

### *Introduction of Opposites and Absolute Value*

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**Big picture:** All rational numbers can be shown on a number line. Each rational number has an **opposite**. Opposite numbers are the same distance from zero in opposite directions. The **absolute value** of a number is the distance the number is from zero on the number line. Some expressions involve absolute value and are not to be confused with opposites.

**Objective:** The learner will be able to identify the opposite and absolute value of a number.

**Language Objectives:**

- ✓ The student will pre-read the text.
- ✓ The student will identify key vocabulary.
- ✓ The student will complete the Frayer model.
- ✓ The student will listen to other read aloud their models.
- ✓ The student will be able to express the differences and comparison to their class.

**Standards:** Standard 1: Numbers and Operation

- ✓ 7.M.1.1.3 Locate the position of integers on a number line.
- ✓ 7.M.1.1.1 Compare magnitudes and relative magnitudes of rational numbers, including integers, fraction and decimals.

**Material:** Frayer Model  
Pencils  
Text book

**Lesson Sequence:**

- 1) Pre-read Chapter 1, section 3.
- 2) Introduce the Frayer Model
- 3) Guided practice: **Opposite** model how to find definition, characteristics, give example and non-example.
- 4) With a partner complete the model for **Absolute Value**.
- 5) Compare and contrast the two vocabulary words.
- 6) Give examples of both terms.

**Assessment:**

- ✓ Ticket out: define either opposite or absolute value
- ✓ Verbal check: State the difference between opposite and absolute value.

# LIMSST Project Literacy Lesson Reflection Form

Date of Lesson: 9/ 24/07

**Lesson Title/Topic Areas:** Frayer Model

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## Literacy Strategies Used:

(Please discuss what literacy strategies you embedded in this lesson. What were your goals in using these strategies?)

The Frayer Model is a graphic organizer that allows me to develop vocabulary meaning. The model provides a better understanding through visualizing examples and non-examples. The student is able to explore, define and summarize thus enhancing comprehension. Finally, this lesson allowed the student to reiterate the concepts by comparing a contrasting them to one another. This lesson's goal was to make a connection to vocabulary as a result gaining a deeper knowledge. If they know it, they will use it.

## Student Response to the Lesson:

(Was the strategy effective? Were students able to read/write as needed in this lesson? What attitudes were displayed? How did specific Students and/or the class do? How did the literacy strategy aid in developing student understanding of the topic? Cite specific evidence from the samples of student work)

Yes, this strategy is effective and has become an essential part of my daily curriculum. With little guided practice and modeling the students (all abilities) were able to complete the Frayer Model. After completion it provides a visual understanding and reference source for the student.

The students value any lesson that provides opportunities for them to visually be successful. If you notice the work samples enclosed, the work is uniform and put into their own words (example: visa versa). This model allows the student the freedom to express it, thus providing ownership.

If you look at the low student and the high student's work sample, you'll notice how similar they are. I think this is because the Frayer Model is easy to understand and illustrates with examples and non-examples.

## Lesson Reflection:

(What worked well with this lesson? What challenges did you encounter in this lesson? Would you change certain aspects of the lesson or the questions that you asked? How does this influence future lesson planning?)

This is a great tool! I have shared the Frayer model with my colleagues and they also have seen success in vocabulary/concept development. I have developed a notebook for the Frayer Model and Cornell note taking. The Frayer model is a great reference tool when they come to a concept/vocabulary that they don't understanding during the lecture. This tool has become a vital part of my daily curriculum and concept building.

## Relationship to Previous Instruction:

(Have you taught this lesson/topic prior to the LIMSST project? If so, how did your teaching of this lesson differ from what you taught before? How did students' reactions to this lesson differ?)

I have never taught this lesson prior to the LIMSST project. Before the model, I used a variety of different strategies to develop vocabulary. None of the strategies were as simple and easily understood by the students as the Frayer Model.