

What Dissolves in Water?

Stirring

The first and most obvious way to dissolve a solid into water is by stirring. Pour your solid into your liquid, grab a large spoon, and stir until you can no longer see the solid. It's still there, but you can no longer see it because it's dissolved.

Water Temperature

Looking to dissolve a solid faster? Using hot water will speed up the process. Adding a solid to boiling water is the fastest way to dissolve it. Using cold water will make it take longer.

What Dissolves in Water?

Have you ever tried to dissolve something in the water? The process of dissolving occurs when a solid is added to a liquid. As they are combined, the solid breaks down and becomes one with the liquid. This new substance is called a solution.

Materials that successfully combine with a liquid are referred to as soluble materials. Examples of soluble materials include sugar and salt. Have you ever watched someone make lemonade? Sugar is added to water along with lemon juice. Simply stir the sugar into the water. The sugar is still there; we

What Dissolves in Water?

Name: _____

6. What does the word combine mean?
- coming together to create one thing
 - separating to create different things
 - brushing your hair
 - filling something

7. Each of the following materials is insoluble. Choose the one that shows the material dissolving in water.

- oil
- salt
- oil
- salt

8. Which of the following actions will help a solid dissolve faster in water?

- stirring
- water
- putting
- decreasing

9. What is the logical conclusion about the materials listed below?

- they are all soluble
- they all are insoluble
- they all are water-soluble
- they all are oil-soluble

10. What does the word product mean?

something you create

Annotate the Text

1 Number the paragraphs

2 Underline important statements

3 Circle unknown words

4 Question? Confusing?

Name: _____

What Dissolves in Water?

- Select the word or phrase from the paragraph that helps the reader understand the meaning of the word dissolve.
 - as they are combined
 - when a solid breaks down and becomes one with the liquid
 - the new substance is called a solution
 - dissolve something in the water
- What example does the author use to support the idea of decreasing an object's surface volume to help it dissolve quicker?
 - Smaller materials dissolve faster.
 - Fine-grain sugar, for instance, will dissolve much faster.
 - Consider breaking sugar cubes into smaller pieces.
 - Pour a little olive oil into a cup of water.
- Where in the text does the author show evidence to support the claim that sugar is a soluble material?
 - Paragraph 2
 - Paragraph 3
 - Paragraph 4
 - Paragraph 5
- What is the main idea of paragraph 4?
 - Materials can be dissolved in different liquids.
 - Some liquids are water-soluble.

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and sand. Think
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This resource includes:

- Teacher Tips
- Questions to Ask Students
- Student Bookmarks:
 - Close Reading Steps
 - Annotate/Mark the Text
- Informational Text: What Dissolves in Water?
- 10 Multiple Choice Questions
- 7 Graphic Organizers
- Answer Key

What Dissolves in Water?

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Water Temperature

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Annotate the Text

1 Number the paragraphs

— Underline important statements

○ Circle unknown words

❓ Question? Confusing?

⚡ Interesting!

What Dissolves in Water?

Have you ever tried to dissolve something in the water? The process of dissolving occurs when a solid is added to a liquid. As they are combined, the solid breaks down and becomes one with the liquid. This new substance is called a solution.

Materials that successfully combine with a liquid are referred to as soluble materials. Examples of soluble materials include sugar and salt. Have you ever watched someone make lemonade? Sugar is added to water along with lemon juice. Simply stir the sugar in, and it will dissolve. The sugar is still there; we just can't see it anymore.

Some materials will not dissolve in a liquid. These materials are known as insoluble materials. Examples of insoluble materials include flour and sand. Think about the coastline where the ocean and sand meet. Even with the strength of the tide, the sand does not dissolve. It can exist within the water and at the bottom of the ocean's surface. Some materials do not interact well with water molecules and, therefore, will not dissolve in a liquid.

Water-Soluble Materials

What are water-soluble materials? Materials that dissolve in water are called water-soluble materials. Examples of water-soluble materials are salt, coffee, vinegar, and lemon juice. Think also about the products you use at home: shampoo, soap, and many other household items are water-soluble, as is laundry detergent.

How to Dissolve

How do we dissolve a solid into a liquid? We know that some materials will dissolve, so how do we test it to see? There are several ways to dissolve a solid into a liquid. Below we will discuss some of the ways to

Non-Fiction Passage

What Dissolves in Water?

Name:

6. What does the word combine mean?
 - a. coming together to create one
 - b. separating to create different
 - c. brushing your hair
 - d. filling something up
7. Each of the following materials is water. Which one shows the correct designation?
 - a. oil and sugar: soluble; coffee and sugar: insoluble
 - b. salt and sugar: soluble; oil and sugar: insoluble
 - c. oil and sand: soluble; salt and coffee: insoluble
 - d. salt and coffee: soluble; oil and sugar: insoluble
8. Which of the following is NOT a way to increase the rate of dissolving?
 - a. stirring
 - b. water temperature
 - c. putting it in the freezer
 - d. increasing the surface area

What Dissolves in Water?

