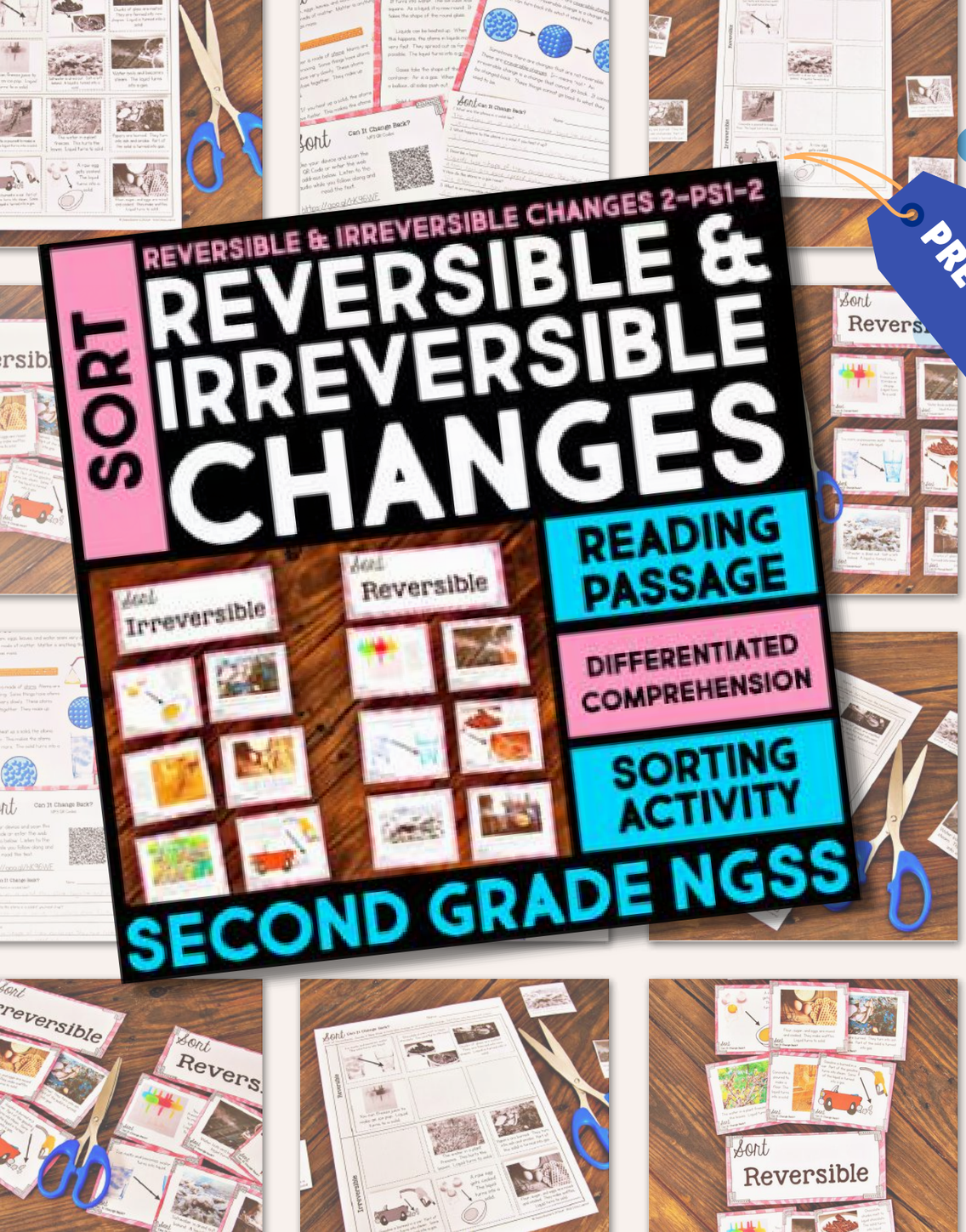


Let's Sort and Find Out!

