



# Table of Contents

Introduction .....	3
Getting Started .....	4
Matter—Properties and Changes Card Game .....	6
Atoms, Molecules, and Elements Card Game.....	12
Forms of Energy Card Game .....	18
Renewable and Nonrenewable Resources Card Game.....	24
Electricity and Magnetism Card Game .....	30
From Animal Cells to Body Systems Card Game .....	36
From Plant Cells to Plants Card Game.....	42
Classification of Plants and Animals Card Game .....	48
Adaptation and Food Chains Card Game.....	54
The Changing Earth Card Game.....	60
Weather Card Game.....	66
The Solar System Card Game .....	72
Important Life Science Terms Card Game.....	78
Important Physical Science Terms Card Game.....	83
Important Earth Science Terms Card Game .....	88
Answer Key .....	93

# I HAVE, WHO HAS?

is a series of books that provide reinforcement for essential academic skills through group activities. These activities consist of game cards that students read and interactively answer. The listening enrichment component gives students additional practice in active listening and extends their learning to the application level.



## Introduction

*I Have, Who Has? Science 6-8* provides a fun, interactive way for students to test their science knowledge. It includes 15 card games that will help improve students' auditory discrimination and reinforce standards-based science content. The following concepts are addressed in this resource:

- Matter—Properties and Changes
- Atoms, Molecules, and Elements
- Forms of Energy
- Renewable and Nonrenewable Resources
- Electricity and Magnetism
- From Animal Cells to Body Systems
- From Plant Cells to Plants
- Classification of Plants and Animals
- Adaptation and Food Chains
- The Changing Earth
- Weather
- The Solar System
- Important Life Science Terms
- Important Physical Science Terms
- Important Earth Science Terms

The ease and simplicity of preparing these games for your class will allow you to begin using *I Have, Who Has?* today! These engaging games are sure to keep students involved as they learn and reinforce science content.

# Getting Started

## ORGANIZATION

Each card game consists of 40 question and answer cards. The cards are arranged in columns (top to bottom) in the order in which they will be read by the class. A reproducible active listening enrichment page follows each of the first 12 card games. Play the interactive card games alone or in conjunction with the reproducible pages to reinforce students' active listening, increase active participation, provide enrichment, and extend the learning and accountability of each student.

## INSTRUCTIONS FOR I HAVE, WHO HAS? GAME CARDS

- 1) Photocopy two sets of the game cards. Keep one copy as your reference to the correct order of questions and answers.
- 2) Cut apart the second set of game cards. Mix up the cards and pass them out to the students. Every student should have at least one card. Depending on your class size, students may have more than one card.
- 3) Have the student with the first card begin the game by saying "*I have the first card.* *Who has . . . ?*" As each student reads a card, monitor your copy to make sure students are reading the cards in the correct order. (Because of the interrelationship between concepts, more than one answer may *seem* correct. Acknowledge each "almost" answer and ask for a more specific answer.) If students correctly matched each card, then the last card read will "loop" back to the first card and read *I have . . . Who has the first card?*

<p>I have the <b>first card</b>.</p> <p>Who has the three states of matter?</p>	<p>I have <b>liquid state</b>.</p> <p>Who has the level of attraction between the particles of a solid?</p>
<p>I have <b>solid, liquid, and gas</b>.</p> <p>Who has the state of matter with tightly packed particles?</p>	<p>I have <b>strong attraction</b>.</p> <p>Who has the level of attraction between the particles of a gas?</p>
<p>I have <b>solid state</b>.</p> <p>Who has the state of matter with the lowest density?</p>	<p>I have <b>weak attraction</b>.</p> <p>Who has one result of heating particles of matter?</p>
<p>I have <b>gaseous state</b>.</p> <p>Who has the state of matter with particles that stick together but flow easily?</p>	<p>I have <b>heated particles gain more energy</b>.</p> <p>Who has one physical effect of solid particles gaining more energy?</p>

## INSTRUCTIONS FOR ACTIVE LISTENING ENRICHMENT PAGE

- 1) Copy one page for each student or pair of students.
- 2) Make sure each student has a light-colored crayon or highlighter (not a marker or pencil) to color over the correct boxes as they are read. Provide time for students to lightly color or highlight the correct box.
- 3) Have students answer the extension questions at the bottom of the page. Use the answer key on pages 93–95 to check students' answers.

## WHAT TO OBSERVE

- 1) Students who have difficulty locating the correct boxes on the active listening enrichment page once familiarity with the format has been established may have difficulties with visual discrimination.
- 2) Students who have difficulty reading their cards at the correct time may have difficulties with attention, hearing, active listening, or the concepts being reinforced.

## VARIATIONS

(To be played without the active listening enrichment page)

### Timed Version

Have students play the game twice. Encourage them to beat their time in the second round. Have students play the same game again the next day. Can they beat their time again? Remember to mix up the cards before distributing them for each new game.

### Small Groups

Give each group a set of game cards. Encourage groups to pay close attention, read quickly, and stay on task to determine which group is the fastest. Playing in smaller groups allows students to have more cards. This raises the opportunities for individual accountability, active participation, time on task, and reinforcement per student.

### Card Reduction

If your class is not ready to play with multiple cards, you can reduce the number to fit your class needs. Photocopy the set of the game cards you want to play. Determine the appropriate number of cards needed. Following the existing order of the game, begin with the first card and count the number of cards you need. Delete the *Who has . . . ?* clue from the last card counted and replace with the sentence *Who has the first card?* Photocopy and cut apart the revised game for class play.



