

Investigation 4, Part 3 Focus Question



What is the importance of accurate measurements for a metric field day?

Review different kinds of measures.

•









IG pg. 238, Step 1



Brainstorm events that must be measured and don't require a lot of equipment.

For example, the Syringe Squirt measures distance. How far can you squirt water from the syringe?

The Syringe Squirt









IG pg. 238, Step 2





Let the games begin!

Half of the groups will be competitors, and the other half will be officials.

Record the results on your Metric Field Day Event Chart.

Determine the winners and trade places.









IG pg. 239, Steps 6–10





What is the importance of accurate measurements for a metric field day?

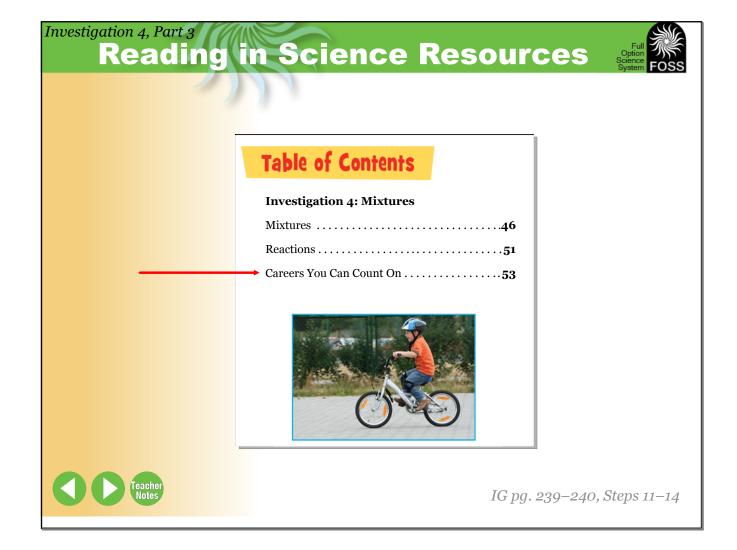








IG pg. 239-240, Steps 11-14



Investigation 4, Part 3



mixture
conservation of mass
cloudy
suspended
dissolve
solution

chemical reaction baking soda vinegar calcium carbonate chalk gravel carbon dioxide salt transparent





IG pg. 241, Step 15

Investigation 4, Part 3 Wrap-Up



Look at the word wall and review the vocabulary from Investigation 4.

Review the focus questions from Investigation 4 in your groups.



- What happens when you mix two materials?
- What is the importance of accurate measurements for a metric field day?

Review Investigations 1, 2, and 3 to prepare for the Posttest.







IG pg. 241–242, Steps 16–17

Investigation 4, Part 3 Motion and Matter

Developed at



Published and Distributed by



P.O. Box 3000 80 Northwest Boulevard Nashua, NH 03063-4067 1-800-258-1302



All rights reserved. Copyright The Regents of the University of California.

IMPORTANT: BY DOWNLOADING, INSTALLING, AND/OR USING THIS SOFTWARE ("SOFTWARE"), YOU AGREE TO ALL THE TERMS IN THIS AGREEMENT, AS WELL AS ANY AND ALL ACCOMPANYING DOCUMENTATION. IF YOU DO NOT AGREE, DO NOT DOWNLOAD, INSTALL, AND/OR USE THIS SOFTWARE.

The Regents of the University of California ("University") retains all rights in the Software. The University hereby grants the purchaser of this Software a limited, nonexclusive, nontransferable license to use the Software in accordance with the terms and conditions set forth herein. All materials contained herein are intended for classroom use only.

You hereby acknowledge that: (a) the Software may not be sublicensed or transferred to any third party; (b) you may not sell, distribute, rent or lease the Software to any third party; and (c) you will not make the Software available in any networked or time-sharing environment or transfer the Software to any computer or mobile device other than the single computer on which the Software is installed.



Teacher Notes FOSS Program Overview





Investigation 4, Part 3 Focus Question



What is the importance of accurate measurements for a metric field day?

Review different kinds of measures.

•



Motion and Matter, IG pg 238, Step 1

Ask students to write the focus question in their notebooks.

Review the different kinds of measures that students have used in this module: length, mass, volume, and temperature. Start with the first bullet and add additional bullets as students contribute.

IWB You can use the *Pen Tool* to record students' responses.

Tell students that they are going to plan a metric field day. Each group will set up an event for other students to try. Each event must include some sort of measurement.







IG pg. 238, Step 1

X



Brainstorm events that must be measured and don't require a lot of equipment.

For example, the Syringe Squirt measures distance. How far can you squirt water from the syringe?

