



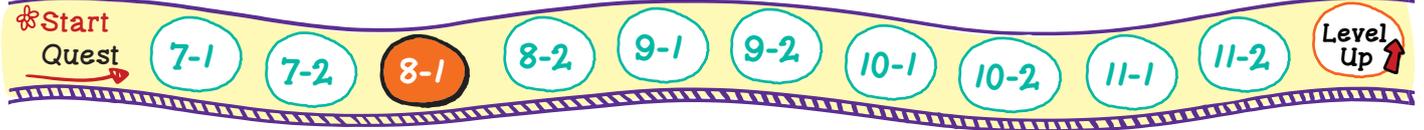
food heroes

Challenge 8: Sneaky Sugar

Quest 2 of 3: Strengthen Our Team



Sneaky Sugar!



Introduction

Let kids learn how sugars are detrimental to the body and mind in the “Sneaky Sugar” challenge.

They will learn about unhealthy snacks and drinks to stay away from and help teach the sugar villain, Sarah Sorceress.

Lesson Objectives

- ★ Students will identify the negative ways that sugar affects our bodies.

You Will Need...

- | | | |
|------------------------------|---------------------|---------------------|
| ★ Rainbow coloring supplies* | | ★ Food Hero Posters |
| ★ Food Journal* | 1 sheet per student | ★ 5 Bowls* |
| ★ Homework sheet* | 1 sheet per student | |

*Additional preparation needed

Lesson Plan

Class Warm Up

Discussion Question:

Is sugar good for your body? What foods have sugar?

Vocabulary Preview

1. **Sugar** - Sweet substance found naturally and artificially; highly addictive
2. **Strong Bones** - Able to grow well and not break easily

Class Story

The Food Heroes are spending the day outside today! They take a hike together under the bright sun, laughing and running up the long steep path. As they climb higher and higher, everybody starts to feel a little tired and step over to take a break.

Kai takes out an energy drink and energy bar, saying, "I heard these snacks and sports drinks give you lots of energy! Let's try them!"

Everyone looks around, nodding their heads, and begins to chomp down the snacks. The Food Heroes immediately feel great and rush ahead, racing and sprinting and having a great time! Soon after, they start slowing down.

"Oh no, I feel awful," says Jade.

"Oof, I don't feel too good either," says Ava. She starts feeling weak, taking off her backpack to lie down on the trail. Her legs won't even move with her anymore!

"Ava! Come on!" Shouts Clay, and as he raises his voice, he can hear that he is getting to be a bit grumpy. Deciding he won't talk to anyone anymore, he storms ahead. Terra gets dizzy and runs into a tree,

Helpful Hints

Get the class warmed up for this lesson by asking a discussion question.

Drink Water, Not Sugar



and even worse, the Food Heroes get lost on the trail because Kai can't think straight anymore and loses their way.

"We need help!" Says Kai; "I think it is something that we ate that did this to us! We're losing our superpowers, so I can't think clearly. Let's stop and rest here for a while so that we can recover our superpowers and make it to the top of the mountain!"

The Food Heroes gather together and sit under a tree.

The Food Heroes slowly recover from their dizziness, stomachaches, and bad moods as they stand up and march onwards with the hike. The heat beats down on them, and soon the ground becomes hotter, and hotter and hotter. Suddenly, the heat starts to melt something on the ground that makes the Food Heroes get stuck!

"Everyone," says Kai, "I can't figure out what is going on! What or who do you think is making us slow and weak like this!?"

"There's only a couple of things that could affect my body and mind like this," replies Ava, scraping her finger across the melty sticky ground and taking a lick. "It's sweet! The only think I can think of right now is sugar!"

At the sound of the word sugar, a cackling comes from behind a tree in the mountain. Kai jumps up: "What was that!? It was probably all the sugary drinks and granola bars. Whoever is laughing over there tricked me into thinking those foods were good, and we lost our superpowers."

Stomping noises come from the path ahead, and a shrill voice screams, "Your favorite flavor is all because of me!! Why be healthy when you can have sweeeeet!!!"

Sarah Sorceress appears and begins to shoot white sugar sprays at the Food Heroes, trapping them to the ground and against trees with her sticky syrup. She spins the sugar below her hands and builds a tower for her to rise higher and higher on. "You Food Heroes will never be able to escape me! My sticky webs are inescapable, and my giant mountains of sugar are impossible to climb!"

As the Food Heroes struggle against the sneaky sugars that surround them, their efforts become weaker and weaker.

"It's all the sugar, it's making me lose my strength and I can't burrow past this mountain!" Says Ava.

"But why is sugar so bad?" Asks Jade. "What does it do to our body? We must find out so that we can defeat Sarah Sorceress!"

Why were the Food Heroes not feeling well? Who must they defeat?



Pause between questions to give students time to think and answer.

Mini-Lesson

Too Much Sugar:

Discuss with the class why it's important to stay away from foods with sugar. Make a list on the board of foods with a lot of sugar (ex. cakes, cookies, soda etc.).

Sugar affects your brain and makes you lose focus, so you can't think as clearly. It also affects your moods and makes you want to eat other bad Runaway foods. It is very addictive.

Class Activity

Sugar Relay Race:

In this activity, students will learn how sugar affects our bodies.

