Language, Literacy & Vocabulary!

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Take-Home Book Masters
Content and Literacy Development for Diverse Language Learners

National Geographic’s Windows on Literacy: Language, Literacy & Vocabulary program is designed for today’s classroom—diverse, challenging, and complex. Many children come to school without the basic background knowledge and oral language development needed for academic success. Language, Literacy & Vocabulary provides the extra support young learners need to experience success from the start.

National Geographic’s Language, Literacy & Vocabulary program offers rich opportunities for beginning learners to build background knowledge, develop vocabulary and oral language, and learn grade-level content. Throughout the nation, teachers told us they needed materials that scaffolded the learning so that children from diverse language backgrounds, at-risk readers, and children with learning challenges would have opportunities to achieve their full potential. The Language, Literacy & Vocabulary program meets this need through:

• Thematic units built around essential key concepts in science, social studies, and math
• Academic vocabulary development
• Age-appropriate and engaging nonfiction texts
• Considerate text with strong picture-text match
• Scaffolded, multilevel instruction for students at different levels of language proficiency
• Springboards to related reading and writing
• Customized instruction for English language learners (ELLs)
• Research-based instructional strategies
• Rich and varied teacher support and tools
Consulting Author: Linda Hoyt

Linda Hoyt is an educational consultant who strives to help teachers and school districts implement best practices in literacy instruction. She has had a rich array of experiences in education, ranging from classroom teaching to working as a reading specialist, curriculum developer, Title 1 teacher, staff developer, and Title 1 District Coordinator. She is the author of numerous books, articles, and videos and conducts presentations and workshops on literacy throughout the country.

Program Advisor: Mary Hawley

Mary Hawley is an educational consultant who has worked with teachers, educators, and publishers to implement best practices for teaching students with diverse language backgrounds. She has taught English as a Second Language in Mexico, worked with migrant and refugee children in Indiana, and studied in Latin America. In recent years, she has been instrumental in developing Spanish reading programs and products for English language learners.

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Success From the Start!

Achieving academic success is essential for children to make adequate yearly progress and for continued academic growth. Conclusive data and research show that children who fall behind on their acquisition of academic content and vocabulary during the K–2 years will fall further behind as they advance through the grade levels. To help children achieve success from the start and prevent them from falling behind, *Windows on Literacy: Language, Literacy & Vocabulary* gives children access to the core grade-level content they need for standards-based academic success through these features:

- Explicit instruction in core academic content and vocabulary to build a foundation for future success
- Focused, targeted, standards-based content
- Alignment with TESOL standards
- Multiple exposures to and applications of academic vocabulary
- Carefully leveled developmental texts
- Picture glossaries of key content vocabulary
- Simple, engaging, and visually striking student book pages
- Strong picture-text match
- Familiar language and simple sentence structures
- Multiple opportunities for oral language development
- Theme Builders for building background and developing oral language
- Opportunities for writing and related reading
One Program for Your Diverse Classroom

Windows on Literacy: Language, Literacy & Vocabulary recognizes that every classroom includes diverse language learners as well as children whose background knowledge and oral language require development. Teachers told us they wanted one program that they could use with English language learners, children with reading and vocabulary challenges, and children with learning issues that affect their ability to acquire and process language. With appropriate modifications for different needs, Language, Literacy & Vocabulary gives teachers a sound, research-based instructional plan to meet the common needs among diverse language learners.
Windows on Literacy: Language, Literacy & Vocabulary is designed to be used in a variety of classroom situations. This flexibility allows you to custom fit the program to match your scheduling and program needs.

### Regular Classrooms

The chart below shows the suggested pacing for use in the regular classroom. Each theme can be completed in five days.

<table>
<thead>
<tr>
<th>Day 1 · Lesson 1</th>
<th>Day 2 · Lesson 2</th>
<th>Day 3 · Lesson 3</th>
<th>Day 4 · Lesson 4</th>
<th>Day 5 · Lesson 5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Administer Pre-Test</td>
<td>Reread Concept Book</td>
<td>Read First Related Nonfiction Book</td>
<td>Read Second Related Nonfiction Book</td>
<td>Rereading and Assessment</td>
</tr>
<tr>
<td>Read Concept Book</td>
<td>Develop Concepts and Vocabulary</td>
<td>Develop Concepts and Vocabulary</td>
<td>Review Concepts and Vocabulary</td>
<td>Guided Writing</td>
</tr>
<tr>
<td>Introduce Concepts and Vocabulary</td>
<td>Introduce Comprehension Strategy</td>
<td>Small Group Reading</td>
<td>Small Group Reading</td>
<td>Optional Reading</td>
</tr>
<tr>
<td>Model the Reading</td>
<td>Small Group Reading</td>
<td>Practice Comprehension Strategy</td>
<td>Apply Comprehension Strategy</td>
<td>Home Connection</td>
</tr>
<tr>
<td></td>
<td>Modeled Writing</td>
<td>Shared Writing</td>
<td>Guided Writing</td>
<td>Administr Post-Test</td>
</tr>
</tbody>
</table>
After-School Programs

*Language, Literacy & Vocabulary* works within a variety of after-school programs. Whether your after-school program meets every day or only three days a week, the program can easily be adjusted to meet your scheduling needs.

- For programs that meet every day, one theme can be completed each week of the program. Use the Pacing Guide on page 6.
- For programs that meet three times per week, one theme can be completed every two weeks. Use the suggested plan shown below.

