



Digital Curriculum and Programs

MIKE BULLOCK

Modeling and Teaching



Example

Questioning to Discover Viewpoint



When I was eleven years old, two events occurred which changed considerably the current of my life. My only brother, who had just graduated from Union College, came home to die. A young man of great talent and promise, he was the pride of my father's heart. We early felt that this son filled a larger place in our father's affections and future plans than the five daughters together.

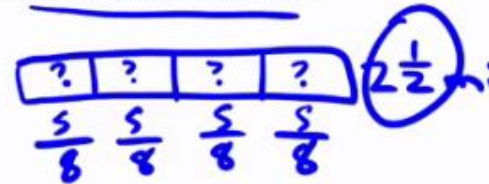
—Eighty Years and More:
Reminiscences, 1815–1897,
Elizabeth Cady Stanton

- Who are the key people in the text?
- What are the key events in the text?
- How do the key events affect the author?
- What are the central ideas of the text?
- How does the author view the central ideas, key people, and key events?

Solving a Problem with Equal Groups



Joel and three teammates ran a relay race that was $2\frac{1}{2}$ miles long. If each runner runs the same distance, how far will each member of the team run?



- Question
each runner's distance
- Clues
total = $2\frac{1}{2}$ mi
four runners
- Strategy
 $2\frac{1}{2} \div 4 = \frac{5}{2} \div \frac{1}{1} = \frac{5}{2} \times \frac{1}{4} = \frac{5}{8}$ mi
- Check



Real-World Connections



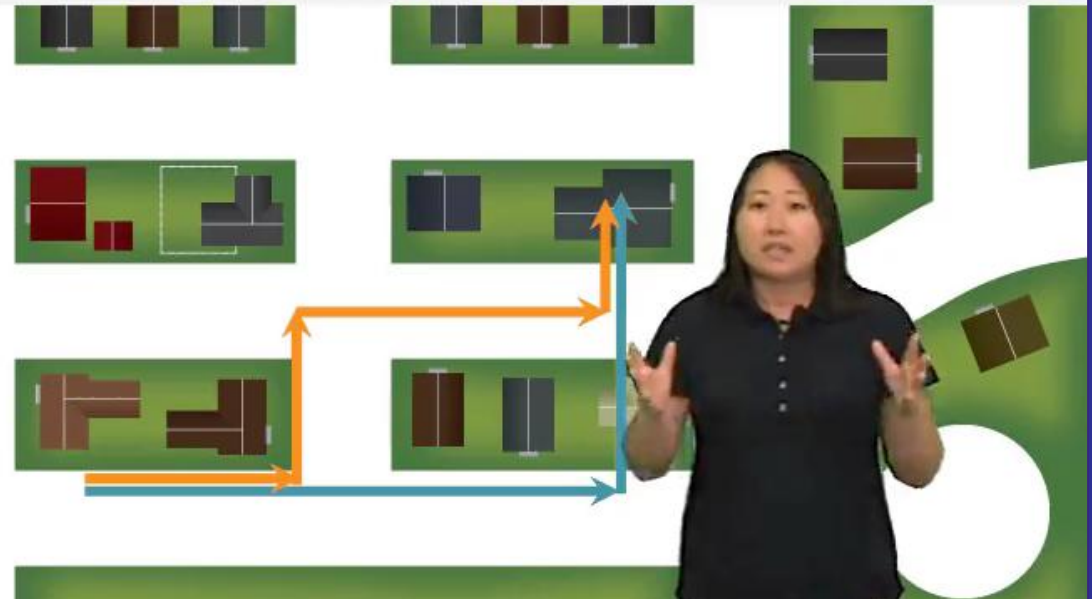
Lesson
Question

How do organisms interact with each other?



Lesson
Question

How can vectors be used to describe and analyze motion in two dimensions?



Virtual Field Trips



The Globe Theatre

Warm-Up



Lesson
Question

How do you design an effective virtual museum exhibit?