Divide students into two or three teams standing in vertical lines each approximately 3 meters in front of their corresponding bowls. Place an equal assortment of Menu Cards and Fake Food Cards in each bowl.

The first person of each line will run up to their bowl and grab a card. If it has an unhealthy snack or drink, they have to spin in a circle 5 times then do 10 jumping jacks!

If it is a healthy snack or drink, have them do 10 jumping jacks.

After completing their turn, they go and tag the next student in line. The team which finishes the cards in their bowl first, wins! After completing their card they can put the card in a pile outside of their bowl.

Ask students how they felt after spinning in circles. Was it easier or harder to do ten jumping jacks? What kinds of snacks are better for us to eat? Why?

At-Home Mission (Optional)

Using the "Boiling Sugar" homework sheet, students can perform the sugar experiment at home with their parents.

Complete a Food Journal.



At-Home Mission

Name: _____

Boiling Soda Activity

Ask your parents to help you do this activity to find out what Sara Sorceress' most powerful weapon is.

Instructions

1. Soda is essentially just water, sugar, and chemicals. If you boil off the water, you can see just how much sugar a bottle of soda has.



2. Pour soda into a pot and boil it down to a sticky syrup. This may take a few minutes.



3. Take the soda out of the pot once it has turned into a thick, syrup-like goo. Have your child observe!

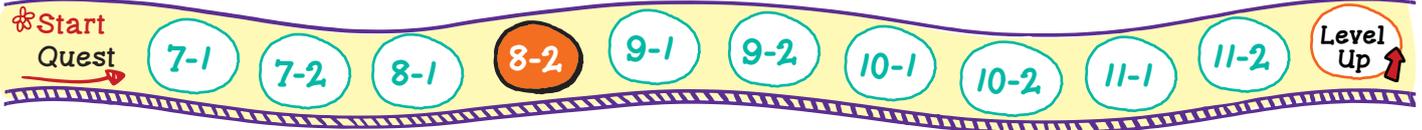


What is the Sara Sara Sorceress most powerful weapon?



Parent's Signature: _____

Sneaky Sugar!



Introduction

Kids will continue to learn how sugar prevents them from having a healthy body and mind in the “Sneaky Sugar” challenge.

Children learn about the amount of sugar in sugary drinks and some healthy alternatives.

Lesson Objectives

- ★ Review why consuming too much sugar is detrimental to the body.
- ★ Students will identify how much sugar certain drinks contain and replacement drinks.

You Will Need...

★ Food Journal*	1 sheet per student	★ Posters of sugary drinks*	1 per group
★ Homework sheet 1	1 sheet per student	★ Cut-outs of sugar cubes*	~70 cubes
★ Homework sheet 2	1 sheet per student	★ Sugar-free badges*	2 per student
★ Rainbow coloring supplies		★ Glue stick*	1 per group

*Additional preparation needed

Lesson Plan

Class Warm Up

Review:

Review with students what happens to your body when you eat too much sugar.

Discussion Question:

What does sugar do to your body?

Vocabulary Preview

1. **Sugar** - Sweet substance found naturally and artificially; highly addictive
2. **Sugary drink** - Beverage with high amounts of added sugar, often high fructose corn syrup

Class Story

Last class, the Food Heroes realized they were being tricked by Sara Sorceress, and as the sun continued beating down on our heroes, it boiled the sugary substances surrounding them into a gross, sticky, goo... just like the Boiling Soda activity that you all did for homework!

"This is so gross!" says Terra.

"It is crazy how much sugar goo is in here," says Kai.

"Sugar must be Sara Sorceress' worst weapon!" says Clay.

The mountain begins to rumble, "Did someone say my name!?" Shouts a voice from above. Sara Sorceress appears, looking ready to strike again.

Helpful Hints



Get the class warmed up for this lesson by asking a discussion question.



“Wait!” Exclaims Jade. Everybody freezes. Jade is closing her eyes and begins to hum, using her magic powers to call the bees towards them. They seem to be carrying something, and everybody takes a closer look. It’s honeycomb!

“Sara! Before you attack with your sugar again,” Terra says, grabbing some honeycomb from Jade’s bee friends, “I’d like you to try this honey! It is natural sugars that our Earth and animal friends make, and equally delicious! Here, just have a nibble!”

Terra extends the honey dipper to Sara, who hesitantly grabs the wooden stick. She seems confused, but at the first lick of the sticky golden substance, her eyes light up.

“Wow!” Sara says, absolutely in shock. “So sweet! So delicious! And it’s made naturally on Earth!?” All the Food Heroes nod in response.

“Sara,” begins Clay, “I think that there are a lot more natural and yummy sugars out there that we want you to try! Sure, your sugar is sweet too, but they seem to be sucking our superpowers!”

“But,” says Sara, “how can we know for sure the differences in fake and real sugars?”

The Food Heroes look at each other and realize that they never checked how much sugar there was in the other drinks!

“Oh man!” Says Clay. “Let’s go home and sort through our kitchen. Who’s with me!?”

