Name: _____ Date: _____

# Where Does the Sugar Go in Your Tea?

Circle group

Drop sugar into a cup of warm tea. Stir it. Soon the sugar seems to be gone. Where did it go?

The sugar did not disappear. It dissolved. When a thing dissolves, it breaks into bits too small to see. The tiny bits spread through the liquid.

You can show the sugar is still there. Taste the tea. It is sweet. You cannot see one grain, but the sweet taste is the sugar.

Warm water dissolves sugar faster than cold water. Stirring helps too. It brings fresh water to the sugar.

But there is a limit. If you add too much sugar, the liquid cannot hold it. The extra sugar sinks to the bottom. It stays there as grains.

## Questions

**1. What is it called when sugar breaks into bits too small to see?**

_____

_____

**2. How can you tell the sugar is still in the tea?**

_____

_____

**3. Which dissolves sugar faster, warm water or cold water?**

_____

_____

**4. How does stirring help?**

_____

_____

**5. What happens to extra sugar when the tea is full?**

_____

_____

**6. Why is it wrong to say the sugar disappeared?**

_____

_____

## Words to know

dissolve: to break into tiny pieces that mix into a liquid
liquid: something wet that can be poured
grain: one tiny piece of something like sugar

## Talk together (every group has these)

1. Find one fact that every group read. How did your sheet say it?
2. What did your sheet tell you that you think another group's did not? Ask them.
3. What is one question about this topic that none of the sheets answered?

Name: _____ Date: _____

# Where Does the Sugar Go in Your Tea?

Triangle group

Drop a spoonful of sugar into a warm cup of tea and stir. In a few moments, the sugar seems to vanish. Where did it go?

The sugar did not disappear. It dissolved. When something dissolves, it breaks into pieces too small to see. These tiny pieces spread out through the liquid and mix evenly with it.

You can prove the sugar is still there with a taste test. The tea now tastes sweet, even though you cannot see a single grain. The sweetness is the sugar, spread through every sip.

Warm water dissolves sugar faster than cold water. The tiny pieces of warm water move around more quickly, and they pull the sugar apart sooner. Stirring helps too, because it keeps bringing fresh water to the sugar.

There is a limit, however. If you keep adding sugar, the liquid cannot hold any more. The extra sugar sinks to the bottom of the cup and stays there as grains.

## Questions

**1. What do we call it when sugar breaks into pieces too small to see?**

_____

_____

**2. How can you tell the sugar is still in the tea?**

_____

_____

**3. Which dissolves sugar faster, warm water or cold water?**

_____

_____

**4. Why does stirring help the sugar dissolve?**

_____

_____

**5. What happens to extra sugar when the tea cannot hold any more?**

_____

_____

**6. Why is it wrong to say the sugar disappeared?**

_____

_____

## Words to know

dissolve: to break into tiny pieces that mix into a liquid
vanish: to go out of sight
liquid: something wet that can be poured
evenly: in the same amount all through
grain: one tiny piece of something like sugar

## Talk together (every group has these)

1. Find one fact that every group read. How did your sheet say it?
2. What did your sheet tell you that you think another group's did not? Ask them.
3. What is one question about this topic that none of the sheets answered?

Name: _____ Date: _____

# Where Does the Sugar Go in Your Tea?

Square group

Drop a spoonful of sugar into a warm cup of tea and give it a good stir. Within moments, the sugar appears to vanish completely. Where could it possibly have gone?

In fact, the sugar did not disappear at all. It dissolved. When a substance dissolves, it breaks apart into particles far too small to see, and these tiny particles spread out through the liquid and mix with it evenly.

A simple taste test proves that the sugar is still present. The tea tastes sweet, even though you cannot spot a single grain. The sweetness is the sugar itself, distributed through every sip.

Warm water dissolves sugar more quickly than cold water does, because the tiny pieces of warm water move around faster and pull the sugar apart sooner. Stirring also speeds things up, since it constantly brings fresh water into contact with the sugar.

Still, there is a limit. If you continue adding sugar, the liquid eventually cannot hold any more. The extra sugar sinks to the bottom of the cup and remains there in the form of grains.

## Questions

**1. What do we call it when sugar breaks apart into particles too small to see?**

_____

_____

**2. How can a taste test prove the sugar is still in the tea?**

_____

_____

**3. Which dissolves sugar more quickly, warm water or cold water?**

_____

_____

**4. Why does stirring speed up dissolving?**

_____

_____

**5. What happens to extra sugar once the liquid cannot hold any more?**

_____

_____

**6. Why is it wrong to say the sugar disappeared?**

_____

_____

## Words to know

dissolve: to break into tiny pieces that mix into a liquid
vanish: to go out of sight
liquid: something wet that can be poured
evenly: in the same amount all through
grain: one tiny piece of something like sugar

## Talk together (every group has these)

1. Find one fact that every group read. How did your sheet say it?
2. What did your sheet tell you that you think another group's did not? Ask them.
3. What is one question about this topic that none of the sheets answered?

# For the teacher: Where Does the Sugar Go in Your Tea?

Each student sheet carries a shape, not a level. The same topic and facts, written three ways.

### Circle: Where Does the Sugar Go in Your Tea?

Easier · 119 words · Flesch-Kincaid grade 1.5

1. Dissolving.
2. The tea tastes sweet.
3. Warm water.
4. It brings fresh water to the sugar.
5. It sinks to the bottom as grains.
6. The sugar is just too small to see, and you can taste it.

### Triangle: Where Does the Sugar Go in Your Tea?

This passage · 159 words · Flesch-Kincaid grade 4.2

1. Dissolving.
2. The tea tastes sweet.
3. Warm water.
4. It keeps bringing fresh water to the sugar.
5. It sinks to the bottom as grains.
6. The sugar is only too small to see, and you can still taste it.

### Square: Where Does the Sugar Go in Your Tea?

Harder · 180 words · Flesch-Kincaid grade 6.5

1. Dissolving.
2. The tea tastes sweet.
3. Warm water.
4. It keeps bringing fresh water into contact with the sugar.
5. It sinks to the bottom of the cup as grains.
6. The sugar is only too small to see, and you can still taste it.