

About the Book

Text Type: Nonfiction/Informational Page Count: 24 Word Count: 1,960

Book Summary

Have you ever wondered why your eyes are blue and your sibling's are brown? Why a friend can roll his tongue and you can't? This informative book answers these questions. Readers will also learn about dominant and recessive traits and how to use a Punnett square to determine the probability of inheriting a particular characteristic.

About the Lesson

Targeted Reading Strategy

- Ask and answer questions

Objectives

- Ask and answer questions to understand the text
- Identify main ideas and supporting details
- Identify and use commas after introductory words
- Use suffixes *-ive*, *-itive*, and *-ative*

Materials

Green text indicates resources available on the website

- Book—*What Makes You, You?* (copy for each student)
- Chalkboard or dry-erase board
- KWL / ask and answer questions, main idea and details, commas after introductory words, suffixes worksheets
- Discussion cards



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

Vocabulary

*Bold vocabulary words also appear in a pre-made lesson for this title on VocabularyA-Z.com.

- Content words:

Story critical: **dominant** (adj.), **genes** (n.), **genetics** (n.), **heredity** (n.), **recessive** (adj.), **traits** (n.)

Enrichment: **acquire** (n.), **chromosomes** (n.), **DNA** (n.), **domesticate** (n.), **offspring** (n.), **override** (n.)

Before Reading

Build Background

- Write the word *heredity* on the board. Ask students to explain what the word means (the transmission of genetic characteristics from parents to offspring) and to think about what they know about heredity. Make a KWL chart on the board for your use. Introduce and explain the [KWL / ask-and-answer-questions worksheet](#). Review or explain that the *K* stands for knowledge we know, the *W* stands for questions we want to know, and the *L* stands for the knowledge we learned. Discuss what the class knows about heredity and invite students to write the information in the *K* row of their worksheet. Write some of the information on the board.

- Ask students what they would like to know about heredity. Encourage them to write their questions in the *W* row of their KWL chart.

Preview the Book

Introduce the Book

- Give students a copy of the book and have them preview the front and back covers. Have students discuss what they see on the covers. Have them predict what they might learn about genetics.
- Show students the title page and read the title. Talk about the information on the page (title, author's name).
- Direct students to the table of contents. Remind students that the table of contents provides an overview of what the book is about. Each section heading provides an idea of what they will read in the book.

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

- Explain to students that asking questions about a topic and making a connection with what they know while they are reading helps them understand and remember the information in the book.
- Have students look at the section titles. Encourage them to write any questions they have about heredity, based on the covers and table of contents, in the *W* row of their KWL chart. Remind students that no question is ever inappropriate if they truly do not know the answer.
- After reviewing the table of contents, model using it to connect to prior knowledge and to create questions relevant to the text.
Think-aloud: I wonder what the differences are between acquired and inherited traits. Also, I have green eyes. One of my brothers has brown eyes, and the other one has blue eyes. I wonder if this book will explain how that happened. I will add those two questions to the W column of my KWL chart. I'll have to read the book to find the answers.
- Have students preview the rest of the book, looking at photos, illustrations, charts, and boxes with additional text. Have them add any additional questions to their KWL chart.
- As students read, they should use other reading strategies in addition to the targeted strategy presented in this section.

Introduce the Vocabulary

- Remind students of the strategies they can use to work out words they don't know. For example, they can use what they know about letter and sound correspondence to figure out a word. They can look for base words within words, prefixes, and suffixes. They can use the context to work out meanings of unfamiliar words.
- Model how to apply word-attack strategies. Direct students to the bold words *heredity* and *genetics* on page 4. Model how they can use context clues to find the meanings of the unfamiliar words. Explain that these are *definition* context clues because the definition of each word is found in the sentences that follow. Read the sentences aloud.
- Remind students that they should check whether a word makes sense by rereading the sentence.
- Have students turn to the glossary on page 24. Have them read the glossary words and their definitions aloud. Next, have students turn to the pages indicated and read each glossary word in the sentence in which it appears. Use context clues in the surrounding sentences to work out unfamiliar vocabulary words as necessary.

Set the Purpose

- Have students read the book to find the answers to their questions about genetics and heredity.

During Reading

Student Reading



Guide the reading: Have students read to the end of page 14. Ask them to identify the main idea in each section (what the section is about). Then have students underline the most important information, or the supporting details, in each section while looking for answers to their questions on the KWL chart. Have students go back and reread the sections if they finish before everyone else.

- When they are finished reading, have students share their questions and the answers they found. Have students add any additional questions they thought of while reading.

- Model answering a question on the KWL chart.

Think-aloud: *I learned the differences between acquired and inherited traits, so I can circle that question and write the answer in the L row of the chart (inherited: traits I was born with and cannot change; acquired: traits I learned). Another question I asked on the KWL chart was why my two brothers and I have different eye colors. Now I know I need to consider the colors of my grandparents' eyes to discover why that happened. I need to make a Punnett square to figure out the answer.* (Tailor comments to fit personal situation.)