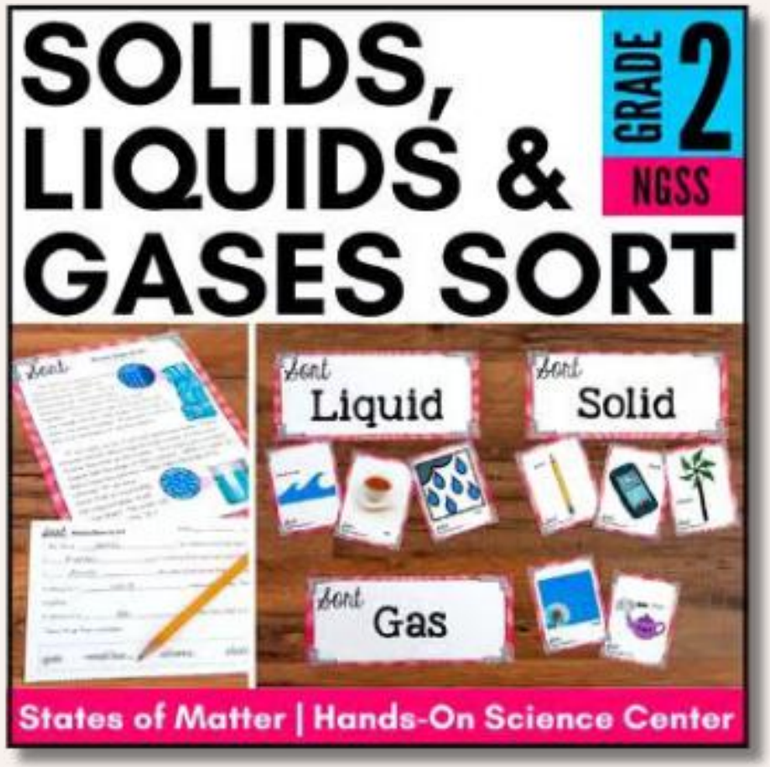
2ND GRADE

SORT REVERSIBLE & IRREVERSIBLE CHANGES

States of Matter 2nd grade Worksheets

KEEP SCROLLING TO SEE WHAT'S INSIDE!

ACTIVITY OVERVIEW



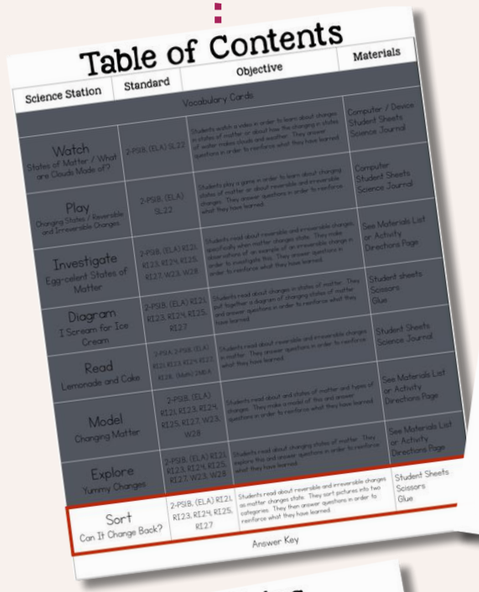


Table of Contents

Science Station	Standard	Objective	Materials
Vocabulary Cards			
Watch States of Matter / What are Clouds Made of?	2-PSI.B. (ELA) SL.2.2	Students watch a video in order to learn about changes of states of matter or about how the changing in states of matter makes clouds and weather. They answer questions in order to reinforce what they have learned.	Computer / Device Student Sheets Science Journal
Play Changing States / Reversible and Irreversible Changes	2-PSI.B. (ELA) SL.2.2	Students play a game in order to learn about changing states of matter or about reversible and irreversible changes. They answer questions in order to reinforce what they have learned.	Computer Student Sheets Science Journal
Investigate Egg-cellent States of Matter	2-PSI.B. (ELA) RI.2.1, RI.2.3, RI.2.4, RI.2.5, RI.2.7, W.2.3, W.2.8	Students read about reversible and irreversible changes as matter changes state. They make a prediction, specifically when matter changes state. They make observations of an example of an irreversible change in order to investigate this. They answer questions in order to reinforce what they have learned.	See Materials List or Activity Directions Page
Diagram I Scream for Ice Cream	2-PSI.B. (ELA) RI.2.1, RI.2.3, RI.2.5, RI.2.7	Students read about changes in states of matter. They put together a diagram of changing states of matter. They answer questions in order to reinforce what they have learned.	Student sheets Scissors Glue
Read Lemonade and Cake	2-PSI.A, 2-PSI.B. (ELA) RI.2.1, RI.2.3, RI.2.4, RI.2.5, RI.2.8, Math: MD.A.1	Students read about reversible and irreversible changes of matter. They answer questions in order to reinforce what they have learned.	Student Sheets Science Journal
Model Changing Matter	2-PSI.B. (ELA) RI.2.1, RI.2.3, RI.2.4, RI.2.5, RI.2.7, W.2.3, W.2.8	Students read about and states of matter and types of changes. They make a model of this and answer questions in order to reinforce what they have learned.	See Materials List or Activity Directions Page
Explore Yummy Changes	2-PSI.B. (ELA) RI.2.1, RI.2.3, RI.2.4, RI.2.5, RI.2.7, W.2.3, W.2.8	Students read about changing states of matter. They explore this and answer questions in order to reinforce what they have learned.	See Materials List or Activity Directions Page
Sort Can It Change Back?	2-PSI.B. (ELA) RI.2.1, RI.2.3, RI.2.4, RI.2.5, RI.2.7	Students read about reversible and irreversible changes as matter changes state. They sort pictures into two categories. They then answer questions in order to reinforce what they have learned.	Student Sheets Scissors Glue
Answer Key			



