How Much is a Name Worth?

Summary

Students will use simple addition facts to compute a value to their name.

Main Core Tie

Mathematics Grade 2

Strand: OPERATIONS AND ALGEBRAIC THINKING (2.OA) Standard 2.OA.2

Materials

- Letter Values Chart
- <u>How much is my name worth?</u> worksheet Assorted counters Calculators
- The Name Jar

Additional Resources

- Books
 - A Perfect Name
 - , by Charlene Costanzo; ISBN 0-8037-2614-7
 - A Porcupine Named Fluffy , by Helen Lester; ISBN 0-395-52018-5
 - Chrysanthemum
 - , by Kevin Henkes; ISBN 0-688-09699-9
 - From Anne to Zach , by Mary Jane Martin; ISBN 1563975734
 - Heart of a Tiger
 - , by Marsha Diane Arnold; ISBN 0-8037-1695-8
 - Hope
 - , by Janice Lee Porter; ISBN 1-57505-230-X
 - I Named the Baby
 - , by Linda Shute; ISBN 0-8075-3417-X
 - Josephina Hates Her Name
 - , by Diana Engel; ISBN 1-55861-218-1
 - Matthew A.B.C.
 - , by Peter Catalanotto; ISBN 0-689-84582-0
 - My Name is Yoon
 - , by Helen Recorvits; ISBN 0-374-35114-7
 - Rumpelstiltskin
 - , by Paul Zelinsky; ISBN 0-14-055864-0
 - The Day of Ahmed's Secret
 - , by Florence Parry Heide and Judith Heide Gilliland; ISBN 0-688-14023-8
 - The First Thing My Mama Told Me
 - , by Susan Marie Swanson; ISBN 0-15-201075-0
 - The Name Jar
 - , by Yangsook Choi; ISBN 0440-41799-6

Background for Teachers

Student names are powerful teaching resources. Names can be used to demonstrate phonemic features and spelling patterns. They can also provide opportunities to explore student differences and individual heritage. In addition to language and content connections, there are many opportunities to explore names in a mathematical sense. One of the most effective behavior reinforcement techniques is to say a student's name and use it in a positive way.

During this activity, students use simple addition facts to compute a value for their name. Next, they add larger numbers to compute the combined value of all the names in their group. Finally, they use the group totals to compute the combined value of all the names in the class. It is not necessary for students to know how to add using the common regrouping algorithm, nor is it necessary for them to know how to add coins. The activity is designed to allow students to explore combining strategies on their own and in small groups. Teachers may use this activity as a diagnostic tool for future regrouping lessons.

Intended Learning Outcomes

5. Understand and use basic concepts and skills.

Instructional Procedures

Invitation to Learn

Read *The Name Jar*. Discuss some of the events that helped Unhei learn to value her name. Define value. What would happen if names had monetary value? How much money would each student's name be worth?

Instructional Procedures

Using your name as an example, model how you would write it out and find the value that goes with each letter. Ask students to help you identify letter values from the <u>Letter Values Chart</u>. Write a number sentence from that information. Ask for possible suggestions as to how you might solve the problem (e.g., Use counters, draw tens and ones, group numbers into doubles, find tens, count on, use 100s board, use the number line, use tally marks, draw it out, use coins). Get as many suggestions as time allows.

Ask students to estimate how much their name would be worth based on your example. Record the estimate.

Explain the scoring rubric and encourage students to use any math tool they think might help them.

Ask students to find out how much their name is worth using one of the strategies discussed, or one they develop on their own.

Once students have successfully found out how much their name is worth, put them in small groups to determine the combined value. Model a sample strategy using a small group. Can they use the same strategy they used to find out the value of their name? Do they need to alter their strategy?

Combine groups once again until you have three or four groups.

As a class, use calculators to determine the final total.

Extensions

Make a vowel consonant graph. Write out your name on 1" graph paper, one letter per square. Color the vowels red and the consonants yellow. Cut out each square and mount on an individual graph. Write three facts about your graph.

How much are your spelling words worth? Vowels are 10¢ letters, B-L are worth 1¢, and letters M-Z are worth 5¢. Using money stamps, students stamp the coins next to their spelling words, then add up the total value of each word.

Make a class alphabet book using the names of the students in your class. Model it after the style

of From Anne to Zach or Matthew A.B.C.

Make a graph based on how many letters are in your name. After counting the letters in your name, make a physical model to represent name length. Compare it with other students in your group. Compare it to a very long name, such as *Rumpelstiltskin* or *Chrysanthemum*. If students have a hard time organizing their work, provide the template for them to work from. If they are struggling with drawing their representations, allow them to use sticker dots or mini stamps to record their solutions. If students are not understanding one-to-one correspondence, encourage them to complete one letter at a time. Breaking the problem into smaller units (scaffolding) can be effective for students who have difficulty processing language.

Family Connections

Conduct a name interview. Ask students to find out where their name comes from. Does it have a special story behind it? Were they named after someone special? Does anyone famous share their name?

Research name origins to discover the meaning of your name at <u>www.behindthename.com</u> or <u>www.babynamesorigins.com</u>.

Find out your Name Day. People in Sweden celebrate their name days just like birthdays. You can find it at <u>www.scandinavius.com/sweden/seconnections/namesday/senamesday.html</u>.

Assessment Plan

Because there are multiple answers and multiple solutions involved, a <u>scoring rubric</u> is helpful when assessing a problem like this.

This assessment may be repeated whenever the seating chart is altered or a new student is added to the class. Encourage students to try a new strategy or attempt a different combining method. Teachers should take note of students' abilities to combine numbers in tens, explain their answers, and organize information.

A sample worksheet could be provided with made-up names for students to repeat the activity independently.

Bibliography

Research Basis

Snow, M.A. & Brinton, D.M. (1997). The Content Based Classroom. White Plains, NY: Longman/Addison-Wesley Publishing Company. pgs. 5-21.

This selection discusses how content-based instruction, cooperative learning groups, and scaffolding are effective techniques for teaching English Language Learners as well as students with learning disabilities. These methods are supported using research from Vygotsky, Slavin, and Cummins. Hornick, L.M. (2004). Multicultural Literature: What's in a Name, Book Links, pgs. 39-42. Hornick provides a bibliography of grade specific books that teachers can use when planning thematic name units. Student names often provide excellent resources when teaching multicultural awareness. The author also suggests several follow up activities that coincide with the literature. Huinker, D.A. (2002). Calculators as Learning Tools for Young Children's Explorations of Number, Teaching Children Mathematics, pgs. 316-321.

This article explores ways students and teachers use calculators to expand number sense and number relationships. "Using calculators as learning tools can empower young children with the capacity to investigate number ideas in ways that were previously inaccessible to them."

Authors

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