sample problems to do with Alec to introduce him to the concept of absolute value of integers. Include solutions with the sample problems. Write a description of how you could use a number line to solve the sample absolute value problems (in sentence form).

b. Choose four sample problems to do with Alec to introduce him to the concepts of addition, subtraction, multiplication, and division with integers. Provide solutions with each sample problem.

c. Write a description (in sentence form) of how you could use counters to solve each of the sample integer operation problems in part (b). Make sure you have a description for each operation.

d. Write a description of how you could use a number line to solve each of the sample integer operation problems in part (b). Make sure you have a description for each operation.

e. Create a graphic organizer to help Alec remember everything you will teach him. Include the definition of the absolute value of an integer, and the sample problems used in part (a). Also, include the rules used for the addition, subtraction, multiplication, and division of integers and the sample problems used in part (b).

- The graphic organizer should be neat and easy to use for any student.

- The graphic organizer must be presented on Google Docs, Slides, or on plain white, copy paper.

Name Date

Alternative Assessment Rubric

Chapter

1

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Score | Conceptual Understanding | Mathematical Skills | Work Habits | Quality of Work |
| 4 | Shows complete understanding of:   * using a number line as a conceptual model for representing integers * operations with integers * absolute value of integers | Explains all integer operation concepts and rules correctly.  Operational models represent given operations exactly. | Answers all parts of each problem.  Work is neat and well organized. | All parts are answered in complete sentences. |
| 3 | Shows nearly complete understanding of:   * using a number line as a conceptual model for representing integers * operations with integers * absolute value of integers | Explains most integer operation concepts and rules correctly.  Operational models represent given operations adequately. | Answers all parts of each problem.  Work is neat and easy  to follow. |  |
| 2 | Shows some understanding of:   * using a number line as a conceptual model for representing integers * operations with integers * absolute value of integers | Explains some integer operation concepts and rules correctly.  Operational models do not represent given operations adequately. | Answers all parts of each problem.  Work is sloppy and hard  to follow. |  |
| 1 | Shows little understanding of:   * using a number line as a conceptual model for representing integers * operations with integers * absolute value of integers | Does not explain integer operation concepts and rules correctly.  Operational models do not represent given operations. | Does not answer all parts  of each problem.  Work is sloppy and hard  to follow. |  |