Science Stations Overview

Watch a Video
At this station, students will watch a video relevant to the topic and answer questions. You have the option of the included worksheet with the questions or use task cards and have students respond in their science journals.

Play a Video Game
Students play an online video game and answer questions about the experience. You have the option of the included worksheet with the questions or use task cards and have students respond in their science journals.

Investigate
Students use materials to investigate the science topic by following directions and recording results. Students answer questions about the investigation.

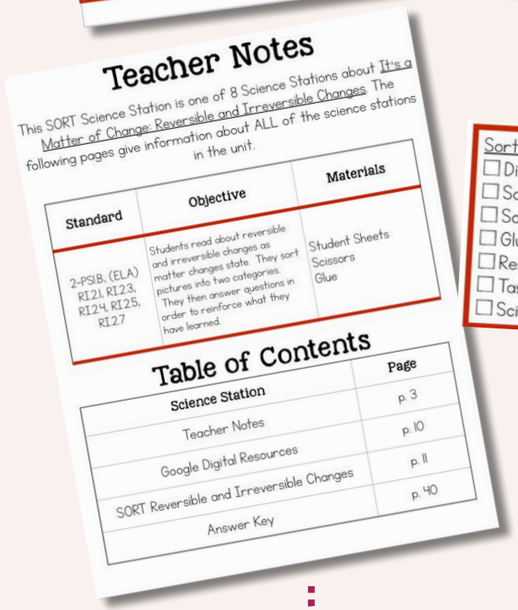
Draw a Diagram
Students draw and label a diagram specific to certain requirements. Students then explain how their diagram meets the requirements.

Read a Passage
Students read a short passage about the topic and answer questions about the information in the passage. You have the option of the included worksheet with the questions or use task cards and have students respond in their science journals.

Create a Model
Students use materials to illustrate the science concept and answer questions. You have the option of the included worksheet with the questions or use task cards and have students respond in their science journals.

Explore
Students create a sample and manipulate it using the new science concepts they have learned. Students answer questions based on the effects.

Sort
Students sort cards into groups or put them in a specific order. Students record the sort and then describe their reasoning.



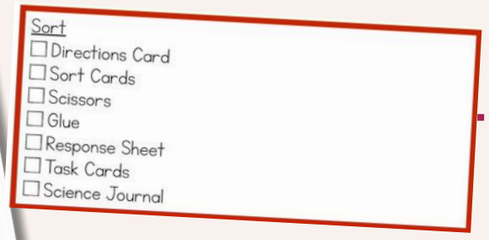
Teacher Notes

This SORT Science Station is one of 8 Science Stations about It's a Matter of Change: Reversible and Irreversible Changes. The following pages give information about ALL of the science stations in the unit.