Image by McKay Savage

Modeling and Teaching



Example

Making Inferences about Theme



“Dell,” said he, “let’s put our Christmas presents away and keep ’em a while. They’re too nice to use just at present. I sold the watch to get the money to buy your combs. And now suppose you put the chops on.”

–*“The Gift of the Magi,”*
O. Henry

- ✓ Identify details about characters' words and actions that suggest a message about life.
- ✓ Combine the details in the text with what you already know to make an inference about theme.



Misconceptions

Dividing by Half vs. Dividing in Half



- **Dividing by half** means finding how many halves there are.

4 divided *by* half:

$$4 \div \frac{1}{2} = 8$$



- **Dividing in half** means splitting a quantity into 2 equal parts.

4 divided *in* half:

$$4 \div 2 = 2$$



Verifying Understanding During Lessons

Analyzing Theme in "Raymond's Run"

Choose a theme and write a paragraph that states your own interpretation of that theme in "Raymond's Run." Be sure to provide evidence and an explanation of your evidence.

Ratios and Fractions

Stephen spent \$4 on milk, \$6 on eggs, and \$11 on cereal. He wrote the ratio $\frac{6}{11}$ to describe some of his purchases. Explain why the ratio is not a fraction.

A fraction shows a part of a whole, and this ratio is a part to part ratio. It shows a comparison of one part (money spent on eggs) to another part (money spent on cereal).

Sample Response: The ratio of $\frac{6}{11}$ compares money spent on eggs to money spent on cereal. This is a part-to-part comparison, not a part-to-whole comparison.

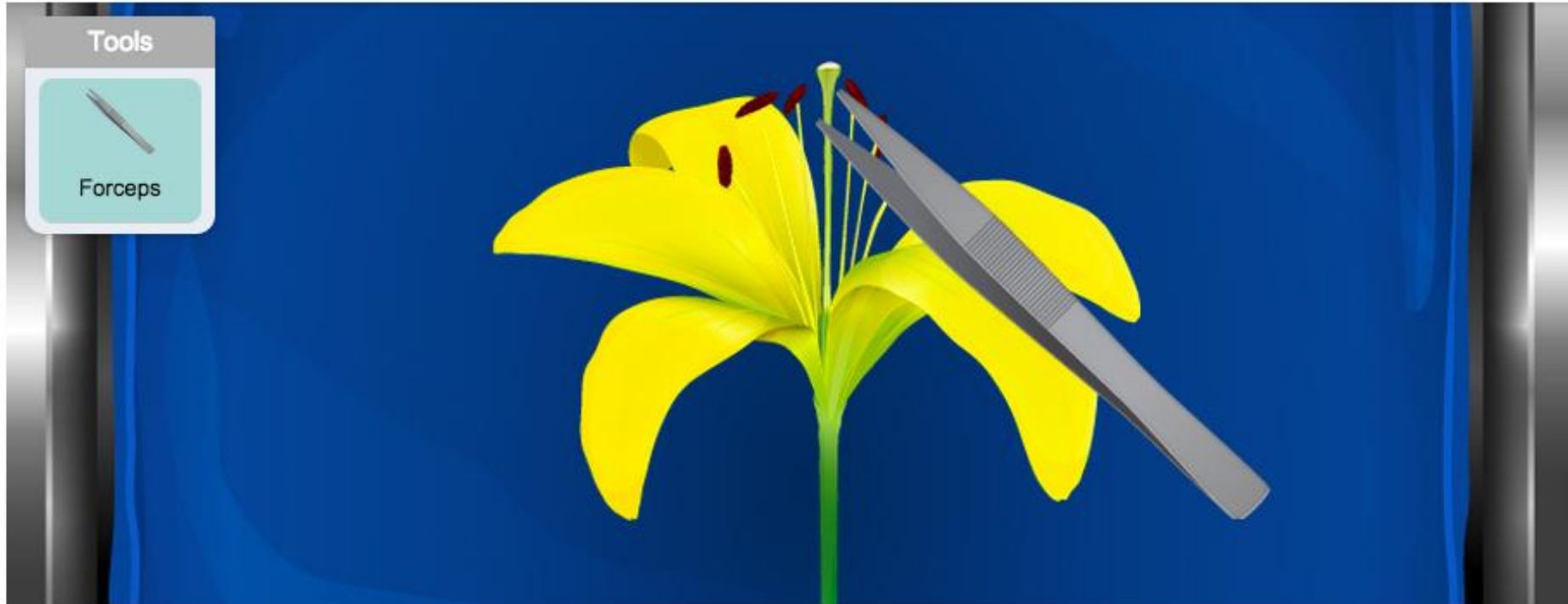
Which did you include in your response? Select all that apply.

