

# Batch: Unit Upgrade Examples



EXAMPLES OF UPGRADED UNITS TO QUESTS

Designing imaginative and rigorous learning experience.

## BEFORE AND AFTER UPGRADES

- Kindergarten: Community Helpers
- 2nd Grade: Measurement
- 5th Grade: Nutrition
- 8th Grade: Applied Statistics
- 10th Grade: Environmental Science
- High School: Economics
- High School: Physics - Engineering



**How can I make Mott Haven a better place?**

**CREATE A PSA**

## Miles and Miles of Measurement: Our Union Station

Subject: Science	Grade Level: 2	School Teacher: Quimper
UNIT TITLE: MA, MI, WA, and Measurement		
OVERVIEW - Purpose and Outcomes		
Students will explore different modes of transportation and collect their knowledge of measurement and time. Through a hands-on study of different modes of transportation, students will apply appropriate tools and techniques to measure the length of objects in both real-world and virtual space. In addition, students will use the communication skills of speaking and listening to interview both employees and passengers.		
By the end of the unit, students will be able to:		
<ul style="list-style-type: none"> <li>• Measure and use to gather information and solve problems about the real world around us.</li> <li>• Different tools are used to measure different things.</li> <li>• People use measurement both formally and informally to make decisions.</li> <li>• People around the world use different units of measurement in daily life.</li> </ul>		
Essential Questions		
<ul style="list-style-type: none"> <li>• How does measurement help us solve problems in the world?               <ul style="list-style-type: none"> <li>◦ How do engineers figure out how much train track is needed to get from one point to another?</li> </ul> </li> <li>• What tools do people use to measure things?               <ul style="list-style-type: none"> <li>◦ How do people know when to use meters or centimeters and when to use inches?</li> <li>◦ How do people measure time?</li> </ul> </li> <li>• How can measurement help the world around us?               <ul style="list-style-type: none"> <li>◦ How does measurement of distance and time affect travel?</li> <li>◦ What factors are considered when choosing a method of transportation?</li> </ul> </li> </ul>		

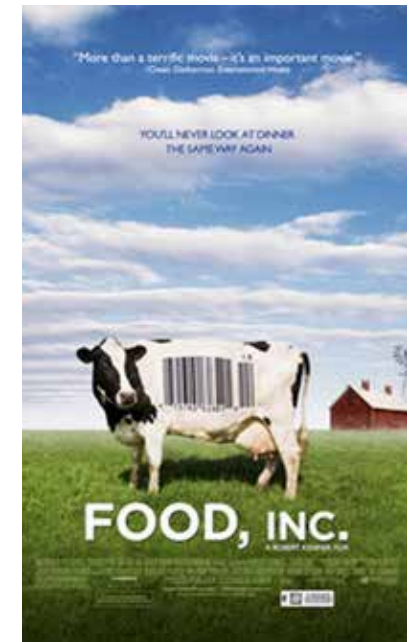


**CREATE a Consumers Guide Website**

## Food Fight!

Issues in the Food  
Production Industry

**CREATE an  
INVESTIGATIVE  
DOCUMENTARY**



Comparative Case Study:

Applied Statistics: **Create an INFOGRAPHIC**

Using Evidence to Learn About the Past and Predict Future Trends  
Patterns and causes of population development in three cities.



Wellington, New Zealand



New Britain, Connecticut





Hanoi, Vietnam



**Geometry: Global Urban Bridges**  
**EQ: How might we design a pedestrian and bicycle bridge to cross our city to avoid traffic?**  
**CREATE A PROTOTYPE**



## DESIGN A SMART HELMET

A helmet that can identify head trauma incurred by its user and, using Bluetooth technology, send a distress message to an emergency contact.



**Math- Financial Literacy**  
**EQ: What makes a start up company last?**  
**CREATE A LONG TERM CASE STUDY**

## Google Science Fair: Quests on a Global Stage