Standard	Objective	Materials
2-PSI.B. (ELA) RI.2.1, RI.2.3, RI.2.4, RI.2.5, RI.2.7	Students read about reversible and irreversible changes as matter changes state. They sort pictures into two categories. They then answer questions in order to reinforce what they have learned.	Student Sheets Scissors Glue

Table of Contents

Science Station	Page
Teacher Notes	p. 3
Google Digital Resources	p. 10
SORT Reversible and Irreversible Changes	p. 11
Answer Key	p. 40



Sort
- ☐ Directions Card
- ☐ Sort Cards
- ☐ Scissors
- ☐ Glue
- ☐ Response Sheet
- ☐ Task Cards
- ☐ Science Journal

Table of Contents

Background Information

Materials Checklist

Teacher Notes/ Table of Contents

WHAT'S INCLUDED
SORTING SCIENCE STAION

- **Student Text** in two formats
- **MP3** Audio Read-Aloud
- Sorting Activity with **color cards**
- Sorting Activity in a **b&w worksheet**
- Differentiated **Questions**
- Answer Key
- Google Form™
- Google Slides™ with Sort Activity



SORT: READING PASSAGE

Sort Can It Change Back?
Student Instructions

Liquids take the shape of their container. An ice cube melts in a glass. It turns into water. The ice cube was square. As a liquid, it is now round. It takes the shape of the round glass.

Liquids can be heated up. When this happens, the atoms in liquids move very fast. They spread out as far as possible. The liquid turns into a **gas**.

Gases take the shape of their container. Air is a gas. When air fills a balloon, all sides push out.

Solid, liquid, and gas are the three **states of matter**. They can change from one state to another. A solid melts to a liquid. A liquid freezes to a solid.

Sort Can It Change Back?
Name:

Ice cream, eggs, leaves, and water seem very different. But they are all made of matter. Matter is anything that takes up space and has mass.

Matter is made of **atoms**. Atoms are always moving. Some things have atoms that move very slowly. These atoms stay close together. They make up **solids**.

If you heat up a solid, the atoms move faster. This makes the atoms spread out more. The solid turns into a **liquid**.

Liquids take the shape of their container. An ice cube melts in a glass. It turns into water. The ice cube was square. As a liquid, it is now round. It takes the shape of the round glass.

Liquids can be heated up. When this happens, the atoms in liquids move very fast. They spread out as far as possible. The liquid turns into a **gas**.

Gases take the shape of their container. Air is a gas. When air fills a balloon, all sides push out.

Solid, liquid, and gas are the three **states of matter**. They can change from one state to another. A solid melts to a liquid. A liquid freezes to a solid.

Many times, these changes are **reversible changes**. Reverse means "go back." A reversible change is a change that can go back. It can turn back into what it used to be.

Sometimes there are changes that are not reversible. These are **irreversible changes**. Ir- means "not." An irreversible change is a change that cannot go back. It cannot be changed back. These things cannot go back to what they used to be.

Ice cream, eggs, leaves, and water seem very different. But they are all made of matter. Matter is anything that takes up space and has mass.

Can It Change Back?

If you heat up a solid, the atoms move faster. This makes the atoms spread out more. The solid turns into a **liquid**.

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Liquids take
An ice cub
into water
a liquid, i
shape c

Matter is made of **atoms**. A oms are
always moving. Some thin s have ato
that move very slowly. hese atoms
close together. They ake up **solids**.

READING PASSAGE IN FOUR FORMATS

ENGAGING ACTIVITY & WORKSHEETS



ENGAGING ACTIVITY & WORKSHEETS


Water boils and becomes steam. The liquid turns into a gas.

Chocolate chunks melt to liquid chocolate. The solid turns into liquid.




Papers are burned. They turn into ash and smoke. Part of the solid is turned into gas.

Sort **Can It Change Back?**

Name: _____

Look at the pictures. Decide if they show a reversible change or an irreversible change. Sort them into the correct column.

Reversible

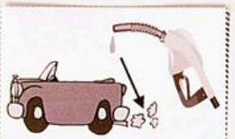
Ice melts and becomes water. The solid turns into liquid.




Saltwater is dried out. Salt is left behind. A liquid is turned into a solid.

Irreversible


Concrete is poured to make a floor. The liquid turns into a solid.


Gasoline is burned in a car. Part of the gasoline turns into steam. Some of the liquid is turned into a gas.


A raw egg gets cooked. The liquid turns into a solid.

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Chunks of glass are melted. They are formed into new shapes. Liquid is turned into a solid.


