

### About the Book

Text Type: Fiction/Informational Page Count: 16 Word Count: 300

### Book Summary

Through the cleverly written text, students learn the difference between the measurement systems of the United States and Canada. Pen pals Lisa and Magda illustrate height, weight, temperature, capacity, and distance in both metric and English units.

### About the Lesson

#### Targeted Reading Strategy

- Ask and answer questions

#### Objectives

- Use the reading strategy of asking and answering questions to understand text
- Compare and contrast
- Identify the *ou* diphthong
- Recognize different types of sentences
- Understand the use of measurement words

#### Materials

Green text indicates resources available on the website

- Book—*How We Measure* (copy for each student)
- Chalkboard or dry erase board
- Dictionary
- Ruler, scale, and thermometer
- Index cards
- Ask and answer questions, compare and contrast, sentence types, vocabulary worksheets
- Discussion cards



Indicates an opportunity for students to mark in the book. (All activities may be demonstrated by projecting book on interactive whiteboard or completed with paper and pencil if books are reused.)

#### Vocabulary

- Content words: *distance, English, height, measure, metric, system, tall, temperature, weighs*

### Before Reading

#### Build Background

- Show students different measuring devices, such as a ruler, a measuring cup, a scale, and a thermometer. Discuss the specific use of each measurement tool. (For example, a measuring cup cannot be used to measure how tall you are.) Point out the labels on each item, such as hash marks, abbreviations, and numbers.
- Point out and ask students why there are two sets of measurement lines on some or all of the items. Explain that one system of measurement is used in the United States, and a different system is used in most other countries.

## Preview the Book

### Introduce the Book

- Give students their copy of the book. Guide them to the front and back covers and read the title. Have students discuss what they see on the covers. Encourage them to offer ideas as to what type of book it is (genre, text type, fiction or nonfiction, and so on) and what it might be about.
- Show students the title page. Discuss the information on the page (title of book, author's name, illustrator's name).
- Ask students to turn to the table of contents. Remind them that the table of contents provides an overview of the book. Ask students what they expect to read about in the book, based on what they see in the table of contents. (Accept all answers that students can justify.)

### Introduce the Reading Strategy: **Ask and answer questions**

- Discuss with students how using prior knowledge to ask questions about a topic can help readers understand and remember the information in a book. Draw a large chart on the board with three rows, and label the rows *Before Reading*, *During Reading*, and *After Reading*.
- Model how to ask questions as you preview the front and back covers and title page of the book. *Think-aloud: It's often a good idea to ask yourself questions before you read a book. Doing this helps your mind get ready to read and understand the book as you look for the answers to your questions. I know from the title that this book is about measuring. But how are two girls important to measuring? On the front cover, I see a picture of a girl on a beach. The picture also has a thermometer. I wonder if the book is about different ways to measure temperature.*
- Write these questions in the *Before Reading* row, and explain that they will help students focus before they begin reading. Explain to students that as they read *How We Measure*, they will be helping you to make a list of questions before, during, and after reading. Then they will answer their questions using the information they learned as they read the book.
- Introduce, explain, and hand out the [ask-and-answer-questions worksheet](#). Have students look at the covers and title page again. Invite them to share questions they have about the book. Emphasize to students that there are no wrong questions. Write their questions on the board under the heading *Before Reading*, and have students write their questions in the *Before Reading* row of their worksheet.
- As students read, encourage them to use other reading strategies in addition to the targeted strategy presented in this section.

### Introduce the Comprehension Skill: **Compare and contrast**

- Explain to students that one way to understand and remember information in a book is to think about how the information is similar and different.
- Direct students' attention to the illustration on the back cover. Model how to compare and contrast the illustrations of the two girls. *Think-aloud: In this illustration, I see two girls. I see that some things about the girls are the same and some things are different. First, I notice that they are both girls. They are both wearing athletic shoes. These are ways the girls are the same. However, I also notice that one girl has light hair and the other has dark hair. This is one way the girls are different from each other.*
- Invite students to suggest other ways in which the girls are the same and different from each other. Draw a T-chart on the board and label one side *Same* and the other side *Different*. Record student responses on the chart under the appropriate headings.

### Introduce the Vocabulary

- Ask students to return to the table of contents. Read the table of contents together.
- Point out the words *tall*, *weigh*, and *temperature*. Write each word on the board and read the words with students. Ask them to tell what they know about the meaning of each word.
- Show students a ruler, scale, and thermometer. Ask them to tell which tool they would use to measure how much something weighs. Model how to use the scale to measure the weight of

## Lesson Plan *(continued)*

## How We Measure

a dictionary. Write the weight on the board under the *Weigh* heading. Ask students to tell the meaning of the word *weigh*.