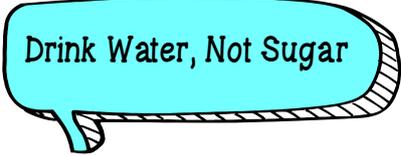
Quickly, the Food Heroes return to the kitchen with Sara, to help show her why her sugars can’t strengthen their powers. In the cabinets and fridge, they see many drinks like sodas and fake juices, with labels showing how much sugars there are in them.

“Look this coke says that there are 22 cubes of sugar in it!” Exclaims Kai.

“And this one bubble tea says that there are 15 sugar cubes!” Says Terra. “There’s even a warning on it to not drink too much as it has a lot of sugar!”

The Food Heroes have baffled at all the sugary drinks in the kitchen. Before Sara Sorceress can change her mind about sugars after seeing how much sugar was sneakily hidden in their kitchen, Ava uses her super speed to run circles around them until she is dizzy.

Sara Sorceress falls over, and only Clay is brave enough to walk up to her and take her hand. “Sara Sorceress,” he says, “Our powers come from the lessons we learned and the Superboost foods we eat. Your sugar drains our powers, but you can’t ever take them away from us!



Drink Water, Not Sugar



We created our own superpowers, and if you eat healthy, you can be a Food Hero too. You don't have to drain other people's powers through your sugar!"

Sara Sorceress still wasn't convinced. "How could I possibly gain my own superpowers? Why would I waste time doing that?" She asks.

"Because eating Superboost foods boosts your body and your powers! It can boost your mind and make you happier. What you eat really changes everything!" Replies Clay. Sara Sorceress smiles hopefully and grabs the banana and glass of water that Ava hands her.

"Sometimes I'll add sugar to things just so that it'll be tasty, and so that people will eat my food. How can I get people to eat what I make if I don't add sugar?" She asks.

Clay excitedly grabs his bowls and cooking utensils, leading Sara towards the kitchen. "I'll teach you to cook!" He exclaims, and Sarah's eyes are wide with excitement.

"Cooking! I'd love that! This is great, I want to be a Food Hero now, too. In fact, I don't want to think of myself as a sugar sorceress any longer; you can call me Sweet Sara instead!"

All the Food Heroes cheer at the good news. "Welcome to the team, Sweet Sara!" Says Clay.

Mini-Lesson

Sugary Drinks:

Discuss with students that certain drinks have more sugar than others and the effects of a lot of sugar on our bodies. What beverages should we drink more of instead?

Some example of sugary drinks are juice, soda, milkshakes, yogurt drinks and sports drinks.



**Eat a Rainbow
Everyday!**



Class Activity

Sugar Relay Race:

Split students into groups and give each group a 'Sugary Drink Poster'. After they complete the math question at the top of the papershowing how many sugar cubes there are in their drinks, let them cut and paste the appropriate number of sugar cubes on the paper.

After they finish ask the students to line up according to whose drink has the most sugar.

Give out Sugar Badges to all the students who complete their posters. Discuss way to make water more interesting by infusing with fruits or herbs. Then challenge the class to take a sugar free pledge for a day or week together!

Answer Key:

Orange Juicebox (200 ml)	4 cubes (Math problem: $1+3=4$)
Apple Juicebox (200 ml)	5 cubes (Math problem: $2+3=5$)
Milk Tea (500 ml)	8 cubes (Math problem: $2+3= 5$)
Cola (355 ml)	10 cubes (Math problem: $4+6= 10$)
Yogurt Drink (435 ml)	16 cubes (Math problem: $8+8=16$)
Sports Drink (500 ml)	8 cubes (Math problem: $5+3= 8$)
Water (200 ml)	0 cubes (Math problem : $2-2=0$)
Tea	0 cubes (Math problem: $1-1= 0$)

At-Home Mission (Optional)

On the "Sugar Free Pledge" homework sheet, draw the drink with the most sugar and recite the Sugar Free Pledge with your family.

On the "Yummy Water" homework sheet, color in the water glass and the fruits you can add to it to make the water taste yummy. Yummy water will help you avoid drinking sugary drinks.

Complete a Food Journal.