Flour, sugar, and eggs are mixed and cooked. They make waffles. Liquid turns to solid.

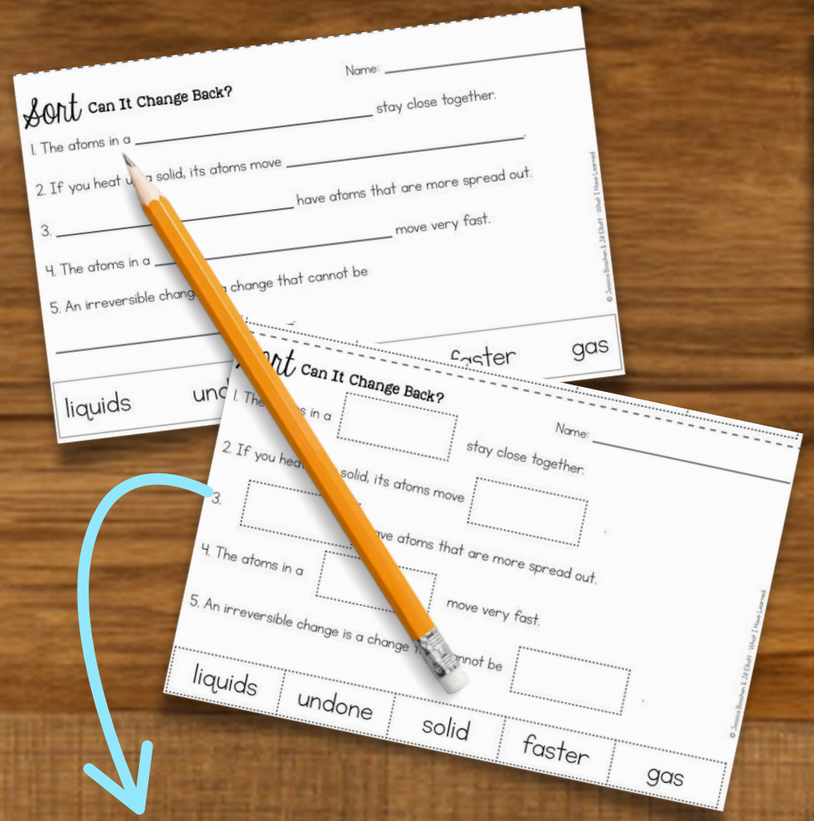

You can freeze juice to make an ice pop. Liquid turns to a solid.


The water in a plant freezes. This hurts the leaves. Liquid turns to solid.