### Pacing Guide: Two Weeks for One Theme

<table>
<thead>
<tr>
<th>Week 1 · Day 1 · Lesson 1</th>
<th>Week 2 · Day 1 · Lesson 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-Test</td>
<td>Read Second Related Nonfiction Book</td>
</tr>
<tr>
<td>Read Concept Book</td>
<td>Review Concepts and Vocabulary</td>
</tr>
<tr>
<td>Introduce Concepts and Vocabulary</td>
<td>Small Group Reading</td>
</tr>
<tr>
<td>Model the Reading</td>
<td>Apply Comprehension Strategy</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Week 1 · Day 2 · Lesson 2</th>
<th>Week 2 · Day 2 · Begin Lesson 5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reread Concept Book</td>
<td>Assess and Extend</td>
</tr>
<tr>
<td>Develop Concepts and Vocabulary</td>
<td>Rereading and Assessment</td>
</tr>
<tr>
<td>Introduce Comprehension Strategy</td>
<td>Begin Guided Writing</td>
</tr>
<tr>
<td>Small Group Reading</td>
<td></td>
</tr>
<tr>
<td>Modeled Writing</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Week 1 · Day 3 · Lesson 3</th>
<th>Week 2 · Day 3 · Complete Lesson 5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Read First Related Nonfiction Book</td>
<td>Complete Guided Writing</td>
</tr>
<tr>
<td>Develop Concepts and Vocabulary</td>
<td>Optional Reading</td>
</tr>
<tr>
<td>Small Group Reading</td>
<td>Home Connection</td>
</tr>
<tr>
<td>Practice Comprehension Strategy</td>
<td>Post-Test</td>
</tr>
<tr>
<td>Shared Writing</td>
<td></td>
</tr>
</tbody>
</table>

Summer School Programs

*Language, Literacy & Vocabulary* is the perfect fit for your summer school program. When time is short and results matter, your class time must be productive. The five-day lesson plan allows you to complete one theme during each week of your summer school program. Whether your summer school plan includes a four-, five-, or six-week program, you can select developmentally appropriate themes that focus on the content areas of math, science, and social studies while developing strong literacy skills.

<table>
<thead>
<tr>
<th>Four-Week Program</th>
<th>Five-Week Program</th>
<th>Six-Week Program</th>
</tr>
</thead>
<tbody>
<tr>
<td>Choose four themes.</td>
<td>Choose five themes.</td>
<td>Choose six themes.</td>
</tr>
</tbody>
</table>
Overview

States of Matter

STANDARDS

ACADEMIC LANGUAGE/ELD
• Use academic vocabulary related to the study of states of matter
• Use appropriate language forms to discuss and predict states of matter, and to make inferences
• Develop fluency in reading, writing, listening to, and speaking English

SCIENCE
• Identify the three states of matter—solid, liquid, gas—and describe the properties of each
• Explain how temperature can cause matter to change from one state to another state

READING/LANGUAGE ARTS
• Learn and apply the comprehension strategy: Making Inferences
• Use the text features: Graphic Organizers/Charts, and Contents/Headings
• Write about states of matter in everyday life
• Learn and use vocabulary related to states of matter

Before Theme Assessment
To compare progress before and after teaching this theme, use the Pre-Test and Post-Test Assessments, pages 33–43.

Optional Reading

Windows on Literacy
Content-Based Fiction
Uncle Terry’s Glasses  Level 17
Summer Day Slushes  Level 18

Windows on Literacy
Nonfiction
Heat Changes Things  Level 7
Water  Level 12
Where Do the Puddles Go?  Level 18
**Instructional Highlights**

**Key Concepts**
- Matter can take the form of a solid, a liquid, or a gas.
- Each state of matter has its own unique properties.
- Changes in temperature can cause matter to change from one state to another state.

**Comprehension Strategy**
Making Inferences

**Key Concept Words**
- change
- matter
- gas
- melt
- heat
- solid
- ice
- steam
- liquid
- temperature

**Text Features**
- Charts/Graphic Organizers
- Contents/Headings

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### Theme Planner

<table>
<thead>
<tr>
<th>Lesson 1*</th>
<th>Lesson 2</th>
<th>Lesson 3</th>
<th>Lesson 4</th>
<th>Lesson 5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Read States of Matter</td>
<td>Reread States of Matter</td>
<td>Read Water Can Change</td>
<td>Read Everything Is Made of Matter</td>
<td>Assess and Extend</td>
</tr>
<tr>
<td>- Administer Pre-Test, p. 38</td>
<td>- Develop Concepts and Vocabulary</td>
<td>- Develop Concepts and Vocabulary</td>
<td>- Review Concepts and Vocabulary</td>
<td>- Administer Post-Test, p. 41</td>
</tr>
<tr>
<td>- Introduce Concepts and Vocabulary</td>
<td>- Introduce the Comprehension Strategy: Making Inferences</td>
<td>- Small Group Reading</td>
<td>- Small Group Reading</td>
<td>- Rereading</td>
</tr>
<tr>
<td>- Model the Reading</td>
<td>- Practice the Comprehension Strategy: Making Inferences</td>
<td>- Shared Writing</td>
<td>- Apply the Comprehension Strategy: Making Inferences</td>
<td>- Guided Writing</td>
</tr>
<tr>
<td></td>
<td>- Small Group Reading</td>
<td></td>
<td>- Guide Writing</td>
<td>- Assessment Tools</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>- Optional Reading</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>- Home Connection</td>
</tr>
</tbody>
</table>

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*Teacher's Guide pp. 10–11

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**Lesson 1**
Read States of Matter
- Administer Pre-Test, p. 38
- Introduce Concepts and Vocabulary
- Model the Reading

**Lesson 2**
Reread States of Matter
- Develop Concepts and Vocabulary
- Introduce the Comprehension Strategy: Making Inferences
- Small Group Reading
- Modeled Writing

**Lesson 3**
Read Water Can Change
- Develop Concepts and Vocabulary
- Small Group Reading
- Practice the Comprehension Strategy: Making Inferences
- Shared Writing

**Lesson 4**
Read Everything Is Made of Matter
- Review Concepts and Vocabulary
- Small Group Reading
- Apply the Comprehension Strategy: Making Inferences
- Shared Writing
- Guided Writing

**Lesson 5**
Assess and Extend
- Administer Post-Test, p. 41
- Rereading
- Guided Writing
- Assessment Tools
- Optional Reading
- Home Connection
Lesson 1

Read States of Matter

**OBJECTIVES**
- Understand that matter has three states, each with unique properties, and that temperature can cause matter to change states
- Learn and use vocabulary related to states of matter
- Use photos to predict vocabulary
- Use text features, such as headings, to understand text

**Materials**
- Realia: three small resealable plastic bags, crayon, water
- Theme Builder
- States of Matter
- Learning Masters page 25
- Audiolesson 9

**Introduce Concepts and Vocabulary**

**Introduce Theme Question**
Ask students: Think about something such as a book you can hold in your hand. How is the book different from something you pour? How is it different from the air you breathe? Explain that students will learn about different kinds of matter and the language to use to talk about matter.