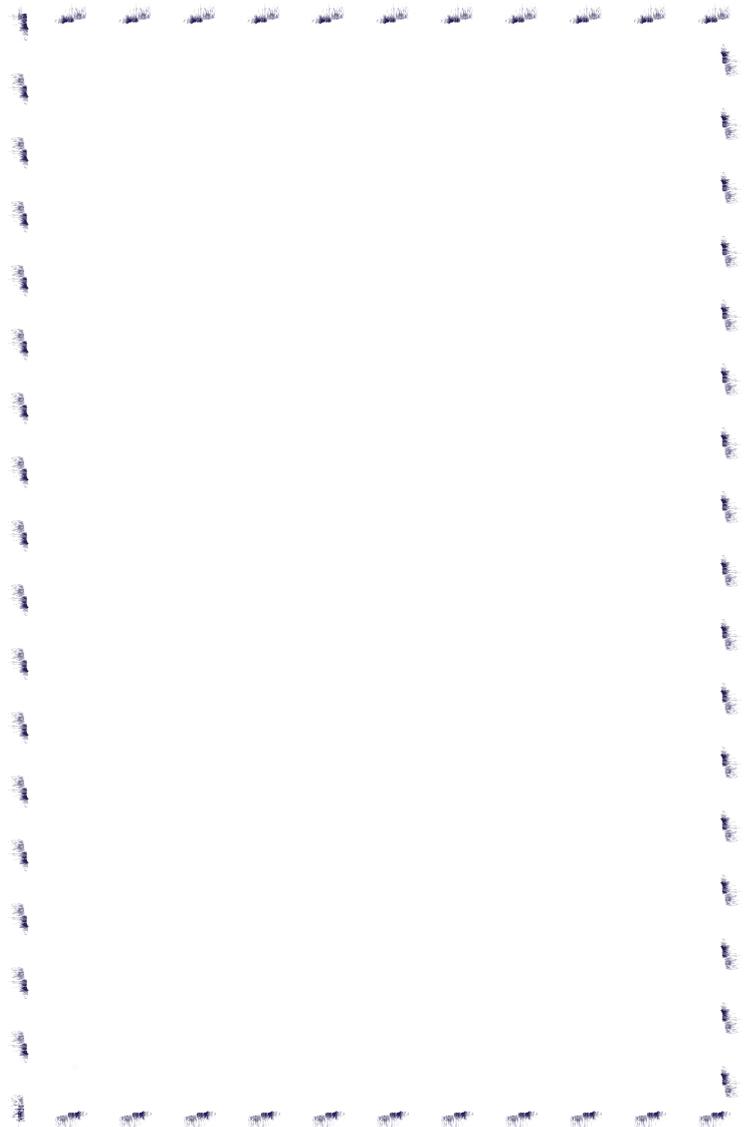


Sugar Mapping

How many sugar cubes are in this drink? Solve the equation to find out!

Then, cut and glue the correct number of sugar cubes onto the paper.

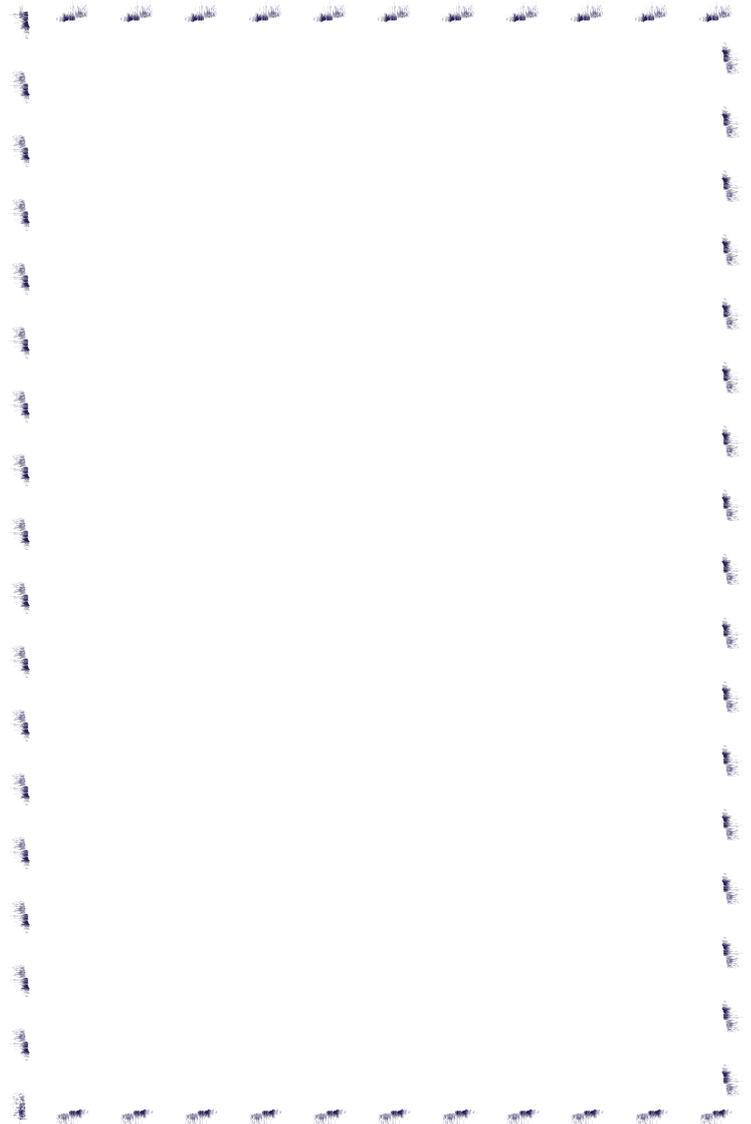
$$1 + 3 = \underline{\hspace{2cm}}$$



Sugar Mapping

How many sugar cubes are in this drink? Solve the equation to find out!
Then, cut and glue the correct number of sugar cubes
onto the paper.

