



EXTENSION ACTIVITIES

It's All About Math

Storybook Theatre encourages everyone to get the most out of each program performed. The following extension activities are for use after viewing Storybook Theatre's production of It's All About Math. They are easily adaptable to either primary or intermediate level students and can be done in a large class, small groups, or by individuals. Primary could be more illustrations, simple sentences, and done in large groups, whereas intermediate students could focus more on writing and independent work. Enjoy!

1. The Real World

Make a class list of times when reading and math go together in the "real world." Keep the list posted and add to it as the class thinks of more examples. Some examples would be:

- Reading a menu and calculating the cost of chosen items
- Reading a recipe and measuring the ingredients
- Reading instructions for a dog house and measuring the lumber
- Reading a map and calculating mileage for a trip

2. Take Your Time

Teachers are always encouraging students to take their time when doing math problems, because accuracy is important. Make a class list (similar to #1) of times when rushing through math and getting the wrong answer would not be a good thing. Some examples are:

- Getting wrong answers on a math test
- Rushing through adding up your purchases, and then finding out you don't have enough money when it's time to check out
- Not taking your time to measure ingredients when cooking – maybe put in two tablespoons of salt instead of two teaspoons when making cookies

3. Research an Animal

In *Herbert Hilligan's Sea World Adventure*, many ocean animals are discussed. Let the students (individually or in small groups) choose an animal, and using the book as a starting point, research other facts about that animal. Have them present their findings to the class in the form of a poster, big book, etc. (they can also include some math problems to go with their animal)

4. Write Your Own Math Adventure

As a class, or in small groups, write your own math adventure patterned after the Herbert Hilligan books. (there are several other Herbert books-you might wish to read them to your students first) The students might decide to turn the adventure into a big book or a computer presentation. Decide on an adventure for the main character to take. On each page, have the character do something and then make a math problem related to that part

of the adventure. Be sure to include an answer page. Present the stories to the class (or other classes) and have the students solve the problems as you go. Be sure to illustrate!

5. Acts of Kindness

In the book, Herbert did several kind things for other people, animals, and his surroundings. Discuss the kindness he showed, and make a Cause/Effect diagram showing what *might* possibly happen next because of his kindness. Example:

Herbert puts money in the well to save the oceans ⇨ Other people see this and put money in the well ⇨ The money helps clean up the oceans

6. Classifications

Make a chart/table/graph that shows the classifications of the animals mentioned in the book. (example: penguin – bird dolphin – mammal)

Students can also classify other ocean animals not in the book

7. Oil in the Water

Herbert and his classmates are concerned with pollution in the ocean. Have a class discussion on what might pollute the oceans. Tell them that a major polluter of the ocean is oil – from ships that leak or have a spill. Show what happens when oil and water mix by filling a clean 2 liter bottle with 3 cups of water (the “ocean”) Add a cup of oil using a funnel. Replace the cap and shake. Observe what happens with the oil and water. You may want to leave the bottle tipped on its side overnight. The next day, see if the oil settled or not. How would this impact our knowing that oil existed in an ocean or lake? How would this help us think about cleaning up oil spills?

8. Actual Size

Create and measure the length of an actual marine mammal. Draw and measure it from head to fin, then to tail. OR Create a life size marine mammal with the children's bodies. Measure in the hall head to toe length of an actual mammal and graph.

9. Graph It

Have the children decide on their favorite ocean animal. Give each child a paper fish and let them place it under their favorite. (sharks, whales, seahorse, octopus, etc.)

They can also interview other classes and friends and family and then add those favorites to the graph they have made. Have the students make up math questions to go with the graph. Example: If seven more people had sharks as their favorite, the number when then be twice as much as which animal?

**TEKS Correlations for
It's All About Math Extension Activities**

Activity #	The student is expected to	3 rd	4 th	5 th	6 th
1 – Real World	Identify the mathematics in everyday situations	MATH 3.14A	MATH 4.14A	MATH 5.14A	MATH 6.11A
2 – Take time	Communicates about math using informal language	MATH 3.15	MATH 4.15	MATH 5.15	MATH 6.12
3 – Research animal	Identify characteristics of living organisms	SCI 8,9,10	SCI 8,9	SCI 9,10	
	Use multiple sources to locate information	ELA 12D	ELA 13C	ELA 13C	ELA 13C
4 – write own adventure	Selects and uses writing processes for self-initiated and assigned writing	ELA 18	ELA 19	ELA 19	ELA 18
5 – acts of kindness	Make & explain inferences from texts such as causes and effects	ELA 9F	ELA 10E	ELA 10E	
6 - classifications	Construct simple graphs, tables, maps, and charts to organize, examine and evaluate information.	SCI 2E	SCI 2E	SCI 2E	SCI 2E
7 – oil in water	Use scientific inquiry methods during field and laboratory investigations	SCI 2	SCI 2	SCI 2	SCI 2
8 – actual size	(3 rd) Estimate and measure lengths using standard units (4-6) Measure to solve problems including length	MATH 3.11A	MATH 4.12A	MATH 3.11A	MATH 6.8B
9 – graph it	(3-4) Interpret information from pictographs and bar graphs (5) Describe characteristics of data in graphs (6). Solve problems by collecting, organizing, displaying, and interpreting data	MATH 3.14B	MATH 4.13C	MATH 5.13B	MATH 6.10D