- Fractions show a part of a whole.
- The whole amount is \$21, which is the total money spent.
- The ratio compares money spent on eggs to money spent on cereal. Both numbers are parts, whereas one should be a whole.

Interactive Tasks

Flower Dissection

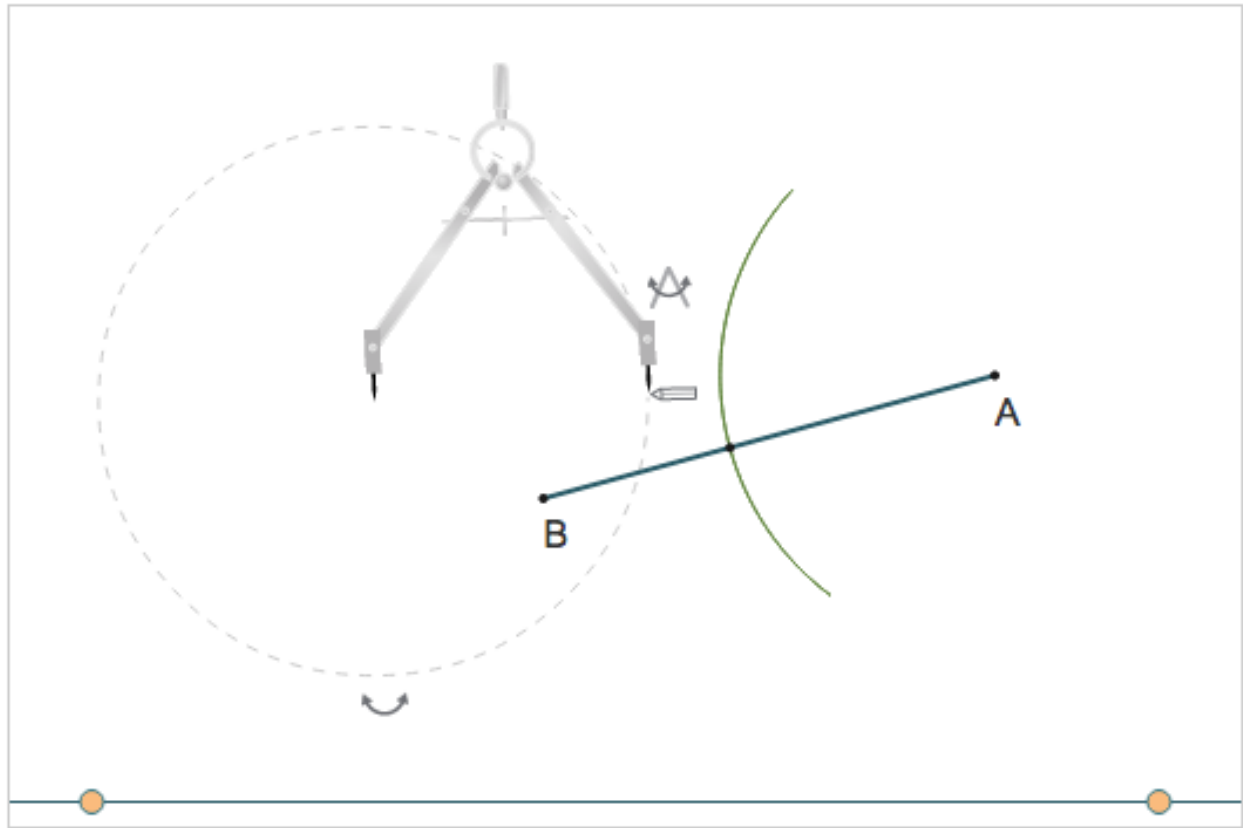
Select Forceps from the Tools, and then remove the petals. Record the number of petals in Table A of the Student Guide. Select Continue when done.