Name:

1. Select the word or phrase from the paragraph that helps the reader understand the meaning of the word dissolve.
 - a. as they are combined
 - b. when a solid breaks down and becomes one with the liquid
 - c. the new substance is called a solution
 - d. dissolve something in the water
2. What example does the author use to support the idea of decreasing an object's surface volume to help it dissolve quicker?
 - a. Smaller materials dissolve faster.
 - b. Fine-grain sugar, for instance, will dissolve much faster.
 - c. Consider breaking sugar cubes into smaller pieces.
 - d. Pour a little olive oil into a cup of water.
3. Where in the text does the author show evidence to support the claim that sugar is a soluble material?
 - a. Paragraph 2
 - b. Paragraph 3
 - c. Paragraph 4
 - d. Paragraph 5
4. What is the main idea of paragraph 4?
 - a. Materials can be dissolved in different liquids.
 - b. Some liquids are water-soluble.
 - c. Water-soluble materials include coffee and vinegar.
 - d. Water-soluble materials can be dissolved in water easily.
5. Which of the following details is most important to the topic of why some materials will not dissolve in a liquid?
 - a. flour and sand are examples of insoluble materials
 - b. some materials do not interact well with water molecules

10 Multiple
Choice
Questions

Close Reading

Close Reading: A reading strategy that is used to comprehend and analyze a text closely. Students will typically read the text at least twice for comprehension, details, analysis, and deep questioning of the text's purpose and meaning.

Steps for Close Reading:

1. Read the Text
2. Mark Up the Text or Annotate the Text
3. Read the Text Again
4. Define Unknown Words
5. Read the Text Again
6. Respond to Reading

Includes:

- Teacher Tips
- Questions to Ask Students
- Close Reading Steps - Bookmark
 - Version with "Mark the text"
 - Version with "Annotate the text"
- Steps to "Mark the Text" Bookmark
- Steps to "Annotate the Text" Bookmark
- Informational Text: The
- 10 Multiple Choice Questions
- 7 Graphic Organizers

Teacher Tips & Suggestions

Questions to Ask Students

- What is the text mostly about?
- Who is the audience for this text?
- What's is the writer's purpose of this text?
- What's your favorite part of the passage?
- What words are new to you? What do you think the words mean?
- What detail stands out to you?
- What questions do you now have about the topic?
- If you can ask the author 2 questions, what would you ask them?
- In this paragraph, what is the author saying?
- What is the structure of the text? How does it help

Teacher Tips

Close reading: A reading strategy that is used to comprehend and analyze a text closely. Students will typically read the text at least twice for comprehension, details, analysis, and deep questioning of the text's purpose and meaning.

1. Read the Text: When students read the text for the first time, they are reading just to identify what the passage is mostly about. The first read is surface level and allows the students to understand the gist of the text.
2. Mark Up the Text or Annotate the Text: Encourage students to use their annotation bookmarks (provided below) to make notes directly on the text. Students can write in the margins, use sticky notes to make notes, use color coding. You can even slip the text inside a dry-erase pocket and encourage students to use dry-erase markers to mark up the text.
3. Read the Text Again: If the teacher is working with the students for this, the teacher can read the text aloud this time. Model think-alouds and use expression while you read. If students are working with partners in a station, encourage them to each read a paragraph then switch readers.
4. Define Unknown Words: During this step, invite students to circle any unknown or unfamiliar words. Use the provided graphic organizer to select 4-5 unknown words and work to identify the meaning of each word.
5. Read the Text Again: With this third time reading the text, encourage the students to read the passage independently.
6. Respond to Reading: Students will now use the text to answer the 10

Graphic Organizers

- Main Ideas with Text Evidence
- Central Ideas with Text Evidence
- Central Ideas with Details
- Main Idea, Details, Conclusion
- KWL: What I Know, What I Want to Know, What I Learned
- Overview: Topic, Author's Purpose, Key Vocabulary, Most Important Thing, I Wonder, Important Facts, Illustration
- Context Clues (3 Versions: 3 words, 4 words, 5 words)
- Arthropods

Name: _____

Unknown Word

Context Clue

Word Meaning

Name: _____

What I Know

What I Want to Know

What I Learned

Name: _____

Topic

Author's Purpose

Key Vocabulary

Most Important Thing

I Wonder...

Important Facts

Illustration

Graphic
Organizers

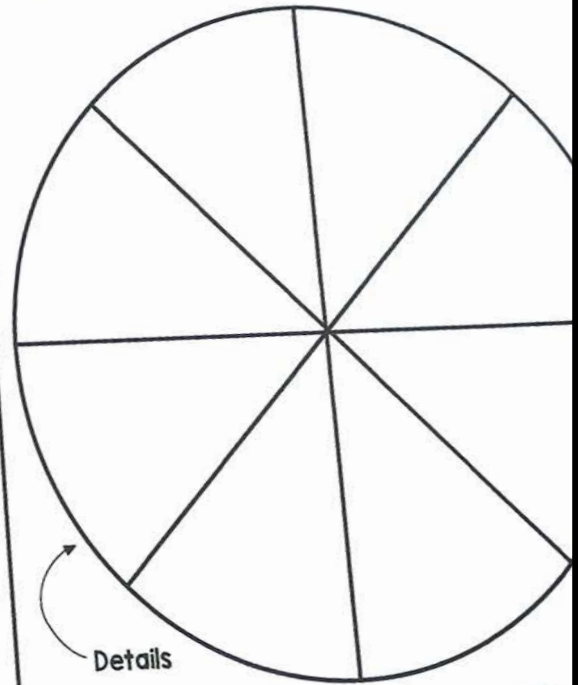
Ideas for Use

- Science or ELA Stations
- Whole Group Instruction
- Partner Practice
- Guided Reading Groups
- Substitute Plans
- Send home to practice
- ELA Work Stations or Centers
- Assessment

Unknown Word	Context Clue

Name: _____

Central Idea



Details

Name: _____

Main Ideas

- 1
- 2
- 3

Text Evidence #1

Text Evidence #2

Text Evidence #3

Name: _____

Main Idea

Detail

Detail

Graphic Organizers

Purchase now to
connect science
and literacy
in your
classroom!