- Ask students to tell which tool they would use to measure how tall something is. Point out that *height* is another term for how tall something is. Write the word *Height* next to the word *Tall* on the board. Model how to use the ruler to measure the height of the dictionary. Write the height on the board under the *Height* heading. Ask students to tell the meaning of the word *height*.
- Ask students to tell which tool they would use to measure how hot or cold something is. Fill the measuring cup with warm water. Model how to use the thermometer to measure the temperature of the water. Write the temperature on the board under the *Temperature* heading. Ask students to tell the meaning of the word *temperature*.
- Ask students whether or not they think everyone around the world measures height, weight, and temperature in the same way.

### Set the Purpose

- Have students read the book to find out how the English and metric measuring systems are similar and different. Remind them to stop after every couple of pages to ask questions and to think about which questions they answered.

## During Reading

### Student Reading

- **Guide the reading:** Have students read to the end of page 7. Encourage those who finish before others to reread the text. Model asking and answering questions.  
*Think-aloud:* After reading these pages, I looked at the ask-and-answer-questions chart on the board to see whether any of my questions were answered. I wanted to know how two girls were important to measuring and whether the book would be about different ways to measure temperature. I learned that the two girls live in different places and each girl uses one of the two measurement systems described in the book. From the illustration on page 5, I can tell that each system is used to measure length, weight, and volume in addition to temperature. I will write the answers in the middle row, labeled During Reading. Based on what I just read, I have another question: What else will Lisa and Magda measure? I will add this question to my chart in the During Reading row.
- Have students write answers they found and additional questions they raised while reading in the *During Reading* row on their worksheet. Invite them to share what they learned and the questions they generated. Write shared responses on the class chart.
- Make a new T-chart like the one in the Introduce the Comprehension Skill section with the headings *English* and *Metric*. Ask students to tell what is the same and different about the English and metric systems (*same: both measure how tall something is; different: English system measures in feet and inches, metric system measures in meters and centimeters*). Write the similarities and differences on the board.
- **Check for understanding:** Have students read to the end of page 11. Have them write answers they found while reading on their ask-and-answer-questions worksheet. Invite students to share the information they learned and the additional questions they generated as they read the book.
-  Ask students to work with a partner to identify and circle in their book a similarity in the two measurement systems. Then have the pairs identify and underline a difference between the two measurement systems. When they have finished, discuss their responses.
- Have students read the remainder of the book. Ask them to look for the answers to their new questions as well as examples of how the English and metric systems are alike and different.
-  Have students make a question mark in their book beside any word they do not understand or cannot pronounce. Encourage them to use the strategies they have learned to read the word and figure out its meaning.

### After Reading

- Ask students what words, if any, they marked in their book. Use this opportunity to model how they can read these words using decoding strategies and context clues.

### Reflect on the Reading Strategy

- **Think-aloud:** *I wanted to know what else Lisa and Magda would measure. I learned that they measured their weight, the temperature outside, ingredients for cookies, and how far it is to school.*
- Ask students to share questions they added to the *During Reading* row of their worksheet while reading, and ask them which questions were answered (or not answered) in the text.
- Reinforce that asking questions before and during reading, and looking for the answers while reading, keeps students interested in the topic.
- Have students write any remaining questions they have in the *After Reading* row of their worksheet. Ask them to share which questions they were not able to answer. Discuss with the group which resources they might use to find the answers (encyclopedia, Internet, and so on).

### Reflect on the Comprehension Skill

- **Discussion:** Review with students the T-chart on the board that lists the similarities and differences between the English and metric systems. Ask them how comparing and contrasting the two measurement systems helped them to better understand the systems. Ask them to explain how they would be able to identify the difference between something measured in the English system and something measured in the metric system.
- **Independent practice:** Introduce and explain the [compare-and-contrast worksheet](#). Ask students to use the T-chart to identify additional similarities and differences between the two systems of measurement.
- **Enduring understanding:** This book showed us that there are two different systems for measuring. Now that you know this information, why do you think it is important to learn and understand both systems?