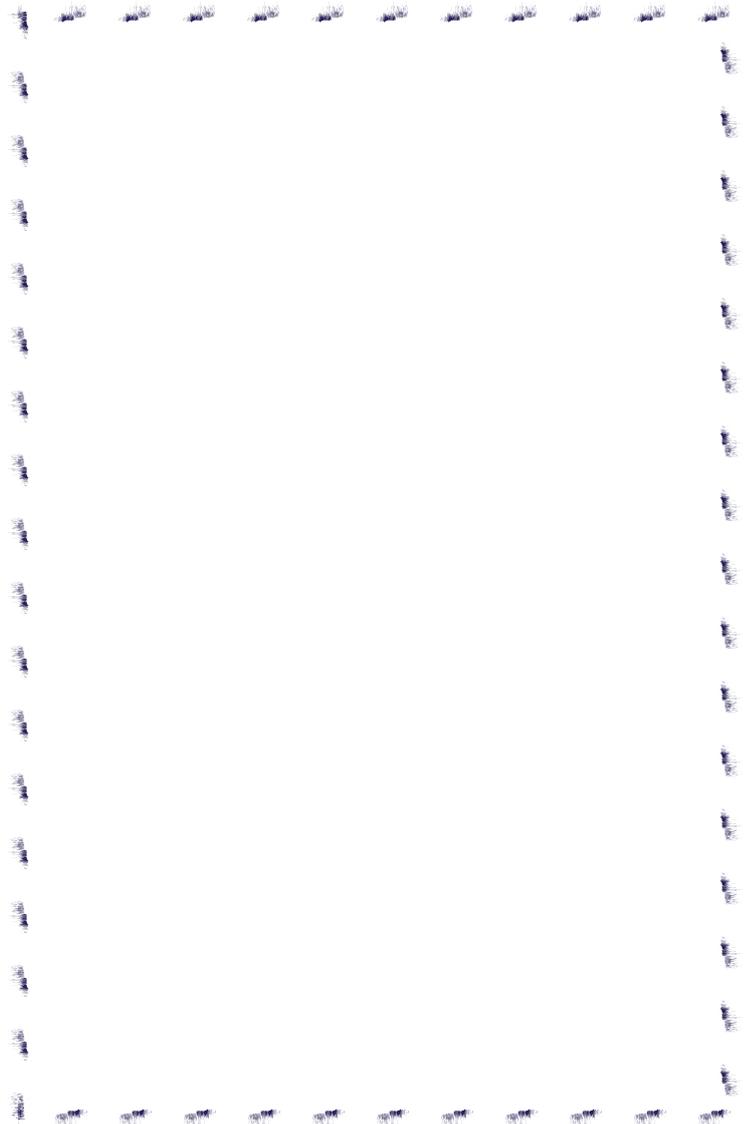
$$4 + 6 = \underline{\hspace{2cm}}$$



Sugar Mapping

How many sugar cubes are in this drink? Solve the equation to find out!
Then, cut and glue the correct number of sugar cubes
onto the paper.

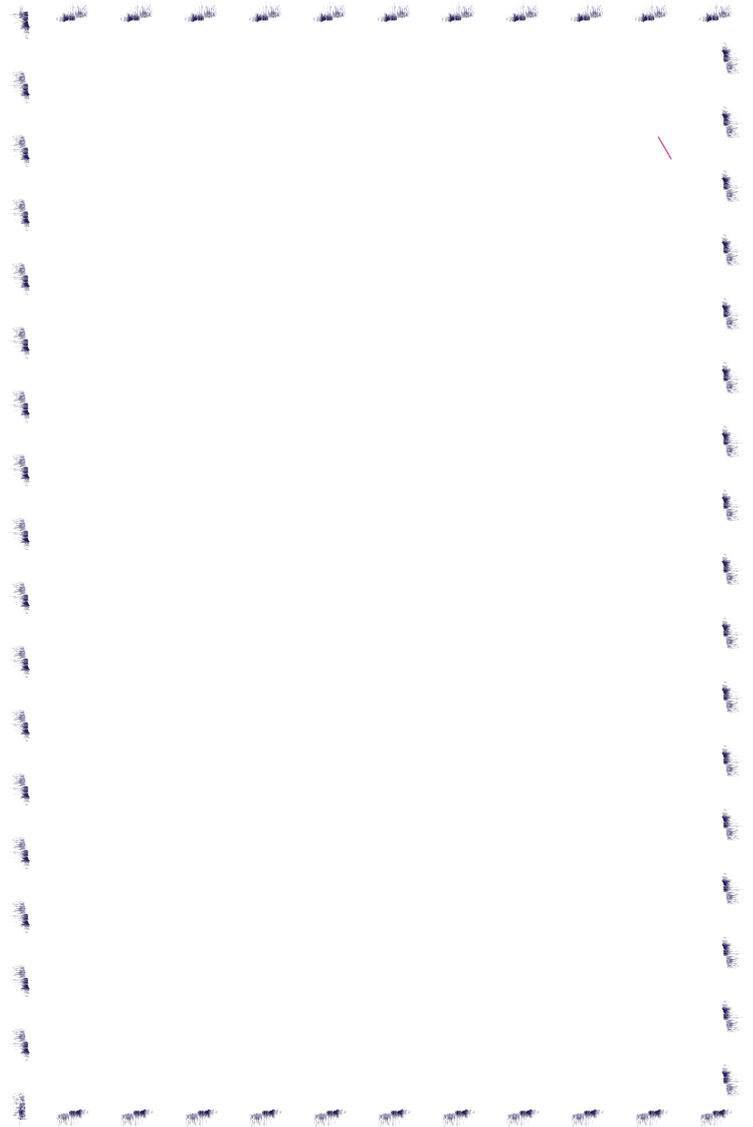
$$2 + 3 = \underline{\hspace{2cm}}$$



Sugar Mapping

How many sugar cubes are in this drink? Solve the equation to find out!
Then, cut and glue the correct number of sugar cubes
onto the paper.