**Turn and Talk** Provide learning groups with small plastic bags—one with a solid object such as a crayon, one with water, and one with only air. Have students touch the bags and describe differences. (The crayon keeps its shape. It is hard. The water changes shape. I can’t see the air.)

**Develop Oral Language**
Show the bag with the solid. Model sentences such as the following: The crayon is hard. It keeps its shape. The crayon is a solid. Continue in the same way with the other two bags.

**Turn and Talk** Have learning partners name and describe one item that is a solid, one that is a liquid, and one that is a gas.

**Introduce Theme Poem**
Display the Theme Poem on the Theme Builder. Have students echo-read the poem, reading line by line after you. Then read the poem in unison. Ask partners to use Learning Masters page 25 to practice reading the poem.

**Introduce Key Vocabulary**
Use the Think and Discuss scene to teach Key Concept Words and model language forms.
There are three states of matter—solid, liquid, and gas.

The people skate on ice. Ice is a solid. It will change to a liquid when the sun ______ it.

Continue to model sentences, using the words listed below to help identify objects in the scene. As you introduce words, jot them on chart paper. Display this Word Bank throughout the theme.

**Turn and Talk** Have students work with partners to practice using the words and language forms: The ______ is a ______. It will change to a ______ when you ______ it.

<table>
<thead>
<tr>
<th>NAMING WORDS</th>
<th>ACTION WORDS</th>
</tr>
</thead>
<tbody>
<tr>
<td>gas</td>
<td>change</td>
</tr>
<tr>
<td>ice</td>
<td>heat</td>
</tr>
<tr>
<td>liquid</td>
<td>melt</td>
</tr>
<tr>
<td>matter</td>
<td></td>
</tr>
<tr>
<td>solid</td>
<td></td>
</tr>
<tr>
<td>steam</td>
<td></td>
</tr>
<tr>
<td>temperature</td>
<td></td>
</tr>
</tbody>
</table>

**Build Background**
Display the Think and Discuss scene on the Theme Builder again. Ask students to describe the state of matter in each photo.

**Turn and Talk** Have partners use the language forms to discuss states of matter and how they can change.
Model the Reading

Preview the Book
Distribute copies of States of Matter. Read aloud the title and the author's name. As you page through the book, point out:
• The Contents page tells what students will read about.
• Each entry from the Contents appears as a heading in the book. The heading tells what the pages are about.
• The sidebar on page 7 adds information about the states of matter.

Predict Vocabulary
Encourage students to use pictures to predict vocabulary: Which words do you expect to see in this book?
Display pages 6–7 and cover the words: Which words do you expect to see on these pages?
Students may mention objects on the pages, such as rocks. Add these words to the Word Bank. Have students talk with partners and use solid, liquid, and gas to describe the objects. Continue the activity with other pages, as time allows.

Model the Reading
Invite students to follow along as you read aloud pages 4–12 in States of Matter. Read fluently, modeling smooth, accurate reading with appropriate expression. After reading each group of pages, pause to think aloud. Also, encourage students to ask questions and make observations.

Pages 4–7
Think Aloud This is like the Think and Discuss scene on the Theme Builder. I know the labels name the people and things.

Pages 8–13
Think Aloud When I look through the headings, I see that the next three pairs of pages each describes one of the states of matter. This tells me that each pair of pages gives information about the kind of matter named in the heading.

Share the Reading
Now have partners complete the reading. Encourage them to pause after reading one or two pages and have conversations about what they have read. Ask them to share questions they may have.

Reread for Fluency
To have students practice fluent reading, read aloud pages 6–7 of States of Matter, sentence by sentence. Have students echo-read each sentence in unison, imitating your model. Then have students reread the entire book independently to build fluency. See Customize the Reading.

Customize Instruction for ELLs

Newcomers/Beginning During reading, ask, “Which is a solid/liquid/gas?” Have students point to objects or say their names.

Developing During reading, ask, “What is the state of matter of this object?” Encourage students to respond with the language form: The _____ is a _____.

Expanding/Bridging Ask students to speak in complete sentences as they identify objects and tell the state of matter of each. Extend the activity to classroom objects.

Customize the Reading

Students reread and talk about States of Matter on their own to build fluency.
• Students who are not yet able to read the book can name objects they know and tell the state of matter of each.
• Students who need extra support can reread the book while listening to the audiolesson.
• Students who can read the book might read independently or aloud with partners.
Lesson 2

**OBJECTIVES**
- Understand that matter has three states and that temperature can cause matter to change states
- Use vocabulary to discuss the states of matter and how they can change
- Learn the comprehension strategy: Making Inferences
- Read to gain fluency in oral and silent reading
- Write about states of matter

**Materials**
- Realia: three clear glasses, tap water, club soda
- Theme Builder
- States of Matter
- Learning Masters pages 24, 26, 27
- Audiolesson 9

**Develop Concepts and Vocabulary**

**Develop Oral Language**
Display several objects, such as an empty glass, a glass filled with tap water, and a glass filled with club soda. Ask students to describe the states of matter. Next, ask: What will happen when you heat water in a pot?