The Syringe Squirt

•

Motion and Matter, IG pg 238, Step 2



Brainstorm events that must be measured (see Step 2 for examples). Start with the first blank bullet and add additional bullets as students contribute.

Choose events.

IWB You can use the *Pen Tool* to record students' responses.







IG pg. 238, Step 2





X

Let the games begin!

Half of the groups will be competitors, and the other half will be officials.

Record the results on your Metric Field Day Event Chart.

Determine the winners and trade plag

Motion and Matter, IG pg 239, Steps 6-10

Go outdoors and prepare for the games.

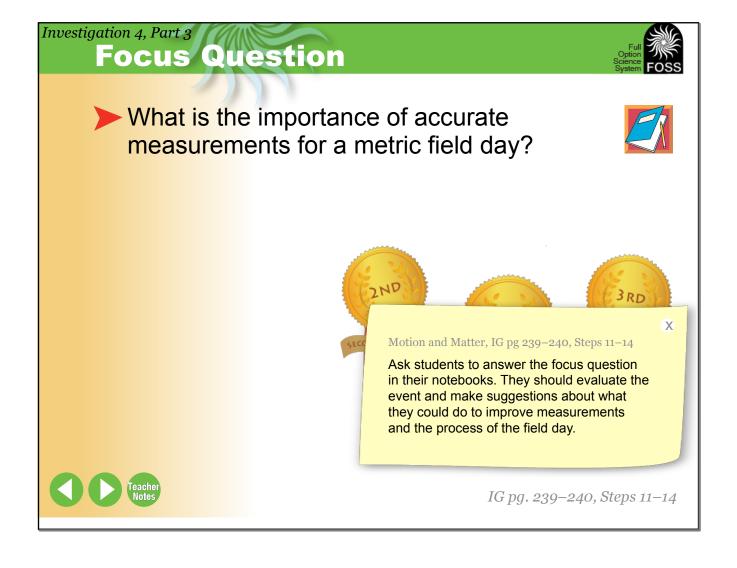
As you visit the events, make sure that students are using the measuring tools properly and that everybody is getting an equal number of turns.

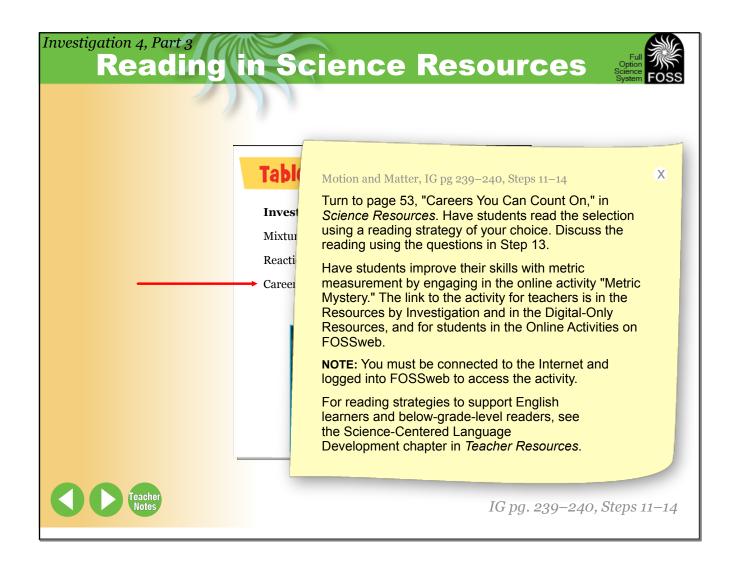






IG pg. 239, Steps 6–10





Investigation 4, Part 3

Investigation 4 Vocabulary Review sort



mixture
conservation of mass
cloudy
suspended
dissolve
solution

chemical reaction baking soda vinegar calcium carbonate chalk

gravel carbon dioxide salt transparent

Motion and Matter, IG pg 241, Step 15

Review vocabulary.

Take a few minutes to review the key words developed throughout Investigation 4.







IG pg. 241, Step 15

X

Investigation 4, Part 3 Wrap-Up



Look at the word wall and review the vocabulary from **Investigation 4.**

Review the focus questions from Investigation 4 in your groups.



What happens materials?

Motion and Matter, IG pg 241–242, Steps 16–17

new words and focus questions in their groups.

X

What is the imp

Administer the Posttest.

measurements

See the Interdisciplinary Extensions following Investigation 4 for suggestions to extend learning across the curriculum.

Conclude this Investigation by having students discuss the

Review Investigations 1,

See the Home/School Connection for Investigation 4 at the end of the Interdisciplinary Extensions section. This is a good time to send it home with students.







IG pg. 241-242, Steps 16-17