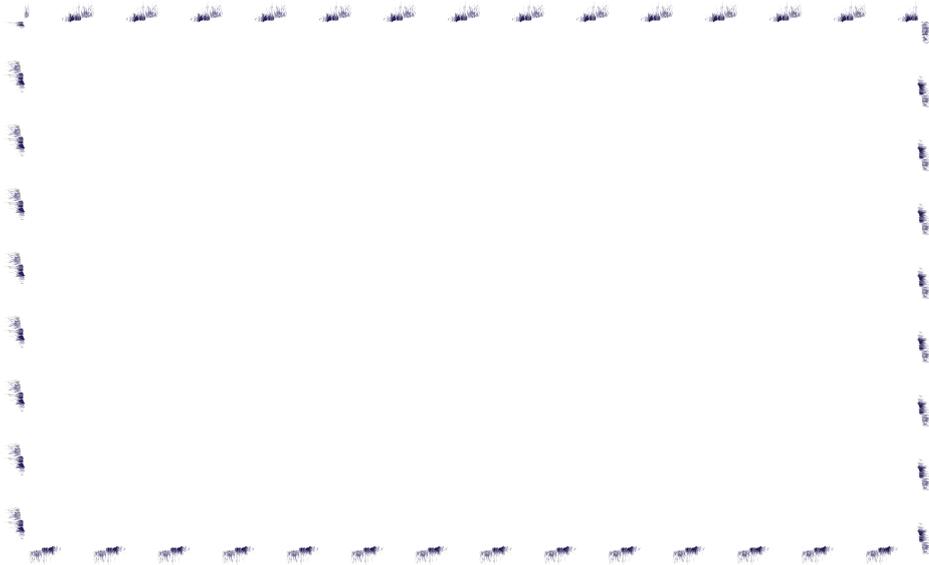
$$2 - 2 = \underline{\hspace{2cm}}$$



Sugar Mapping

How many sugar cubes are in this drink? Solve the equation to find out!
Then, cut and glue the correct number of sugar cubes
onto the paper.

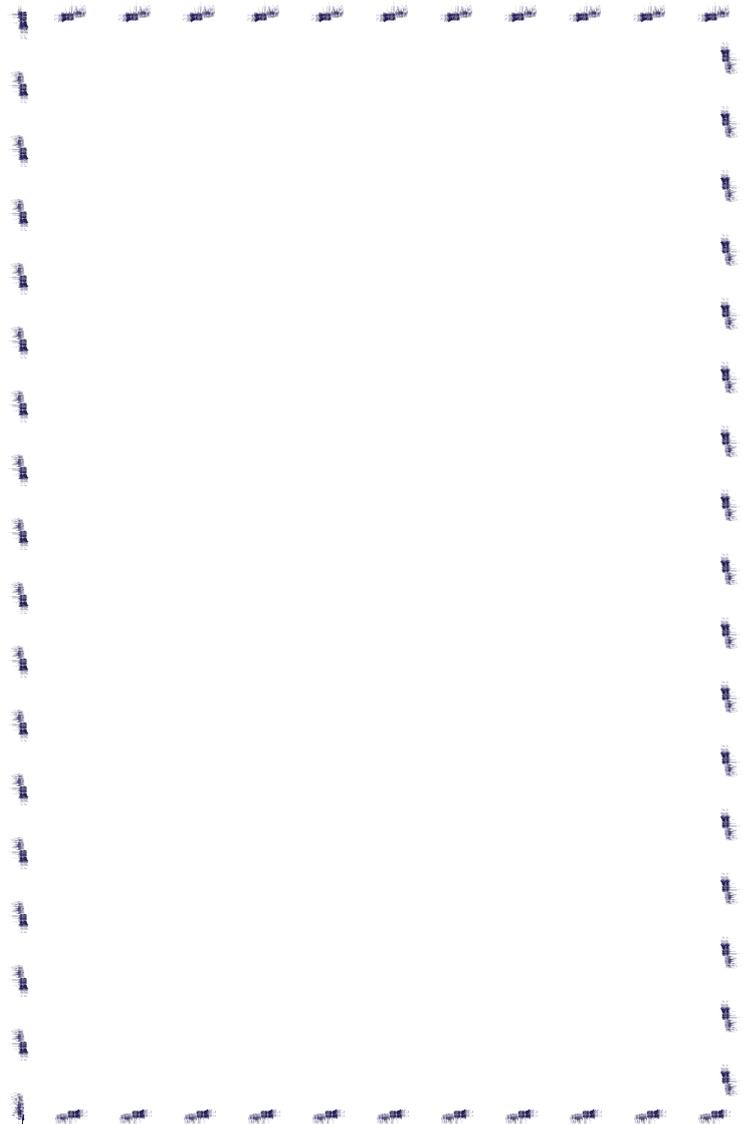
$$1 - 1 = \underline{\hspace{2cm}}$$



Sugar Mapping

How many sugar cubes are in this drink? Solve the equation to find out!
Then, cut and glue the correct number of sugar cubes
onto the paper.