**Turn and Talk** Have learning partners describe objects in the classroom by their shape, size, and state of matter. The listening partner can guess what the objects are.

**Revisit the Theme Poem** Display the theme poem on the Theme Builder. Assign students to read lines 5, 6, and 7. Have the group read the other lines in unison. Read the poem together.

**Build Background**
Display the graphic organizer on the Theme Builder and identify the three states of matter shown on the web. Then review changes in matter as shown on the graphic organizer. For example: When you heat water, the water will change to steam. When you freeze water, the water will change to ice.

**Turn and Talk** Encourage partners to describe the processes shown on the graphic organizer and say the state of matter in each picture.

**Begin Vocabulary Log** As students read, encourage them to use sticky notes to tag words they would like to save. After reading, students can record the words and their notes about them.

Use Learning Masters page 24.

**Introduce the Comprehension Strategy**

**Introduce Making Inferences**
Students make inferences when they combine information from the text with things they already know to infer meaning.

**Think Aloud** When I read a book, sometimes the author doesn’t tell me everything I need to know. I have to think about what I’m reading and what I see in the pictures and combine that information with what I already know. That’s called making inferences.

**Model Making Inferences**
Turn to pages 14–15 and model the comprehension strategy and language forms for making inferences.

**The words tell me** that the water has become a solid—ice.

**The picture shows me** the ice on a small river or canal. I can see the boats frozen in the ice.

**I know that** water in a river is usually a liquid. I know that when the temperature is very cold, water will change to a solid.

**I infer that** the cold temperature changed the water in the river into a solid because I know that water freezes when it’s very cold.

For additional practice in making inferences, have partners work on Learning Masters page 26.
As students read, invite them to share what they notice. Use some of the suggestions below to encourage observations and talk about the book.

**Pages 6–15**
**Check Understanding** Tell about the differences between a solid, a liquid, and a gas. (The size and shape of a solid stay the same. The shape of a liquid depends on where it is. You can see solids and liquids, but you can’t always see gases. You can see signs, like air bubbles in water, that show that gases are there.)

**Pages 16–17**
**Check Understanding** In your own words, tell about the states of matter in the water cycle. (When the sun heats water in the puddle, the water changes into vapor, a gas. In clouds, the water changes back into a liquid. The liquid then falls as rain.)

**Pages 18–19**
**Check Understanding** Have students use the words from the Word Bank and make inferences about changes in the states of matter shown in the pictures.

**Pages 20–21**
**Check Understanding** Have students discuss the pictures. How are solids, liquids, and gases the same? (They all take up space.) Which does not change shape easily? (a solid) Which do we not see easily? (a gas)

**Discuss the Book**
Invoke students to share what they learned. Ask them to describe the three states of matter and give examples of each. Also, ask students to describe how states of matter can change and to provide examples of the changes. Encourage students to use the words in the Word Bank to discuss what they have read. Remind students to add words to their Vocabulary Logs.

Students can complete **Learning Masters** page 27.

**Reread for Fluency**
Read aloud the paragraph on page 8, without pausing at the periods or commas. Ask students why it was hard to understand you. (You didn’t pause.) Explain that a period is a place to stop at the end of a sentence; a comma shows a place to pause within a sentence. Guide students to improve in phrasing by being sure to pause for each comma and period as they read the page in unison with you. For other suggestions, see **Customize the Reading.**

**Customize the Reading**
Students reread and talk about States of Matter using one of the following options:

- Look through the pages, pointing to objects and telling their state of matter.
- Reread the book while following along with the audiolesson.
- Read independently or read aloud with a partner.

**Modeled Writing**

Use the graphic organizer on the **Theme Builder** to review some Key Concepts of the theme. Prepare to model writing, including how to use details to support main ideas.

**Think Aloud** I’m going to write about an amusement park and things I might find there in different states of matter. I’ll draw a web like the one on the **Theme Builder** and list ideas for each state of matter—solid, liquid, or gas. (Ideas for solids should include rides, such as a roller coaster. Liquids and gas could include soda.)

**Think Aloud** I’m going to create an interesting beginning by describing the roller coaster. I’ll begin by telling where we are.

At an amusement park, a red roller coaster goes slowly up the hill. The roller coaster is a solid. It has a shape. When it moves from place to place, it still keeps its shape.
Lesson 3

Read Water Can Change

Develop Concepts and Vocabulary

Develop Oral Language
Model the Key Concept Words melt, ice, and solid. Display an ice cube. Model the following language: What will happen when the ice is put in the sun? It will melt. If possible, put the object in the sun to demonstrate melting. Next, display an ice tray filled with water. Model the following language: What will happen when the water is put into the freezer? It will change into ice. It will change into a solid.

Turn and Talk Have learning partners examine the other items you have brought in—butter and chocolate. Have them use your model to ask questions and make predictions.

Revisit the Theme Poem Display the poem on the Theme Builder. Invite students to point to appropriate pictures beneath the poem as they read with you.

Build Background
Distribute copies of Water Can Change. Have students describe the objects on the cover. Ask them to predict what will happen. (The water will be heated. The girl, with help from an adult, may cook something in the water. There will be steam.)

Small Group Reading

Get Ready to Read
Preview the Book Read aloud the title, the author’s name, and the Think and Discuss question on the back cover: What makes the water boil?

Page through the book and do the following:
• Point out how the chapter titles in the Contents match the headings in the book.
• Ask students to describe the state of matter of the water on the pages.
• Ask students to predict what they will learn.

Predict Vocabulary Encourage students to use photos to predict vocabulary: Which words do you expect to see in this book?

Display a page and cover the words: Which words do you expect to see on this page?

List the words students mention. Add Key Concept Words in the book that students do not mention.

Text Feature: Chart
Introduce Display the chart on page 12. This chart summarizes information in the book about how water changes.