- Have students review the questions written on their KWL charts and write in the answers.
- Ask students if they thought of other questions while reading. Have them add these to their KWL chart.



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 each 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

- Reinforce that asking questions before and during reading and looking for answers while reading keeps them involved in the reading and helps them understand and remember what they have read.


Teach the Comprehension Skill: **Main idea and details**

- **Discussion:** Ask what the author's purpose was for writing the book (to tell information about heredity and genetics). Have students complete the L row of their KWL chart. Ask them to circle any questions they did not find answers to and offer suggestions as to where they can find the answers. Discuss what they learned about heredity and genetics.
- **Introduce and model:** Review or explain that many books are mainly about one thing, or topic. Remind students that in a book like this one, it was necessary to look at the table of contents or to read the book to identify the topic.
- Explain that main ideas are the most important things the writer wants the reader to know. Remind students that the headings of sections or chapters often give clues to the main ideas. Direct students to the table of contents on page 3. Explain that each section contains details about heredity or genetics. Have students find the section title "Genetics in Our Future." Explain that this section tells about what scientists are discovering to change medicine, crime investigation, and the impact on farming. Included are details about how scientists can alter our foods. Explain to students that this is a very controversial area of current science and is a good topic for further research. Remind students that finding details such as these will help them understand and remember what they read.

- **Check for understanding:** Have students look at pages 5, 6, and 7. Ask them to find the main idea and one detail about the history of genetics. Write under the heading *Main Idea: Gregor Mendel was the first person to formally study genetics*. Under the heading *Details*, write: 1. He began by studying the height of pea plants.
- **Independent practice:** Introduce, explain, and have students complete the [main-idea-and-details worksheet](#). If time allows, discuss their responses.

Build Skills

Grammar and Mechanics: Commas after introductory words

- Review or explain that some sentences have introductory words or phrases, which are set off by commas. Have students turn to the second paragraph on page 7. Read the paragraph with them. Ask students to find the sentence that begins with the words *For example* and point out that this sentence provides an example of the information in the sentence preceding it. Explain to students that these words are called an *introductory phrase*. Explain that although the phrase is not necessary for the sentence or paragraph to make sense, it clarifies for the reader what the author wanted to say.
- Have students turn to the first paragraph on page 9. Have them find an introductory word in one of the sentences that is set off by a comma (*However*). Explain that introductory phrases can be one word or many words. The focus of this activity is on phrases that are only one or two words.
-  **Check for understanding:** Have students go through the book and circle the introductory phrases. Monitor students' work. When they are finished, have students tell the pages and read the sentences they marked. (They should have fourteen phrases circled, including the examples discussed in class.)
- **Independent practice:** Introduce, explain, and have students complete the [commas-after-introductory-words worksheet](#). If time allows, discuss their answers.

Word Work: Suffixes *-ive*, *-ative*, and *-itive*

- Write the word *recessive* on the board and circle the suffix *-ive*. Point out that the word *recessive* is an adjective used to describe the word *gene* in the text. Explain to students that the root word is *recede*, which means *to draw back*. Explain that in order to create the word *recessive*, the spelling changes and the suffix *-ive* is added. Explain to students that the suffixes *-ive*, *-ative*, and *-itive* mean *having the quality or characteristic of*.
- Write the words *deceive*, *talk*, and *repeat* on the board. Add the appropriate suffix (*deceptive*, *talkative*, *repetitive*). Ask students to note how the spellings of *deceive* and *repeat* change.
- **Check for understanding:** Write the following words on the board: *possessive*, *comparative*, and *repetitive*. Have students copy these words on a separate sheet of paper. Ask students to circle the suffix in each word and identify the root word. Have students share their responses.
- **Independent practice:** Introduce, explain, and have students complete the [suffixes -ive, -ative, and -itive worksheet](#). If time allows, discuss their responses.

Build Fluency

Independent Reading

- Invite students to read their book independently. Additionally, invite partners to 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.

Extend the Reading

Writing Connection

Have students write descriptions of their family members, including physical characteristics, habits, mannerisms, and talents. Have students label each as an inherited trait or an acquired trait. If a characteristic is inherited, have students decide from which side of the family it came. If students do not know their parents, work with them to decide which traits they have that are inherited.

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

Science Connection

Have students work in small groups to research topics such as DNA, cloning, stem cell research, and genetically modified foods. Encourage them to make visual displays that support their presentation. Have students share what they learned with the group.

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.
- 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 text during discussion and on a worksheet
- accurately identify main ideas and supporting details in the book during discussion and on a worksheet
- correctly recognize and use commas after introductory words in text and on a worksheet
- correctly apply suffixes *-ive*, *-ative*, and *-itive* during discussion and on a worksheet

Comprehension Checks

- [Book Quiz](#)
- [Retelling Rubric](#)