

Lesson: Math – Grades K- 3
Topic: Graphs



Veggie Tables

Introduction

Students will use tally marks in tables to categorize characteristics and sort vegetables by color, size and shape.

Learning Outcomes

Ohio Standards

- Identify multiple categories for sorting data.
- Collect and organize data into charts using tally marks.

National Standards

- Formulate questions that can be addressed with data and collect, organize, and display relevant data to answer.
- Pose questions and gather data about themselves and their surroundings.
- Sort and classify objects according to their attributes and organize data about the objects.
- Represent data using concrete objects, pictures, and graphs.

Getting Started

Materials

- A variety of different vegetables (Use vegetables of many different sizes, shapes and that are color red, green, yellow and orange)
- Handouts A, B, and C
- Large chart paper
- Markers
- Four boxes or baskets labeled
- Color labels that can be placed on and removed from the boxes: red, green, yellow and orange
- Shape labels that can be placed on and removed from the boxes: Circle, Oval and Other)
- Size labels that can be placed on and removed from the boxes: Large, Medium and Small

Vocabulary

- Tally mark
- Category
- Data

- Organize
- Sort
- Chart
- Circle
- Oval

Lesson

Orientation Activity

Set all of the vegetables out on a table in front of the class. Ask the students what is on the table. (Hopefully someone will say: vegetables) Tell the class: "These are vegetables that Peter Rabbit got from McGregor's Garden. Peter needs help sorting them and putting them away for the winter. The problem is, Peter is not sure how to sort them and wants us to help him."

Learning Activity

1. Ask the class if they think it is possible to sort the vegetables by their color.
2. Point out the four boxes or baskets and place the color labels on them.
3. Make sure each student has **Handout A**.
4. Explain to the class that you will hold up a vegetable and they will need to identify its color.
5. Once the color has been identified, the vegetable will be placed in the box with the appropriate color label.
6. When the vegetable is placed in the box, each student should place a tally mark on their paper in the appropriate color box.
7. Once all of the vegetables' colors have been identified and the vegetables have been placed in the boxes, ask the students how many tally marks they have for each color.
8. Check the answers by taking the vegetables out of each box (one box at a time) and counting all the vegetables in that color box.
9. While counting each color box, use markers and chart paper to make tally marks in color boxes for a class chart. (Chart should resemble **Handout A** and should be constructed ahead of time to save time in class.)
10. Make sure each student has **Handout B**.
11. Explain to the class that you will be repeating the activity, but this time when you hold up a vegetable, they will need to identify its shape.
12. Change the labels on the boxes to Circle, Oval, Other.
13. Once the shape has been identified, the vegetable will be placed in the box with the appropriate shape label.
14. When the vegetable is placed in the box, each student should place a tally mark on their paper in the appropriate shape box.
15. Once all of the vegetables' shapes have been identified and the vegetables have been placed in the boxes, ask the students how many tally marks they have for each shape.
16. Check the answers by taking the vegetables out of each box (one box at a time) and counting all the vegetables in that shape box.

17. While counting each shape box, use markers and chart paper to make tally marks in shape boxes for a class chart. (Chart should resemble **Handout B** and should be constructed ahead of time to save time in class.)
18. Make sure each student has **Handout C**.
19. Explain to the class that you will be repeating the activity again, but this time when you hold up a vegetable they will need to identify its size.
20. Change the labels on the boxes to Large, Medium, Small.
21. Once the shape has been identified, the vegetable will be placed in the box with the appropriate size label.
22. When the vegetable is placed in the box, each student should place a tally mark on their paper in the appropriate size box.
23. Once all of the vegetables' sizes have been identified and the vegetables have been placed in the boxes, ask the students how many tally marks they have for each size.
24. Check the answers by taking the vegetables out of each box (one box at a time) and counting all the vegetables in that size box.
25. While counting each size box, use markers and chart paper to make tally marks in size boxes for a class chart. (Chart should resemble **Handout C** and should be constructed ahead of time to save time in class.)

Handouts

Color labels

Shape Labels

Size Labels

Handout A - Color tally boxes

Handout B - Shape tally boxes

Handout C - Size tally boxes

Evaluation and Follow-up

Assessment Tools and Methods

As an on-going evaluation throughout the activity, observe the number of students who have the correct number of tally marks in the boxes for the color, shape and size of the vegetables.