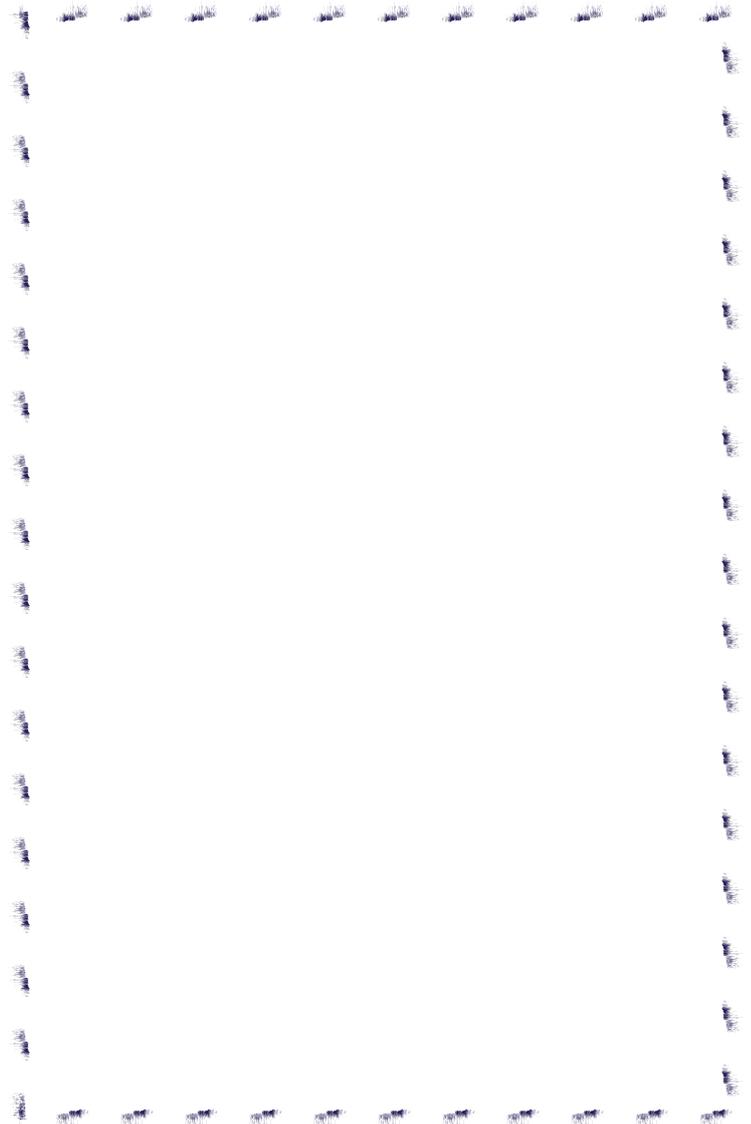
$$2 + 6 = \underline{\hspace{2cm}}$$

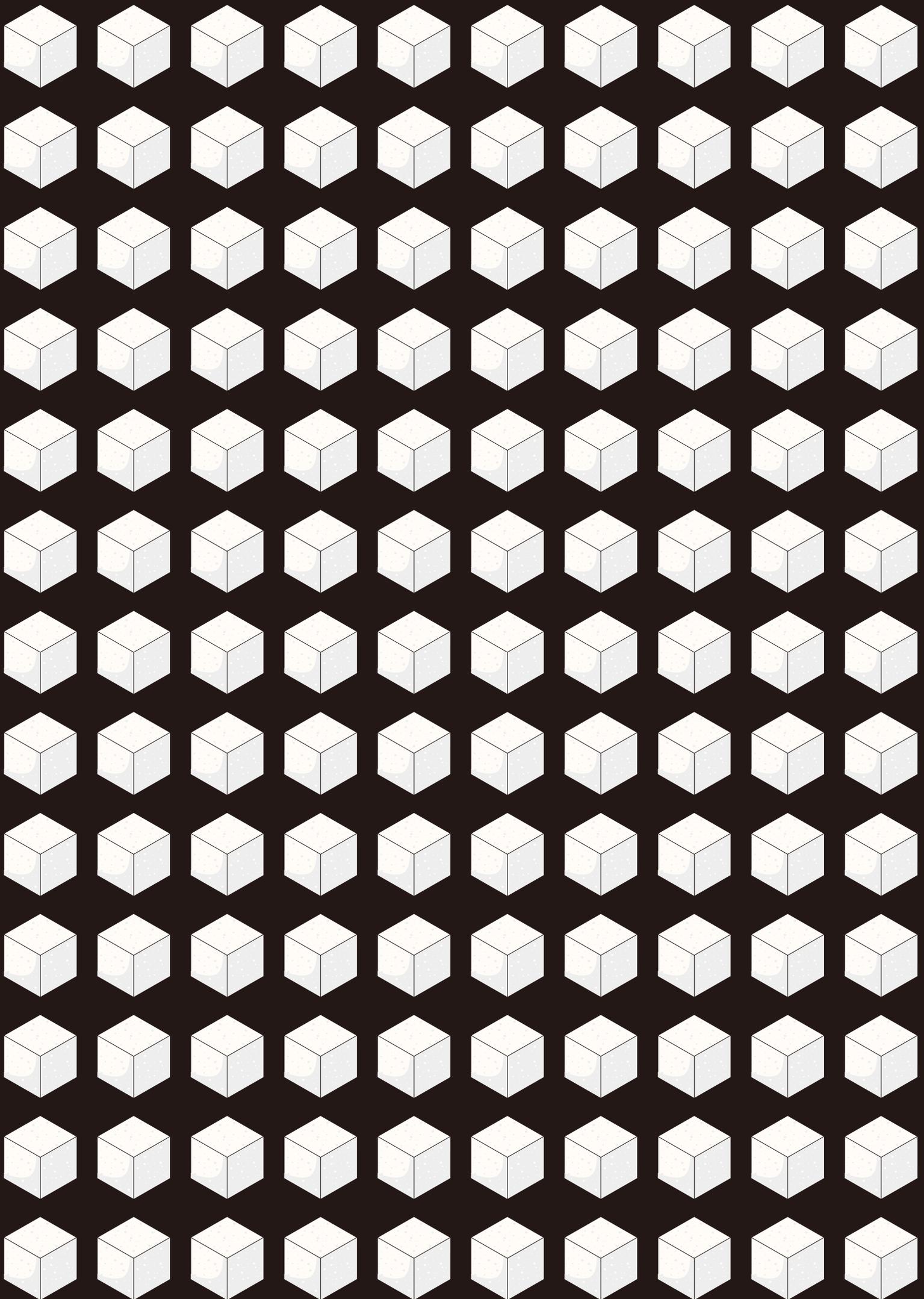


Sugar Mapping

How many sugar cubes are in this drink? Solve the equation to find out!
Then, cut and glue the correct number of sugar cubes
onto the paper.

$$5 + 3 = \underline{\hspace{2cm}}$$







At-Home Mission

Name: _____

Draw the drink with the most sugar!



Have your mom or dad take the sugar-free pledge with you!

I pledge to be sugar-free for one
“ week. During this week, I will ”