Model I see that the top row of this chart shows how ice changes as a result of being heated. It changes into a liquid.

Practice Direct students’ attention to the second row at the bottom of the page. Ask what it shows. (It shows how water changes to steam as a result of being heated.)
**Read the Book**

As students read, invite them to share what they notice. Use some of the suggestions below to encourage observations and talk about the book.

**Pages 3–5**  
**Key Concept Words** ice, solid, heat, change

**Practice the Comprehension Strategy**

Encourage students to **Make Inferences** about the change in the state of matter to help them better understand pages 4–5.

What change in state is happening? In the first picture, what state is the water in? In the third picture, what state is the water in? What causes the change?

Guide students in recognizing how they added what they already knew to what they saw and read on these pages.

**Pages 6–9**  
**Key Concept Words** liquid, steam

**Support Comprehension** Ask students to make predictions: The girl is going to heat the water. What will happen to the water? *(It will change to steam.)*

**Pages 10–11**

**Key Concept Word** gas

**Check Understanding** Describe the change that happened when the water was heated. *(It changed from a liquid to a gas.)* How is a gas different from a solid or a liquid? *(A gas is hard to see.)*

**Pages 12**

**Check Understanding** Tell about the changes that the chart shows. What causes the changes?

**Discuss the Book**

Invite students to use the Word Bank to tell about the book. What have they learned about two ways that water can change? Can they explain what causes the change? Remind students to add words to their Vocabulary Logs.

Use **Learning Masters** page 28.

**Reread for Fluency**

Have students reread the entire book independently to build fluency. See **Customize the Reading**.

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**Shared Writing**

Review the paragraphs you modeled in Lesson 2. Invite students to help you write a paragraph about other activities at an amusement park, such as throwing darts at balloons tacked to a dart board or riding down a water slide. Be sure to help students tie in properties of matter they have learned about.

**Customize Instruction for ELLs**

**Newcomers/Beginning** Show a photo or sketch of an amusement park. Guide students as they point out objects and tell the state of matter of each.

**Developing** Encourage students to finish sentences such as, “The liquids at the park include *(the water at the water slide).”*

**Expanding/Bridging** Have students call on prior knowledge to add details as they describe items from the amusement park.
Lesson 4

**Read Everything Is Made of Matter**

**Review Concepts and Vocabulary**

**Develop Oral Language**
If possible, take students to a different place in the school, such as the cafeteria. Have students identify various items as a solid, liquid, or gas. Have them describe any changes in states of matter they see.

**Turn and Talk** Ask learning partners to take turns describing what they remember from the visit about states of matter. Invite them to add information about states of matter in restaurants they have visited.

**Revisit the Theme Poem** Display the song on the Theme Builder. Ask students to practice reading the poem. Students should read a line silently to themselves, then look up and say the line to a partner.

**Build Background**
Distribute copies of Everything Is Made of Matter. Ask students to identify what kind of matter is on the cover. What is happening to it?

**Small Group Reading**

**Get Ready to Read**

**Preview the Book** Read aloud the title, the author’s name, and the Think and Discuss question on the back cover: What makes the balloons rise?
Page through the book and do the following:
- Point out the question at the top of page 3. Explain that the next sentence answers the question. Point out a similar format on page 14.
- Read through the Contents.
- Ask students to predict what they will learn.

**Predict Vocabulary** Encourage students to use photos to predict vocabulary: Which words do you expect to see in this book?
Display a page and cover the words: Which words do you expect to see on this page?
List the words students mention. Add Key Concept Words in the book that students do not mention.

**Text Feature: Contents/Headings**

**Introduce** Read the listings in the Contents. The listings show me what pages have information on different topics.

**Model** When I turn to page 14, I see that the heading at the top of the page is the same as the one listed in the Contents.

**Practice** Ask students to pick two listings from the Contents and find them within in the book.
Guided Writing

Distribute copies of the *Take-Home Book Masters*. Read the title and page through the book. Explain that students will write books about states of matter—and changes in states of matter—of objects at a birthday party. Work with students to:

- Complete the Contents.
- Describe and name the objects.
- Share writing ideas for each pair of pages.

Record students’ writing ideas for the pages of their books on chart paper. Have partners talk together to plan what to write. Explain that each student will complete a graphic organizer. They may wish to identify solids, liquids, and gases they see in each picture of their Take-Home Books. Display the Word Bank, and remind students to check their Vocabulary Logs as they begin to write.

Use *Learning Masters* page 30.
Lesson 5

Assess and Extend

OBJECTIVES

- Use Key Concepts and Key Concept Words in writing
- Demonstrate oral language proficiency
- Demonstrate comprehension of theme selections
- Read related titles to reinforce Key Concepts and vocabulary

Materials

Take-Home Book Masters:
States of Matter
Learning Masters pages 22–23, 31–32

Rereading and Assessments

Allow time for children to independently reread the theme selections. Display the Word Bank for children’s reference as they read.

As children reread, meet with individuals. Use the Post-Test on pages 41–43 to evaluate children’s progress and to update their records.

Guided Writing

Students continue writing the Take-Home Books they began in Lesson 4. Review the group list of writing ideas. Display the Word Bank.

Page through the theme books to review the text features, including the Contents page and headings. Talk about text features students could add to their Take-Home Books. For example, they might include a chart to show the change in the state of matter they describe for pages 10–11 in their Take-Home Books.

Point out that good writers:
- Often start with a sentence that tells where something is happening.
- Add describing details.

- Read over their work. Have students check to be certain they capitalized the first word in each sentence and included a period at the end of each sentence.

As students write, circulate to coach and support individuals. If students need help, try suggesting one or two words that will remind the student of a Key Concept.

Have partners exchange books and discuss what they like in one another’s books. For example, a reader may like a detail that the writer added from personal experience. Tell students to decide which changes to make and add any final touches.