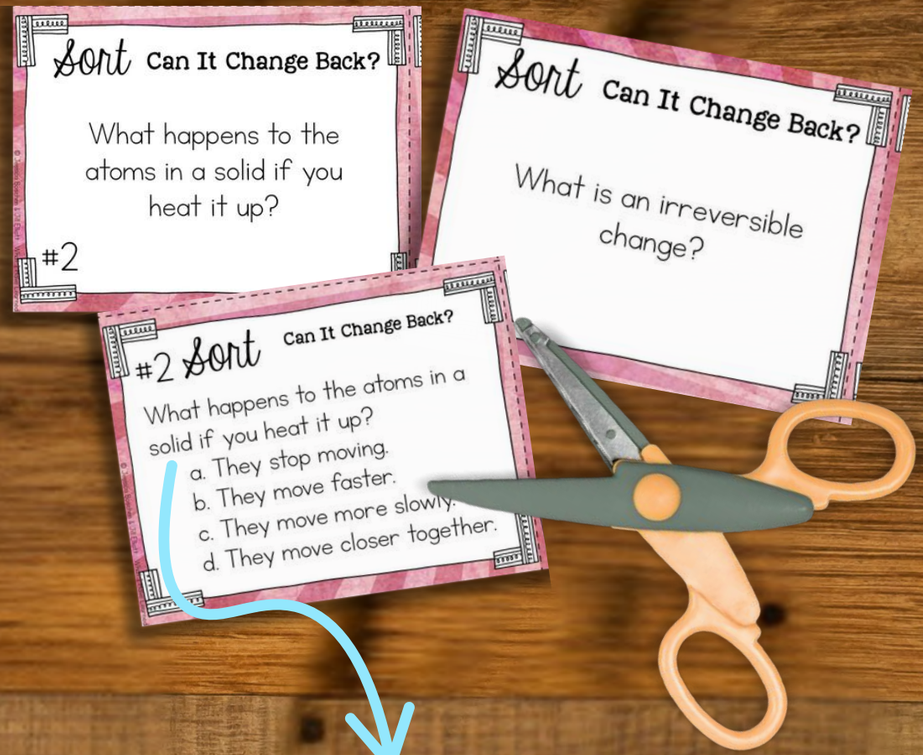
DIFFERENTIATED QUESTIONS



SHORT ANSWER



FILL-IN-THE BLANK



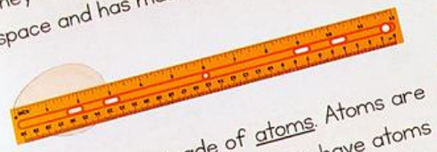
TASK CARDS: SHORT ANSWER & MULTIPLE CHOICE

Sort

Can It Change Back?

Student Instructions

Ice cream, eggs, leaves, and water seem very different, but they are all made of matter. Matter is anything that takes up space and has mass.



Matter is made of atoms. Atoms are always moving. Some things have atoms that move very slowly. These atoms stay close together. They make up solids.

If you heat up a solid, the atoms move faster. This makes the atoms

Sort

Can It Change B

Student Instructio

Liquids take the shape of their container. An ice cube melts in a glass. It turns into water. The ice cube was square. As a liquid, it is now round. It takes the shape of the round glass.

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Gases take the shape of the container. Air is a gas. When a balloon, all sides push out.

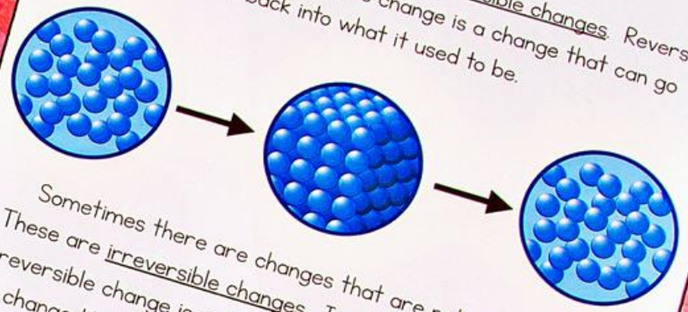
Solid, li

Sort

Can It Change Back?

Student Instructions

Many times, these changes are reversible changes. Reverse means "go back." A reversible change is a change that can go back. It can turn back into what it used to be.



Sometimes there are changes that are not reversible. These are irreversible changes. Ir- means "not." An irreversible change is a change that cannot go back. It cannot be changed back. These things cannot go back to what they used to be.

Sort

Can It Change Back?

MP3 QR Codes

Use your device and scan the QR Code or enter the web address below. Listen to the audio while you follow along and read the text.

ht

Sort Can It Change Back?

Name:

1. What are the atoms in a solid like?
The atoms in a solid stay c
very slowly.
2. What happens to the atoms in a solid if you heat it
If you heat up a solid, it
3. Describe a liquid.
Liquids take shape of their conta
atoms that are move spread out.
4. How do the atoms in a gas move?
The atoms in a gas move very fast.
5. What is an irreversible change?
An irreversible change is a change that cannot
be changed back.

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YOU WILL LOVE THIS BECAUSE



Makes Science Visual and Hands-On

Students learn better when they can see and manipulate real-world examples—this sort activity makes concepts concrete.



