# **Charting Charlotte's Children –**

# A Mathematical Look at Charlotte's Web



### **Essential Questions**

- WHAT IS THE FOOD CHAIN?
- WHERE DO THE ANIMALS IN CHARLOTTE'S WEB FIT INTO THE FOOD CHAIN?

## **Learning Intention / Overview**

This activity allows students to think about how science is represented in E. B. White's novel, *Charlotte's Web*. Students will explore the identities of different species that present in this treasured children's novel. They will use their knowledge of the food chain to determine where different animals fit into the food chain. This requires critical thinking and allows the students to look at the novel from a unique scientific perspective.

# **Methods / Teaching Strategies**

- Group work
- Independent Practice

# **Assessment of Learning**

Charting Charlotte's Children worksheet (provided)

# How might you customize or alter this lesson?

# **Key Learning Areas**

Literacy

Math

### **Concepts Taught**

**Fiction Reading** 

Addition,

Multiplication

### **Target Age**

9 – 12 Year Olds

**Duration** 

1x 60 minute Session

#### You will need:

Charlote's Web book

Charting Charlotte's Children worksheet



#### Online Resources:

- <u>http://edgalaxy.com/educati</u> <u>on-quotes</u>
- http://edgalaxy.com/classro om-posterscharts/2013/9/10/14educational-quotes-posters
- http://www.youtube.com/w atch?v=iPnYfwLOw84

# Teaching Instructions

1. Ask students to recall how many eggs Charlotte had in her egg sac.

\*\*\*\*\* The correct answer is: 514.

2. Ask students to recall the three spiders that stayed behind with Wilbur.

\*\*\*\*\* The correct answer is: Joy, Aranea, and Nellie.

- 3. Explain to students that they are going to create a bar graph. Show students an example of a bar graph.
- 4. Show students a bar graph that shows Charlotte's number of eggs.
- 5. Ask students to create a bar graph that shows the number of eggs for each of the three spiders that stayed with Wilbur. Ask them to assume that each of these spiders had the same number of eggs.
- 6. Then, ask them to create a bar on the bar graph that shows the sum of all eggs from Charlotte, Joy, Aranea, and Nellie.
- 7. Their bar graph should have five bars: one to show Charlotte's eggs, one to show Joy's eggs, one to show Aranea's eggs, and one to show Nellie's eggs.
- 8. Students can either use the bar graph provided or have students create one entirely from scratch. Please note that if the current bar graph is used, students will have to expand the y-axis to accurately graph the total number of eggs from the four spiders.



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