Customize Instruction for ELLs

Newcomers/Beginning Have students dictate what they want to write to a bridging partner.

Developing Tell students to write simple sentences in their Take-Home Books describing objects and their states of matter.

Expanding/Bridging Encourage students to vary the types of sentences they use. Have students look through the theme selections for patterns.
Assessment Tools

Self-Assessment
Allow children to reflect and assess their own learning by completing Learning Masters pages 22–23.
- What I Learned, page 22
- How I Learned, page 23

Reading
In addition to the Pre-Test and Post-Test Assessments, the following assessment tools, available online, can help you evaluate and record children's progress in reading.
- Retelling Guide and Scoring Rubric
- Fluency Scoring Guide
- Oral Reading Record

Writing
Use the completed Take-Home Books available online and the following tools to assess children's development as writers.
- Writing Rubric
- Developmental Checklist

Content Assessment
Have groups choose or draw a picture of a place, such as a kitchen, a fair, a cafeteria, or an ice rink. Encourage groups to find at least one object that can change its state of matter. Have groups present their labeled pictures to other groups.

Vocabulary and Oral Language
Use the following resources, available online, in addition to the Think and Discuss scene on the Theme Builder, to assess oral language development.
- Content Vocabulary Checklist
- Oral Language Developmental Checklist

Optional Reading

Reading related titles allows students to explore concepts and vocabulary at different levels. It also allows them to use reading strategies in different types of texts. Encourage students to compare the theme books to the books in the next column.

Nonfiction Titles
Heat Changes Things Level 7
Water Level 12
Where Do the Puddles Go? Level 18

Fiction Titles
Uncle Terry's Glasses Level 17
Summer Day Slushes Level 18

Home Connection

The Family Focus letters on Learning Masters pages 31–32 summarize key concepts about states of matter.

In the Share and Learn activity, family members look for things in the kitchen that illustrate states of matter and the way these states can change.
Learning Masters
Fluent: States of Matter
Name ________________________________

What I Learned

List the three most important things you learned in this theme. Tell why you listed each one.

1. ______________________________________

   ______________________________________

   ______________________________________

2. ______________________________________

   ______________________________________

   ______________________________________

3. ______________________________________

   ______________________________________

   ______________________________________
Name ________________________________

How I Learned

Think about reading the books in this theme. Draw an X next to the things you did as you read.

☐ I made connections.

☐ I thought about what would happen next.

☐ I asked questions before I read.

☐ I asked questions while I read.

☐ I made pictures in my mind.

☐ I picked out the most important ideas.

☐ I figured things out without the author telling me.

Choose one thing from your list. Tell how it helped you understand the text.

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________
<table>
<thead>
<tr>
<th>Word</th>
<th>What It Means</th>
<th>Notes or Drawings</th>
</tr>
</thead>
</table>

List words you want to remember. Tell what each word means. Add notes or drawings about the word.
Matter, matter everywhere.
You find it here and over there.
You’ll find it in a state, you see.
How many states? Matter has three.
Matter—a solid, like ice in a rink.
Matter—a liquid, like water you drink.
Matter—a gas, which you usually can’t see,
Like vapor rising from water that’s bubbling.
Making Inferences

Read pages 6–7 in *States of Matter*. What inference can you make? Complete the sentence.

I infer

because
Complete the sentences. Use the word **solid, liquid, or gas**.

1. Water gets very cold. The water will change to a
   ____________________.

2. Your aunt heats water. Some of the water will change to a
   ____________________.

3. Your parent lights a candle. Some of the candle will change to a
   ____________________.
## Water Can Change

Use the following sentences to complete the chart:

- An example is water. Some can melt, like butter.
- It is hard to see. It has its own shape.
- It flows easily. Heat can change water to this.
- An example is steam. An example is ice.
- It is runny.

<table>
<thead>
<tr>
<th>Solid</th>
<th>1.</th>
<th>2.</th>
<th>3.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Liquid</td>
<td>1.</td>
<td>2.</td>
<td>3.</td>
</tr>
<tr>
<td>Gas</td>
<td>1.</td>
<td>2.</td>
<td>3.</td>
</tr>
</tbody>
</table>
Everything Is Made of Matter

Here is a Contents page for a book about matter. Read the Contents. Then read each question. Tell the page number you would check to answer the question.

Contents
Solids 3
Liquids 6
Gas 8
Cooking: From Liquid to Solid 10
Glossary 12

1. Is juice a liquid? Look on page ______.

2. Is ice a solid? Look on page ______.

3. Where is the list of words from the book? Look on page ______.

4. Is steam a gas? Look on page ______.

5. Are pancakes a solid or a liquid? Look on page ______.

6. How can heat change matter? Look on page ______.

7. What are some solids? Look on page ______.

8. What does “liquid” mean? Look on page ______.
Use this graphic organizer to plan what you will write in your Take-Home Book on states of matter.
Dear Family,
Your child has been reading the books *States of Matter, Water Can Change,* and *Everything Is Made of Matter* in our unit of study on states of matter. Please use this page to talk together about what your child has learned in this theme.

Your child has written a Take-Home Book. Invite your child to share the book with you. Also, share your child’s Vocabulary Log for the theme. Here are some sample questions to help you discuss the Take-Home Book together:

- What are the three states of matter?
- What are examples of solids you find in everyday life?
- What are examples of liquids?
- What are examples of gases?
- What are examples of matter changing from one state to another because of a change in temperature?

**Key Concepts**
Your child has been learning these important ideas:

- Matter can take the form of a solid, a liquid, or a gas.
- Each state of matter has its own unique properties.
- Changes in temperature can cause matter to change from one state to another state.