Supports Vocabulary & Classification Skills

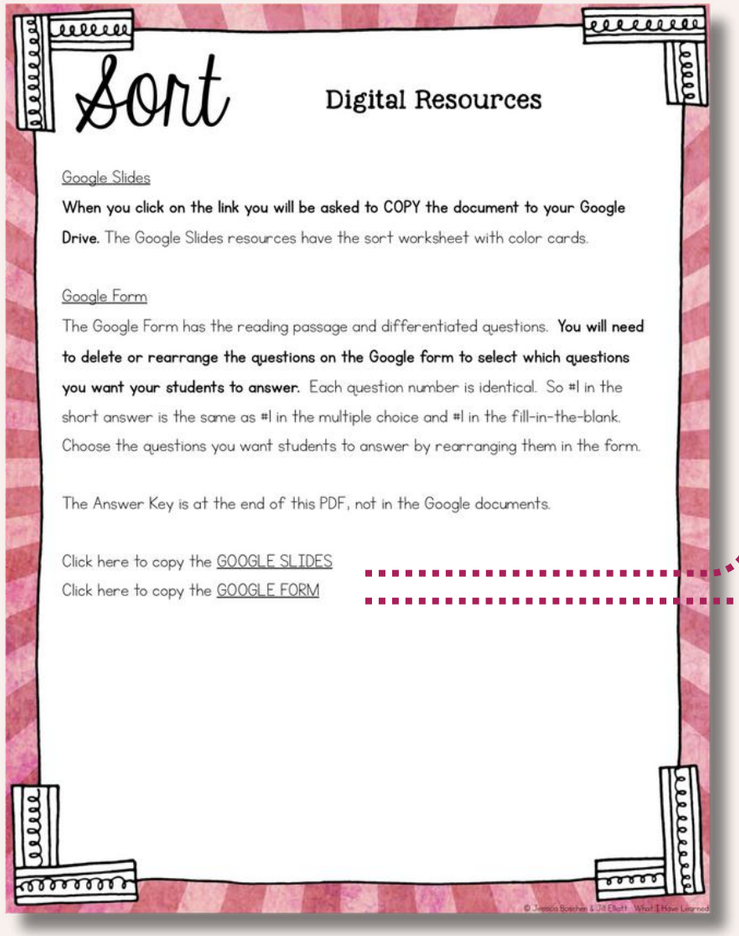
Students apply key science terms while sorting and explaining their reasoning—great for retention.

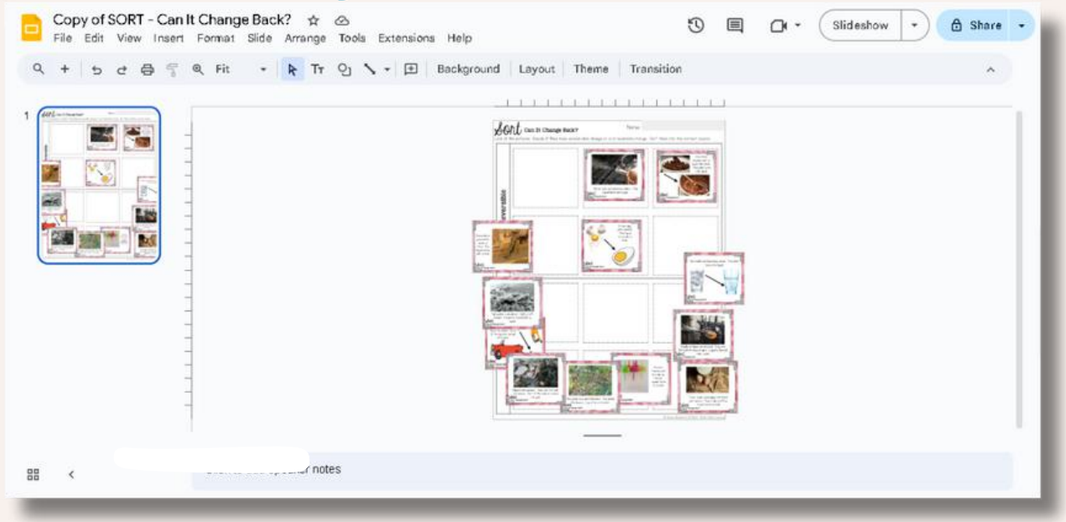


Supports Differentiated Instruction

Multiple reading levels, audio, and five response types mean every student has access to the content.

DIGITAL VERSIONS







DIGITAL VERSIONS

- ✔ Google Sheet with Activity & Directions
- ✔ Google Form with Reading & Questions

Answer keys provided

TEACHERS LOVE IT!

"Great hands on activity to go with our Science unit. Students got to practice what they learned in class. "

Julie F.



"This was a great hands-on activity that I was able to use to give my students a grade on this :) thank you. "

Margaret S.



My passion is making learning accessible to all students.
I love scaffolding learning, breaking down the concepts and building them up so that students can see the connections.
I love figuring out the small components that build up to the big ideas and helping students see it all.



teach MATH | teach SCIENCE | teach READING | teach WRITING

What I have LEARNED