

## Grade 7 Math

### *Integers*

*Guidelines:*

4. You may complete as many of the activities as you like in the given time period.
5. You must complete activities totalling at least 100 points.
6. You may be as creative as you like within the guidelines listed below.

Plan to Do	Activity to Complete:	Point Value
	<p>A, B, C, D, and E correspond to points on a thermometer. Use these clues to plot the points:</p> <ul style="list-style-type: none"> <li>▪ B and D are negative</li> <li>▪ D is warmer than C</li> <li>▪ B is warmer than C</li> <li>▪ E and D are the same distance from zero</li> <li>▪ E is colder than A</li> </ul> <p>Compose your own thermometer problem and include your answer.</p>	20
	Design a poster that explains the rules for adding and subtracting integers. Be sure to include examples of each.	20
	Identify three real-life situations where integers could be used to convey information. Create one problem using each situation. Include your answers.	30
	Create a 4x4 Magic Square where each row, column, and diagonal adds to -7.	25
	Design four different learning centre activities that your classmates could use to practice adding and subtracting integers. Remember to include answers where appropriate.	25
	Create an entertaining presentation of your choice that will help students remember how to add and subtract integers.	20
	Use the newspaper or internet news sites to locate at least three stories that can be used to create a total of six integer word problems. Create a bulletin board display that shows the stories, word problems, and solutions. Include both positive and negative integers and show both addition and subtraction problems.	25
	Create a collage for the number 42 with at least 25 different integer calculations, including addition and subtraction, that have 42 as their answer. Be creative with your integer equations!	25
	Write a narrative story that uses addition and subtraction of integers as part of the plot.	30
	Write a procedure that explains how to use a number line to add integers and counters to subtract integers. Include diagrams and examples.	30
	Free Choice: Must be outlined on a proposal form and approved before beginning work.	10 To 30

I plan to do \_\_\_\_\_ activities totalling \_\_\_\_\_ points.

\_\_\_\_\_  
Student's Signature

\_\_\_\_\_  
Teacher's Initials

NUMBER SENSE AND NUMERATION	Level 1	Level 2	Level 3	Level 4
<p><b>Knowledge and Understanding</b></p> <p><i>The student:</i></p> <ul style="list-style-type: none"> <li>-identifies and compares integers found in real-life contexts</li> <li>-represents and orders integers using a variety of tools</li> <li>-adds and subtracts integers, using a variety of tools</li> </ul>	<p>Limited T1 <input type="checkbox"/> T2 <input type="checkbox"/> T3 <input type="checkbox"/></p> <p>Limited T1 <input type="checkbox"/> T2 <input type="checkbox"/> T3 <input type="checkbox"/></p> <p>Limited T1 <input type="checkbox"/> T2 <input type="checkbox"/> T3 <input type="checkbox"/></p>	<p>Some T1 <input type="checkbox"/> T2 <input type="checkbox"/> T3 <input type="checkbox"/></p> <p>Some T1 <input type="checkbox"/> T2 <input type="checkbox"/> T3 <input type="checkbox"/></p> <p>Some T1 <input type="checkbox"/> T2 <input type="checkbox"/> T3 <input type="checkbox"/></p>	<p>Considerable T1 <input type="checkbox"/> T2 <input type="checkbox"/> T3 <input type="checkbox"/></p> <p>Considerable T1 <input type="checkbox"/> T2 <input type="checkbox"/> T3 <input type="checkbox"/></p> <p>Considerable T1 <input type="checkbox"/> T2 <input type="checkbox"/> T3 <input type="checkbox"/></p>	<p>High Degree T1 <input type="checkbox"/> T2 <input type="checkbox"/> T3 <input type="checkbox"/></p> <p>High Degree T1 <input type="checkbox"/> T2 <input type="checkbox"/> T3 <input type="checkbox"/></p> <p>High Degree T1 <input type="checkbox"/> T2 <input type="checkbox"/> T3 <input type="checkbox"/></p>
<p><b>Problem Solving/Thinking</b></p> <p><i>The student:</i></p> <ul style="list-style-type: none"> <li>-creates and carries out a plan to solve problems involving integers</li> </ul>	<p>Limited T1 <input type="checkbox"/> T2 <input type="checkbox"/> T3 <input type="checkbox"/></p>	<p>Some T1 <input type="checkbox"/> T2 <input type="checkbox"/> T3 <input type="checkbox"/></p>	<p>Considerable T1 <input type="checkbox"/> T2 <input type="checkbox"/> T3 <input type="checkbox"/></p>	<p>High Degree T1 <input type="checkbox"/> T2 <input type="checkbox"/> T3 <input type="checkbox"/></p>
<p><b>Communication</b></p> <p><i>The student:</i></p> <ul style="list-style-type: none"> <li>-explains mathematical thinking clearly using a variety of modes</li> <li>-uses appropriate vocabulary and terminology in oral, visual, and/or written forms</li> </ul>	<p>Limited T1 <input type="checkbox"/> T2 <input type="checkbox"/> T3 <input type="checkbox"/></p> <p>Limited T1 <input type="checkbox"/> T2 <input type="checkbox"/> T3 <input type="checkbox"/></p>	<p>Some T1 <input type="checkbox"/> T2 <input type="checkbox"/> T3 <input type="checkbox"/></p> <p>Some T1 <input type="checkbox"/> T2 <input type="checkbox"/> T3 <input type="checkbox"/></p>	<p>Considerable T1 <input type="checkbox"/> T2 <input type="checkbox"/> T3 <input type="checkbox"/></p> <p>Considerable T1 <input type="checkbox"/> T2 <input type="checkbox"/> T3 <input type="checkbox"/></p>	<p>High Degree T1 <input type="checkbox"/> T2 <input type="checkbox"/> T3 <input type="checkbox"/></p> <p>High Degree T1 <input type="checkbox"/> T2 <input type="checkbox"/> T3 <input type="checkbox"/></p>
<p><b>Application of Learning</b></p> <p><i>The student:</i></p> <ul style="list-style-type: none"> <li>-makes connections between math concepts and the real world</li> </ul>	<p>Limited T1 <input type="checkbox"/> T2 <input type="checkbox"/> T3 <input type="checkbox"/></p>	<p>Some T1 <input type="checkbox"/> T2 <input type="checkbox"/> T3 <input type="checkbox"/></p>	<p>Considerable T1 <input type="checkbox"/> T2 <input type="checkbox"/> T3 <input type="checkbox"/></p>	<p>High Degree T1 <input type="checkbox"/> T2 <input type="checkbox"/> T3 <input type="checkbox"/></p>

Task 1: \_\_\_\_\_

Task 2: \_\_\_\_\_

Task 3: \_\_\_\_\_