### Build Skills

#### Phonics: **ou diphthong**

- Have students look at the cover of the book and point to the word *How*. Write the words *house* and *how* on the board. Read both words aloud with students and ask them what sound both words make (*the ou sound as in the sound you would make if you were hurt or if you bumped into a chair*). Underline the *ou* in *house* and the *ow* in *how*. Explain that these are different letter combinations that make the same sound, which is called a *diphthong*. Explain to students that a diphthong is a vowel sound made by gliding from one sound to another in the same syllable.
- Have students turn to page 8 and locate two words with the *ou* diphthong (*ounces, pounds*). Write the words on the board and select a volunteer to come to the board and circle the letters that make the diphthong sound.
- **Check for understanding:** Have students work with a partner to find and circle words on pages 9, 10, 11, and 12 that make the same diphthong sound (*outside, how, flour*). Ask for volunteers to come to the board and list words they find in the book. Read the completed list together.
- **Independent practice:** Challenge students to think of other words, not used in the book, that have the same *ou* diphthong sound. If time allows, discuss their answers.

#### Grammar and Mechanics: **Sentence types**

- Review or explain that there are different types of sentences. Have students turn to page 4 and read the first sentence. Explain that this is a *telling* sentence—it tells readers something. Write the word *Telling* on the board. Have students put their finger on the punctuation mark at the end of the sentence. Review that a period signals the end of a telling sentence.

- Direct students to the section heading *How Tall Are You?* on page 6. Review or explain that this is an *asking* sentence—it asks a question. Write the word *Asking* on the board. Have students put their finger on the punctuation mark at the end of the sentence. Review or explain that a *question mark* signals the end of an asking sentence. Read the heading aloud to students, modeling the voice inflection used at the end of a question.
- Repeat this process for the exclamatory sentence at the end of page 10, writing *Exclamation* on the board.



**Check for understanding:** Have students go through the book and underline one telling sentence, one asking sentence, and one exclamation. Have students share the sentences they selected with the group.

- **Independent practice:** Introduce, explain, and have students complete the [sentence types worksheet](#). If time allows, discuss their answers.

### Word Work: **Measurement words**

- Write the following words on index cards and place them in a pocket chart or along the chalkboard ledge: *feet, inches, meters, centimeters, pounds, ounces, kilograms, Fahrenheit, Celsius, cups, teaspoons, grams, milliliters, miles, kilometers*. Read each word with students.
- Explain to students that these measurement words are used to describe different units of measurement. Create a four-column chart on the board with the following headings: *Height, Temperature, Amount, Distance*. Read each heading with students. Have them write each heading and the words *English* and *Metric* on an index card.
- Have volunteers come to the board and sort the words into the correct columns in the chart. Then have students sort the words in each column into *English* and *metric*.
- **Check for understanding:** Mix up the index cards and show each card to students. Pause after showing each card and have students hold up the index card that tells what type of measurement the word describes and to which measurement system it belongs. Observe students' responses.
- **Independent practice:** Introduce, explain, and have students complete the [vocabulary worksheet](#). If time allows, discuss their answers.

## **Build Fluency**

### Independent Reading

- Allow students to read their book independently. Additionally, partners can take turns reading parts of the book to each other.

### Home Connection

- Give students their book to take home to read with parents, caregivers, siblings, or friends. Have them explain the two measuring systems to someone at home.

## **Extend the Reading**

### Transactional Writing Connection

Establish pen pals for students. Discuss with students what information to include in their letter (name, age, school, hobbies, and so on). Have students write a friendly letter to their pen pal.

Visit [Writing A–Z](#) for a lesson and leveled materials on transactional writing.

### Math Connection

Have students create a T-chart on a separate piece of paper. Label one side *English* and the other side *metric*. Provide the necessary measuring instruments and have students measure the height of their desk, weight of a dictionary, and outdoor temperature in both English and metric systems. Have them write the measurements on their chart.

### Skill Review

Discussion cards covering comprehension skills and strategies not explicitly taught with the book are provided as an extension activity. The following is a list of some ways these cards can be used with students:

- Use as discussion starters for literature circles.
- Have students choose one or more cards and write a response, either as an essay or as a journal entry.
- Distribute before reading the book and have students use one of the questions as a purpose for reading.
- Cut apart and use the cards as game cards with a board game.
- Conduct a class discussion as a review before the book quiz.

### Assessment

Monitor students to determine if they can:

- consistently ask and answer questions about their reading before, during, and after reading; write questions and answers to their questions on a worksheet
- accurately compare and contrast two measurement systems during discussion and on a worksheet
- correctly locate in the text and write examples of the *ou* diphthong during discussion
- correctly identify and write three different types of sentences during discussion and on a worksheet
- accurately recognize and classify measurement words during discussion and on a worksheet

### Comprehension Checks

- Book Quiz
- Retelling Rubric