# Matter— Properties and Changes



<p>I have the <b>first card</b>.</p> <p>Who has the three states of matter?</p>	<p>I have <b>liquid state</b>.</p> <p>Who has the level of attraction between the particles of a solid?</p>
<p>I have <b>solid, liquid, and gas</b>.</p> <p>Who has the state of matter with tightly packed particles?</p>	<p>I have <b>strong attraction</b>.</p> <p>Who has the level of attraction between the particles of a gas?</p>
<p>I have <b>solid state</b>.</p> <p>Who has the state of matter with the lowest density?</p>	<p>I have <b>weak attraction</b>.</p> <p>Who has one result of heating particles of matter?</p>
<p>I have <b>gaseous state</b>.</p> <p>Who has the state of matter with particles that stick together but flow easily?</p>	<p>I have <b>heated particles gain more energy</b>.</p> <p>Who has one physical effect of solid particles gaining more energy?</p>



# Matter— Properties and Changes



I have solid particles  
**vibrate faster.**

Who has the measure of how fast  
the atoms of an object are moving?



I have **adding heat to a  
liquid's particles.**

Who has what happens to atoms  
when their temperature decreases?



I have **temperature.**

Who has the phase change  
that occurs when a solid's  
forces weaken rapidly?



I have **atoms slow down.**

Who has the term for liquid  
particles moving away from each  
other when heat is added?



I have **a solid can change  
directly into a gas.**

Who has one major difference  
between solids and liquids?



I have **boiling.**

Who has the definition of  
gas pressure?



I have **liquids take the shape  
of their container.**

Who has the action that increases  
energy of a liquid's particles?



I have **gas particles hitting  
a surface.**

Who has one way to increase  
gas pressure?



# Matter— Properties and Changes



<p>I have <b>reduce the volume of its container.</b></p> <p>Who has the term for gas particles spreading out?</p>	<p>I have <b>mass.</b></p> <p>Who has the name of the tool used to measure an object's mass?</p>
<p>I have <b>diffusion.</b></p> <p>Who has an example of diffusion?</p>	<p>I have <b>balance.</b></p> <p>Who has the effect on mass when a state of matter changes?</p>
<p>I have <b>smelling perfume sprayed on the other side of the room.</b></p> <p>Who has diffusion's effect on gases or liquids?</p>	<p>I have <b>no effect.</b></p> <p>Who has the term for the mass of an object divided by its volume?</p>
<p>I have <b>gases or liquids mix together.</b></p> <p>Who has the term for the amount of material in an object?</p>	<p>I have <b>density.</b></p> <p>Who has the scientific term for changing one substance into another substance?</p>



# Matter— Properties and Changes



I have **chemical change**.

Who has the term for the ability of a substance to undergo a chemical change?



I have **gases**.

Who has evidence of a chemical change that you can see?



I have **reactivity**.

Who has the term for the ability of a substance to burn?



I have **change in color**.

Who has the gas released when mixing vinegar and baking soda?



I have **combustibility**.

Who has the name of a metal that changes by rusting?



I have **carbon dioxide**.

Who has the chemical change that results when iron and oxygen are combined?



I have **iron**.

Who has the products of chemical changes that you cannot see?



I have **rust**.

Who has the product made from combining hydrogen and oxygen?





# Matter— Properties and Changes



<p>I have <b>water</b>.</p> <p>Who has the product made from combining sodium and chloride?</p>	<p>I have <b>carving it into a baseball bat</b>.</p> <p>Who has two ways physical changes may occur?</p>
<p>I have <b>salt</b>.</p> <p>Who has a change to an object's size or shape?</p>	<p>I have <b>by adding heat or by removing heat</b>.</p> <p>Who has examples of mixtures?</p>
<p>I have <b>physical change</b>.</p> <p>Who has an example of a physical change to paper?</p>	<p>I have <b>paper, bread, and air</b>.</p> <p>Who has examples of solutions?</p>
<p>I have <b>cutting it with scissors</b>.</p> <p>Who has an example of a physical change to wood?</p>	<p>I have <b>ocean water and hot cocoa</b>.</p> <p>Who has the first card?</p>



# Matter—Properties and Changes

Draw a line from word to word to complete the maze as your classmates read the clues.

<b>START</b>	SOLID, LIQUID, GAS	LIQUID STATE	STRONG
DIFFUSION	SOLID STATE	GASEOUS STATE	WEAK
ADDING HEAT	LIQUIDS TAKE CONTAINER SHAPE	MASS	HEATED PARTICLES GAIN MORE ENERGY
ATOMS SLOW DOWN	SOLID CAN CHANGE DIRECTLY INTO A GAS	TEMPERATURE	VIBRATE FASTER
BOILING	CHEMICAL CHANGE	MASS	BALANCE
PARTICLES HITTING A SURFACE	SMELLING SPRAYED PERFUME	GASES OR LIQUIDS MIX	NO EFFECT
REDUCE THE VOLUME	DIFFUSION	COMBUSTIBILITY	DENSITY
REACTIVITY	PHYSICAL CHANGE	SALT	CHEMICAL CHANGE
CARVING IT INTO A BAT	CUTTING IT WITH SCISSORS	WATER	REACTIVITY
ADDING OR REMOVING HEAT	DENSITY	RUST	COMBUSTIBILITY
PAPER, BREAD, AIR	OCEAN WATER AND HOT COCOA	CARBON DIOXIDE	IRON
PHYSICAL CHANGE	<b>FINISH</b>	CHANGE IN COLOR	GASES

Look at the words you did **not** use in the maze above. Write one of those words for each definition.

1. \_\_\_\_\_ particles spreading out
2. \_\_\_\_\_ the amount of material in an object
3. \_\_\_\_\_ mass divided by volume
4. \_\_\_\_\_ the change in matter when one substance turns into another substance
5. \_\_\_\_\_ the ability of a substance to burn
6. \_\_\_\_\_ the result of changing the size, shape, or color of an object
7. \_\_\_\_\_ the ability of a substance to undergo a chemical change