Box Labels: Color

Red

Yellow

Orange

Green

Box Labels: Shape

Circle

Oval

Other

Box Labels: Size

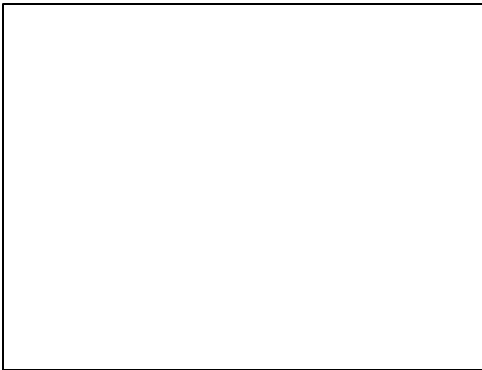
Large

Medium

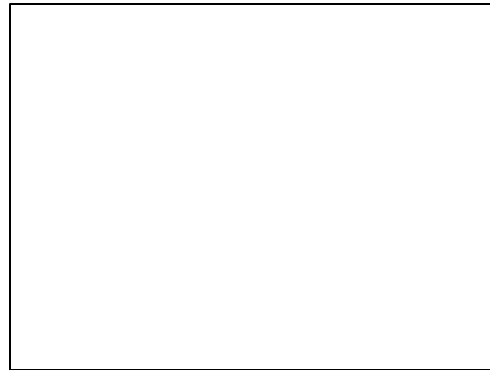
Small

Handout A

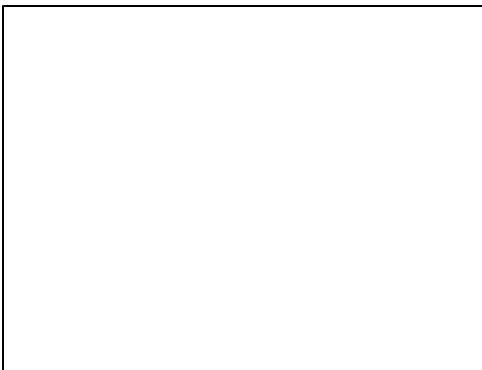
Red



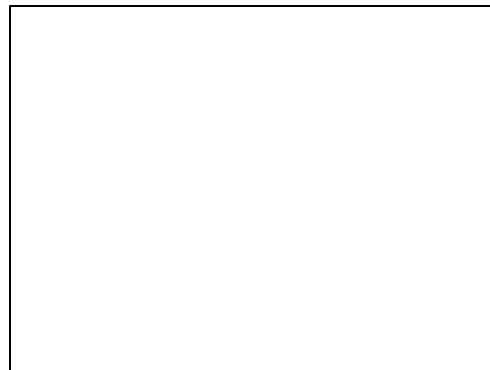
Yellow



Orange

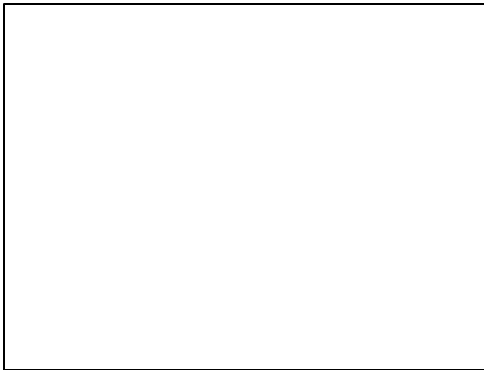


Green

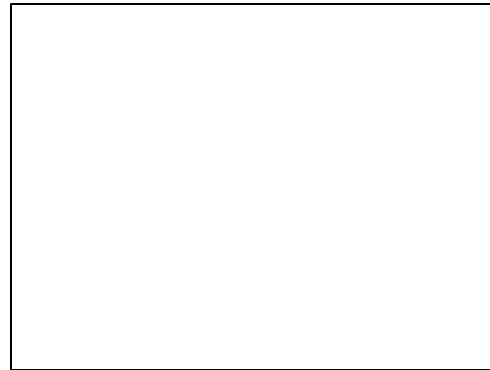


Handout B

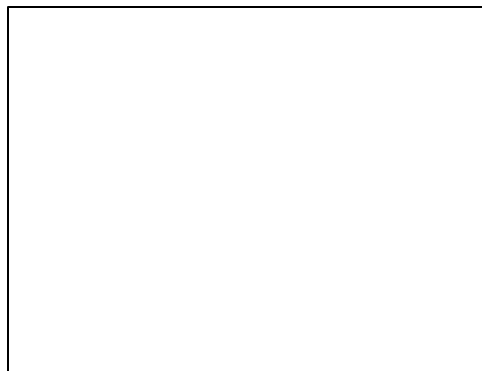
Circle



Oval

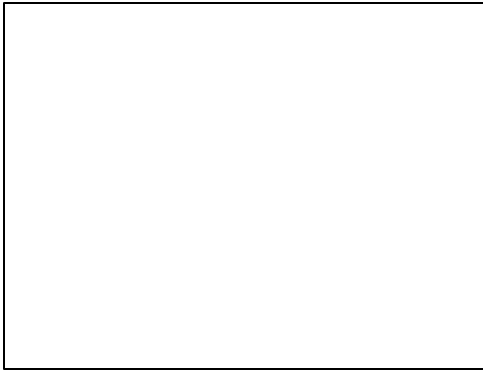


Other

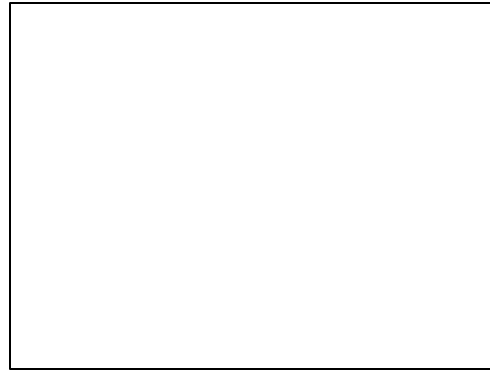


Handout C

Large



Medium



Small