not drink any soda or juice.

Parent's Signature: _____

At-Home Mission

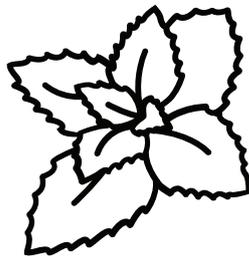
Name: _____

Yummy Water

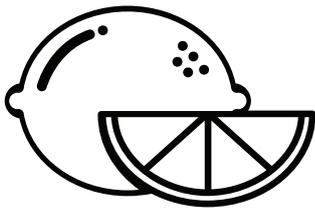
Color in the glass of water and different foods.

You can add these to water to make it extra yummy and fun.

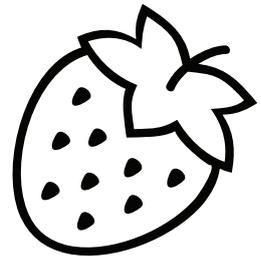
Mint



Lemon



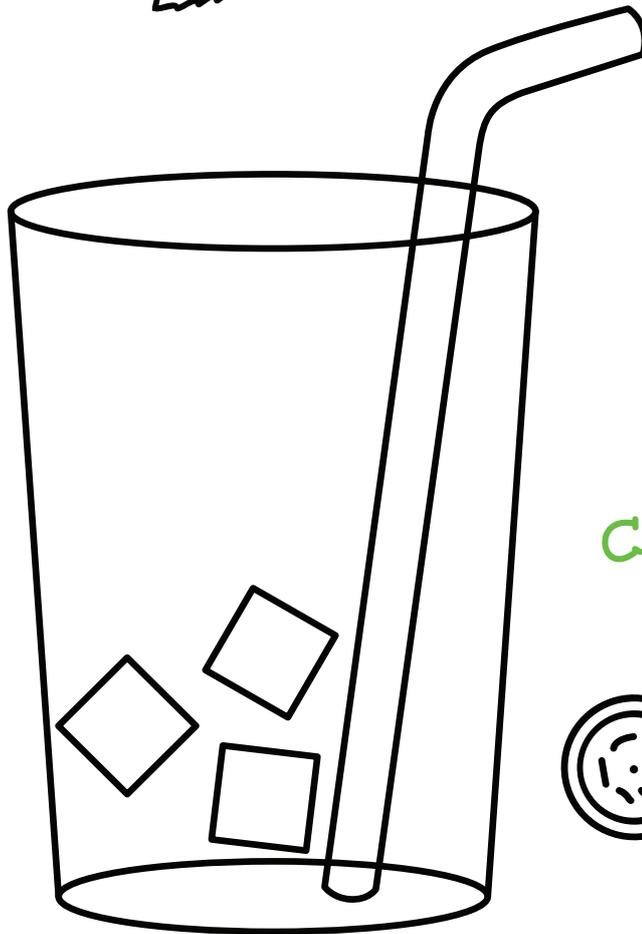
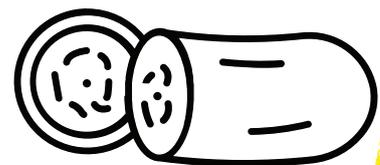
Strawberry



Orange



Cucumber



Parent's Signature: _____