Lesson Plan Summary

Magic Tree House #43: Leprechaun in Late Winter

Graphing For Gold!

THIS EXTENTION WILL ENABLE EACH CHILD TO:	COMMON CORE STANDARDS ADDRESSED:
• Display and interpret data on a bar graph. • Use data on a bar graph to answer questions. • Multiply whole numbers by 10. • Combine multiples of 10. • Enter information on a bar graph. • Compare data on a bar graph • Work in cooperative groups	**MATH:** • Interpret products of whole numbers • Apply properties of operations as strategies to multiply and divide. • Multiply one-digit whole numbers by multiples of 10 • Use a scaled bar graph to represent data set with several categories. Solve one- and two-step "how many more" and "how many less" problems using information presented in scaled bar graphs

43-1S112

Created By: Paula Henson, 2007 Magic Tree House Teacher of the Year, Knoxville, Tennessee

Lesson Plan

Magic Tree House #43: Leprechaun in Late Winter

Graphing For Gold Lesson Plan

The ability to read and interpret data on a graph is a math skill that people apply in everyday life. Skip counting by 10's is a skill that will aid students in counting money and other objects. Combine these two skills after reading *Leprechaun in Late Winter* to allow your class experience in skip counting and graphing gold coins that leprechauns might find at the end of a rainbow!

Materials:

1. Plastic gold coins found at most party supply stores
2. 1 heavy duty plastic shower curtain liner or solid color vinyl table cloth (rectangular) The graph can also be drawn on bulletin board paper.
3. Yard stick
4. Black permanent marker
5. Index card for each student
6. 1 zipper-type plastic bag for each student

Procedure:

1. Make a graph on the plastic shower curtain liner/vinyl table cloth using the black permanent marker and yard stick. Create boxes across the bottom of the graph to match the number of students in the class. There should be 11 vertical boxes with numbers in multiples of 10 along the left side of the graph. (The first vertical box will be empty.) Start numbering from the bottom.

100															
90															
80															
70															
60															
50															
40															
30															
20															
10															
	Jill	Sam	Josh	Emma											

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2. Place the graph on the floor and allow your students to sit around the perimeter of the graph.

3. Instruct students to write their name on an index card and place it in one of the boxes along the bottom of the graph.

4. Separate plastic gold coins into groups from 1-10 and place in a zipper-type plastic bag for each student. (Some students will have the same number of coins.)

5. Hand out plastic bags with varying numbers of plastic gold coins and tell students that each coin is worth ten pieces of gold.

6. Allow students to place their gold coins on the graph above their name starting at the bottom. They should count by tens as they go.

7. Next ask questions about the data on the graph such as:

- Which students have the most pieces of gold? How many do they have? (Count by tens.) If you have at least twenty students, two students will have the same number for each amount on the graph.
- Which students have the fewest pieces of gold?
- Which students have the same amounts? Name pairs of students that have 10, 20, 30 and so on…
- How many more pieces of gold do _____ and _____have than _____ and _____? (Ask this question for several pairs of students.)
- How many fewer pieces of gold do _____and _____ have than _____ and _____? (Ask this question for several pairs of students.)
- How many

*Note: Use the graph for future graphing activities.

8. Finally, allow students to complete the “Graphing for Gold” Activity (provided) in small groups.

Graphing for Gold!

Use the information on the bar graph to answer the questions on the next page. Fill in the boxes at the bottom of the graph with your classmates' names. **Remember, each coin is worth 10 pieces of gold!**

Pieces of Gold

100								
90								
80									
70								
60								
50								
40								
30								
20								
10								
	Leprechaun 1	Leprechaun 2	Leprechaun 3	Leprechaun 4	Leprechaun 5	Leprechaun 6	Leprechaun 7	Leprechaun 8

Name:_____

Use the bar graph to answer the questions. Remember, each coin is worth 10 pieces of gold!

1. Who found the most gold? How much was it? _____, _____Pieces
2. Who found the least amount of gold? How much was it? _____, _____Pieces
3. Which two Leprechauns found the same amount of gold? _____ and_____
4. How many more pieces of gold did Leprechaun 3 find than Leprechaun 5? _____Pieces
5. How many fewer pieces of gold did Leprechaun 3 find than Leprechaun 1? _____Pieces
6. How many pieces of gold did Leprechauns 4, 6, and 8 find altogether? _____Pieces
7. How many gold pieces did all of the Leprechauns find? _____Pieces
8. Which Leprechaun would you like to be?_____