Interactive Tasks


Perpendicular Bisector

Construct a perpendicular bisector to \overline{AB} .



Undo

Individualized Student Interventions

Lesson Mastery > Mathematics 6 – MA3106


Last Update: 12/07/2013 04:00 AM Eastern Time

Lesson Mastery
Activities and Scores

Select Group(s): Period 1, Period 2, Perio...

Filter:

Reset









Expand All Standards | Collapse All Standards

View By

Course Structure

% Struggling

Understanding Ratios and Rates

View Standards	Lesson	% Struggling	# Struggling	# In this Lesson	Avg Quiz Score	Avg Quiz Attempts	Avg Lesson (hh:mm:ss)
▶ Standards	Describing Part to Part Relationships	 35%	16 out of 46	2	70.5%	1.9	1:18:41
▶ Standards	Using Ratio Notation	 35%	16 out of 46	0	72.5%	2.1	1:01:45
▶ Standards	Equivalent Ratios	 35%	16 out of 46	0	84.2%	1.9	1:08:32
▶ Standards	Patterns in Multiplication Tables	 33%	15 out of 46	0	76.9%	2.2	0:55:25
▶ Standards	Equivalent Ratios in Measurements	 31%	14 out of 46	0	81.8%	1.8	2:00:27
▶ Standards	Understanding Unit Rates	 30%	14 out of 46	0	79.4%	2.3	0:53:09
▶ Standards	Comparing Ratios	 30%	14 out of 46	0	71.2%	2.7	0:47:07
▶ Standards	Ratios in Real-World Situations	 30%	13 out of 46	0	70.3%	1.4	2:01:45

Blended Learning – East Pennsboro, PA



“We use Edgenuity to make our face-to-face class time so much more in-depth. We can do more personalized projects because what they’ve done in the lab translates to us through the data. We’re able to take their data, analyze it; and individualize their projects, grading systems, remediation, and enrichment programs.”

- SOCIAL STUDIES TEACHER, EAST PENNSBORO SCHOOL DISTRICT

Blended Learning – East Pennsboro, PA



“My day begins with analyzing data in the online program from the day before. Based on that data, I’m able to see where students need remediation and where students have complete understanding. That information is what drives my face-to-face class time.

During learning lab time, when the kids are working on the computers, I’m pulling kids in, seeing where they are, and coaching them as they working through the Edgenuity program.”

- SOCIAL STUDIES TEACHER, EAST PENNSBORO SCHOOL DISTRICT

Multiple Uses – Minidoka County Schools



Intervention: Using the districts Star Assessment data students are assigned curriculum specific to their learning gaps.

Alt Ed/Credit Recovery: Students recover credits by demonstrating mastery through pretesting. The Alt Ed program is able to offer more course options to students.

New Teacher: The chemistry teacher is a first time teacher and uses the Chemistry curriculum to guide his lesson planning and as a blended learning tool.

Mastery Based Learning-Federal Way, WA



- Teachers use data to identify which standards students have not mastered.
- Teachers create an individualized course based on each student's needs and standard gaps.
- Pretesting assessments are used to allow students to test out of content if they meet passing thresholds.

Questions?

MICHAEL BULLOCK