My Own Questions and Tasks

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Lesson Goal: Students will write fractional parts of a set and be able to graph their own data.

Grade Level: Third

Standard(s) Addressed: SOL 3.3 Fractions

Underlying Big Idea(s)

*The student will be able to write fractions using a model.

*The student will be able to compare the fractions using like denominators.

*The student will make their own bar graph as a visual representation.

Open Question(s):

***Write your own problem using the animal model and solve it.

Parallel Tasks:

Option 1: What fraction of the animals counted at least eight or higher?

Option 2: What fraction of the animals took the kings challenge?

Reflections:

I read the book "Two Ways to Count to Ten" to my students and gave them each a sticky note. Then, I wrote the Parallel Tasks on the board and the students were to choose which one they wanted to keep track of as I read the story to them. On their sticky notes, they put tally marks to help them count as I read. Once I finished reading the story, I asked the students to break into two groups for each parallel task and compare their findings with each other. They each came up with their fractions and wrote them on the board. We had a class discussion on the different types of fractions and why our denominators were the same. Then, I

asked them “How many different ways can we count to ten?” and I had several students raise their hands and tell me all the different ways we could count to ten, by ones, twos, fives, and tens.

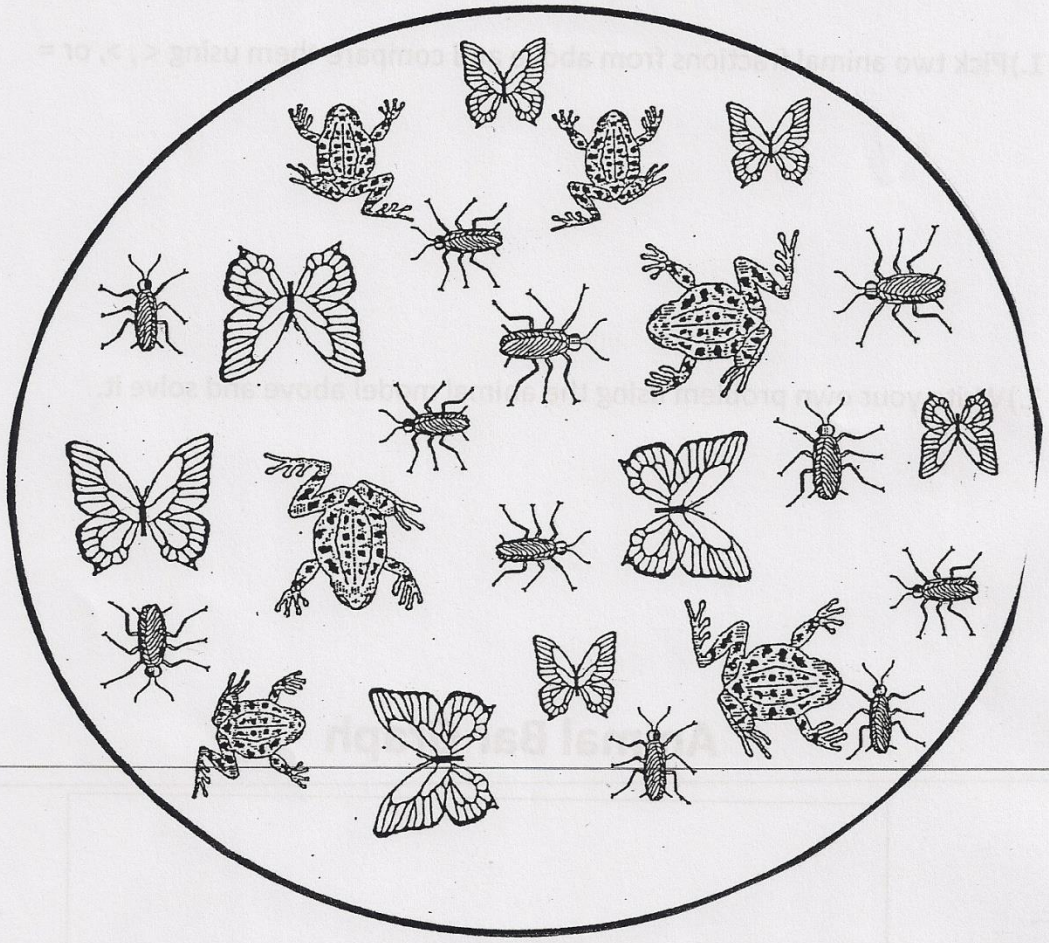
Next, I passed them each the Animal Fractions Worksheet. They were to look at the animals in the graph and answer the fraction questions. The students were able to write fractions from a given set. Then, on the back of the worksheet, I asked them the Open Question to see what types of problems they would come up with. I was surprised that most of my students chose addition or subtraction type of problems. I would have liked to see more multiplication or even division.

The students also had to choose which fractions they wanted to compare. Some students struggled with this problem as well because they were not use to having the freedom of choosing any two fractions from a given set and compare them. This did generate a class discussion because the students were all able to tell the different ways they compared the set and as they were explaining they were using their greater than, less than, and equal to vocabulary.

Most of my students really enjoyed listening to the story and even asked why we were reading a story in math class. I told them that reading and math can go hand in hand, just like when we are reading a word problem in math. Most of them did fairly well with using their sticky notes to keep track. Some of them really struggled with the worksheet. They were unsure of the open question on the back and did not know what to do, this is partly because they are so use to having the problem in front of them and then solve. They have never really come up with their own type of math problems. Also, when they had to graph their animals, I left the graph blank on purpose to see how the students would graph. Most of them chose a bar graph and counted by ones. A few of my students did count by two’s. One student tried to count by five’s but realized that two’s would be easier and started over even though I encouraged him to try by five’s.

If I were to teach this lesson again, I would probably not use the sticky notes as I was reading because I want the students to learn to keep track of things in their minds and not always have to write it down. This would help with “mental math.” Also, I would have the students start writing more of their own types of math problems and gearing them more towards multiplication once they get familiar with that concept. Overall, I was very pleased with how the lesson turned out and many of them really enjoyed the lesson.

Animal Fractions



What fractional part of the set are frogs? _____

What fractional part of the set are butterflies? _____

What fractional part of the set are roaches? _____

What fractional part of the set are NOT frogs? _____

What fractional part of the set are not frogs and not roaches? _____

What fractional parts of the frogs are facing south? _____ east? _____

Animal Thinking

1.) Pick two animal fractions from above and compare them using < , >, or =

2.) Write your own problem using the animal model above and solve it.

Animal Bar Graph