**Words to Know**

<table>
<thead>
<tr>
<th>Change</th>
<th>Matter</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gas</td>
<td>Melt</td>
</tr>
<tr>
<td>Heat</td>
<td>Solid</td>
</tr>
<tr>
<td>Ice</td>
<td>Steam</td>
</tr>
<tr>
<td>Liquid</td>
<td>Temperature</td>
</tr>
</tbody>
</table>

**Share and Learn**

Look for examples of the three states of matter—solid, liquid, and gas—in your kitchen. Demonstrate changes in states of matter with these activities: To show a liquid changing to a solid, make ice cubes with your child. To show liquid changing to a gas, spill a few drops of water and check later to see if they have evaporated, or turned into water vapor. To show a solid changing to a liquid, let an ice cube melt on a plate.
Enfoque en la familia

Estimada familia,

Su escolar ha estado leyendo los libros *States of Matter (Los estados de la materia)*, *Water Can Change (El agua puede cambiar)* y *Everything is Made of Matter (Todo se compone de materia)* en nuestra unidad de estudio sobre los estados de la materia. Favor de usar esta página para hablar juntos sobre lo que su escolar ha aprendido acerca de este tema.

Su escolar ha escrito un libro para llevar a la casa. Pídale a su escolar que le lea el libro. También revise el Diario de Vocabulario que ha creado para el tema. Use estas preguntas para discutir el libro juntos:

- ¿Cuáles son los tres estados de la materia?
- ¿Cuáles son algunos ejemplos de sólidos que encuentras en la vida cotidiana?
- ¿Cuáles son algunos ejemplos de líquidos?
- ¿Cuáles son algunos ejemplos de gases?
- ¿Cuáles son algunos ejemplos de un cambio de estado de materia debido a un cambio de temperatura?

Ideas Clave

Su escolar ha estado aprendiendo estas ideas importantes:

- La materia puede tomar la forma de un sólido, un líquido o un gas.
- Cada estado de la materia tiene propiedades únicas.
- Los cambios en la temperatura pueden causar cambios en la materia de un estado a otro.

Compartir y aprender

Busquen ejemplos de los tres estados de la materia—sólido, líquido y gas—en su cocina. Demuestre los cambios de estado de materia con estas actividades: Para demostrar el cambio de líquido a sólido, haga cubos de hielo con su escolar. Para demostrar el cambio de líquido a gas, derrame unas gotas de agua y luego vuelva para ver si se han evaporado o convertido en vapor de agua. Para demostrar el cambio de sólido a líquido, deja que un cubo de hielo se derrita.

Vocabulario

<table>
<thead>
<tr>
<th>Español</th>
<th>Inglés</th>
</tr>
</thead>
<tbody>
<tr>
<td>calor</td>
<td>heat</td>
</tr>
<tr>
<td>cambio</td>
<td>change</td>
</tr>
<tr>
<td>derretir</td>
<td>melt</td>
</tr>
<tr>
<td>gas</td>
<td>gas</td>
</tr>
<tr>
<td>hielo</td>
<td>ice</td>
</tr>
<tr>
<td>líquido</td>
<td>liquid</td>
</tr>
<tr>
<td>materia</td>
<td>matter</td>
</tr>
<tr>
<td>sólido</td>
<td>solid</td>
</tr>
<tr>
<td>temperatura</td>
<td>temperature</td>
</tr>
<tr>
<td>vapor</td>
<td>steam</td>
</tr>
</tbody>
</table>

Nombre: __________________________
Assessments
Fluent: States of Matter
Administering the Tests

About the Pre-Test and Post-Test

The Pre-Test and Post-Test measure students’ performance in four skill domains:

- Concept Words
- Key Concepts
- Comprehension Strategies
- Text Features

The Pre-Test gives information about each student’s baseline proficiency with the theme of study. Analyzing student results will help you select appropriate teaching strategies and target areas of need. The Post-Test, when compared with the Pre-Test data, captures students’ gains and serves as a useful tool in documenting student progress.

Administering the Test

1. Before distributing the test, be sure that students have their Concept and Related Nonfiction books accessible. These texts are often referred to in both the Pre- and Post-Tests.

2. Distribute the test.

3. Look to make sure that each student is working on the correct page. Read all directions and test items out loud to students. Have students work individually on sections and allow a reasonable amount of time for them to complete each item.

4. Collect all tests and score them using the Answer Key on page 35.
Scoring the Pre-Test and Post-Test

Items 1–12 and 15–18 are worth one point. Items 13–14 are worth 2 points. There are 20 points total. For free response answers that require students to draw or write, answers need to show an understanding of the key word or concept to receive the point. Do not penalize students for incorrect spelling or grammar.

### Pre-Test

<table>
<thead>
<tr>
<th>Concept Words (1–6)</th>
<th>Key Concepts (7–12)</th>
<th>Comprehension Strategy (13 &amp; 14)</th>
<th>Text Features (15–18)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 point each</td>
<td>1 point each</td>
<td>2 points each</td>
<td>1 point each</td>
</tr>
<tr>
<td>1. (c)</td>
<td>7. matter</td>
<td>Points</td>
<td>Description</td>
</tr>
<tr>
<td>2. (a)</td>
<td>8. temperature</td>
<td>2</td>
<td>Response demonstrates a complete understanding of the strategy.</td>
</tr>
<tr>
<td>3. (b)</td>
<td>9. solid</td>
<td>1</td>
<td>Response demonstrates a partial understanding of the strategy.</td>
</tr>
<tr>
<td>4. (e)</td>
<td>10. liquid</td>
<td>0</td>
<td>Response is totally incorrect or irrelevant.</td>
</tr>
<tr>
<td>5. (f)</td>
<td>11. ice</td>
<td></td>
<td>Note: Do not score written response for grammar, mechanics, or spelling.</td>
</tr>
<tr>
<td>6. (d)</td>
<td>12. change</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Post-Test

