Round Down the Trail

A Lesson in Rounding Whole Numbers

Developed by:

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Discipline / Subject:

Math—Numbers & Operations in Base Ten

Topic:

Rounding Whole Numbers

Grade Level:

Intermediate Grades—3rd, 4th, and 5th

Resources / References / Materials Teacher Needs:

Brain Pop—

https://www.brainpop.com/math/numbersandoperations/rounding/

Handouts—"Rounding the Iditarod Trail"

Rounding the Iditarod Trail Board Game, Cards, and Game Pieces Exit Slip

Lesson Summary

In this lesson students will learn to round numbers to the nearest ten, hundred, thousand, ten thousand, and hundred thousand using numbers from the Iditarod.

Standards Addressed: Common Core State Standards

3rd Grade:

CCSS.MATH.CONTENT.3.NBT.A.1

Use place value understanding to round whole numbers to the nearest 10 or 100.

4th Grade:

CCSS.MATH.CONTENT.4.NBT.A.3

Use place value understanding to round multi-digit whole numbers to any place.

5th Grade:

CCSS.MATH.CONTENT.5.NBT.A.4

Use place value understanding to round decimals to any place.

Learning Objectives:

1. Students will round whole numbers to the nearest ten, hundred, thousand, ten thousand, and hundred thousand.

Students will complete an exit slip before they leave the classroom to show mastery of the skill.

Assessment:

Procedural Activities:

1. Begin by asking students what it means to round numbers. Use the Brain Pop video, Rounding, to introduce the topic.

2. Pass out the "Rounding the Iditarod Trail" handout and read together as a class. Review the examples of how to round 487,015.

*If you have not already done so, you can teach students a rhyme to remember which numbers to round down and which numbers to round up. A common rhyme used is: Zero to four hit the floor (round down). Five to nine climb the vine (round up).

3.) Practice with student's #1-8 on handout.

4. Next students will play the "Rounding the Iditarod Trail" board game. Explain to students that they will work in small groups and the first "math musher" to reach Nome will receive an honorary "Math Musher Award". The numbers students will be using are all related to the Iditarod. The directions and rules are on the back side of the handout.

5. Allow students to play the game for 20-25 minutes. Check in with each small group to answer any questions and to monitor their learning.

6. One time is up or all students have finished review a few of the problems as a class.

7. Lastly, have students complete an exit slip before leaving class in order to assess their learning.

Materials Students Need:

Handouts—"Rounding the Iditarod Trail"

Rounding the Iditarod Trail Board Game, Cards, and Game Pieces Exit Slip

Technology Utilized to Enhance Learning:

Brain Pop

Other Information:

Grouping of students is important during this lesson. I have found that mixed ability groups are best, so students may reteach one another if needed. There is a lot of power in students teaching one another.

Modifications for Special Learners/ Enrichment Opportunities:

1. This lesson can also be used as a "Scoot". Students would have one minute with each problem and then they would write their answer into the corresponding box on their handout.

2. The lesson could be extended by having students read Iditarod books and pick out the many number statistics that are used and round to the nearest ten, hundred, etc. (Ex. *Snow Dogs: Racers of the North* by: Ian Whitelaw, *Xtreme Races: Iditarod* by S.L. Hamilton, and *MUSH: Sled Dogs of the Iditarod* by Joe Funk).