<table>
<thead>
<tr>
<th>Concept Words (1–6)</th>
<th>Key Concepts (7–12)</th>
<th>Comprehension Strategy (13 &amp; 14)</th>
<th>Text Features (15–18)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 point each</td>
<td>1 point each</td>
<td>2 points each</td>
<td>1 point each</td>
</tr>
<tr>
<td>1. (d)</td>
<td>7. water</td>
<td>Points</td>
<td>Description</td>
</tr>
<tr>
<td>2. (e)</td>
<td>8. ice</td>
<td>2</td>
<td>Response demonstrates a complete understanding of the strategy.</td>
</tr>
<tr>
<td>3. (b)</td>
<td>9. matter</td>
<td>1</td>
<td>Response demonstrates a partial understanding of the strategy.</td>
</tr>
<tr>
<td>4. (c)</td>
<td>10. Heat</td>
<td>0</td>
<td>Response is totally incorrect or irrelevant.</td>
</tr>
<tr>
<td>5. (a)</td>
<td>11. Steam</td>
<td>Note: Do not score written response for grammar, mechanics, or spelling.</td>
<td></td>
</tr>
<tr>
<td>6. (f)</td>
<td>12. temperature</td>
<td></td>
<td></td>
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</tbody>
</table>
# Student Profile for Pre-Test and Post-Test

<table>
<thead>
<tr>
<th>Test &amp; Date</th>
<th>Concept Words</th>
<th>Key Concepts</th>
<th>Compr. Strategy</th>
<th>Text Features</th>
<th>Point Score</th>
<th>Percent Score</th>
</tr>
</thead>
<tbody>
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<td></td>
<td></td>
<td></td>
<td>/20</td>
<td>%</td>
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<tr>
<td>Date:</td>
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<td>/4</td>
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<tr>
<td>Post-Test</td>
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<td>%</td>
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<tr>
<td>Date:</td>
<td>/6</td>
<td>/6</td>
<td>/4</td>
<td>/4</td>
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</tbody>
</table>

Name ____________________________________________
## Class Profile

**Teacher Name**

<table>
<thead>
<tr>
<th>Student Name</th>
<th>Pre-Test</th>
<th>Post-Test</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Date:</td>
<td>Date:</td>
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<tr>
<td></td>
<td>Point Score</td>
<td>Percent Score</td>
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</tbody>
</table>
Pre-Test

Name ___________________________________________________ Date ____________________

Draw a line from the word to what it means.

1. gas __________________________  a. The state of matter of water.
2. liquid _________________________  b. The state of matter of ice.
3. solid __________________________  c. The state of matter of the air we breathe in and out.
4. melt __________________________  d. This is what you can see when you boil water.
5. heat __________________________  e. This is what happens to butter when you heat it.
6. steam _________________________  f. This is what you need if you want to turn an ice cube into water.
Pre-Test

Name ___________________________________________________ Date ____________________

Key Concepts

Look at the words in the Word Bank. Choose the word that best completes the sentence. Write the word on the line. Follow the example.

Example: When you heat water it becomes ______steam_____.

7. Liquid, gas, and solid are all states of ____________.

8. To change water into gas you need to change the ____________.

9. The state of matter of a bicycle tire is ____________.

10. The state of matter of juice is ____________.

11. When you put water in the freezer, the water turns into ____________.

12. States of matter can ____________. For example, when you leave ice outside it turns into water.
Pre-Test

Name ___________________________________________________ Date ____________________

Comprehension Strategy

Read page 14 in States of Matter. What inferences can you make?

13. I infer ____________________________________________

14. because __________________________________________

Text Features

Complete the chart.

<table>
<thead>
<tr>
<th>The Three States of Water</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>15. Solid</strong></td>
</tr>
<tr>
<td><img src="image" alt="Diagram of water droplets falling from the top to the bottom" /></td>
</tr>
</tbody>
</table>

Look at the Contents page in Everything Is Made of Matter. Answer the questions.

17. On what page can you find information about food?
   Page _____________.

18. What is the heading for page 12? __________________________________________
Post-Test

Draw a line from the word to what it means.

1. change
   a. What is the state of matter of water vapor?

2. liquid
   b. This needs to change for liquid to turn into solid.

3. temperature
   c. The size and shape of this state of matter stay the same when you move it from one place to another.

4. solid
   d. For example, when solid becomes liquid.

5. gas
   e. What is the state of matter of water?

6. steam
   f. This is what you see when you boil water.
Post-Test

Look at the words in the Word Bank. Choose the word that best completes the sentence. Write the word on the line.

7. The liquid form of water is ____________.

8. The solid form of water is ____________.

9. Plasma is another state of ____________.

10. ____________ can change ice into water.

11. ____________ is a gas.

12. When you boil something, you change its ____________.
Post-Test

Comprehension Strategy

Turn to pages 10–11 in *States of Matter*. What can you infer? Complete the sentence.

13. I know that liquid takes up space but does not have a shape of its own. I can infer that if the tub overflows, then

Turn to pages 12–13 in *States of Matter*. What can you infer? Complete the sentence.

14. I can infer that the diver will have to get out of the water when the air in the tank runs out because I know that

Text Features

Complete the chart.

<table>
<thead>
<tr>
<th>Solid</th>
<th>+</th>
<th>Heat</th>
<th>= 15.</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image1.png" alt="Glass" /></td>
<td><img src="image2.png" alt="Sun" /></td>
<td></td>
<td>16.</td>
</tr>
</tbody>
</table>

Use your book *States of Matter* to answer the questions.

17. On what page is the glossary? The glossary is on page ________.

18. On what page is the heading “Matter in Gas Form”?

   It is on page ________.
Language, Literacy & Vocabulary!

Take-Home Book Masters
Fluent: States of Matter
States of Matter

by

Contents

Solids 4

6

8

Changes in States of Matter 10

Picture Glossary 12
About the Author


Solids
Liquids

Gas
Changes in States of Matter

Picture Glossary

- Candle
- Balloons
- Birthday girl
- Gift