

Juice Jumble Activity 2

Super Sugar & Fruit Experiment

Instructions

Learning Objective

Students are able to successfully determine which drinks contain 100% fruit juice or no fruit juice based on packaging and label information. Students are able to successfully determine which drinks contain the most sugar based on nutrition label information and serving size. Students are able to successfully determine which fruit drinks can give them a serving of fruit for the day.

Materials

1. Sugar Experiment handouts
2. 6 fruit drinks
 - a. Fruit Juice Box (100% fruit juice)
 - b. Fruit Sports Drink (no juice)
 - c. Fruit-flavored Soda (no juice)
 - d. Lemonade in a bottle (10-40% fruit juice)
 - e. Fruit Punch juice pouch (less than 5% fruit juice)
 - f. Fruit-flavored Tea (no juice)
3. One plastic cup or glass
4. Chalkboard, dry erase board, overhead, or poster
5. Plastic plate
6. Teaspoon
7. White granulated sugar

Teacher Preparation

1. Print out a copy of the Sugar Experiment handout for each student.
2. Purchase 6 drinks of various sizes and bring them to class
3. Determine the correct answers for questions 1-10 based on the drinks you have purchased.
 - a. Note that one teaspoon of sugar is equal to 4.2 grams.
 - b. For step 8, divide the grams of sugar in the drink by 4.2 and multiply by the number of servings.
 - c. For step 13, just divide the grams of sugar by 4.2 to get the number of tablespoons per serving.
4. On a board, overhead, or poster, create three columns, one for you class's guesses, one for your guess, and one for the correct answer to questions. Cover the last two columns with sheets of paper or notecards.

Instructions

1. Line up all 6 drinks on a table so all students can see.
2. Give each student a copy of the Sugar Experiment handout.



Juice Jumble Activity 2

Super Sugar & Fruit Experiment

3. Read the first two questions to the class aloud. Instruct students to write their guesses to the first two question down on their paper.
4. Have everyone in the class put their heads down on the table. Call out each answer choice, instructing students to raise their hands when the answer they guessed is called out. Remember, no peeking! Tally the class votes and write it on the board in the empty column for each question.
5. Reveal the class votes. Reveal your initial guess. Then reveal the correct answer. Give a round of applause to students that guessed correctly.
6. Remind students that each drink is a different size, and this must be taken into consideration if they plan to drink the entire drink. When answering questions 3-6, size should be a part of their guess.
7. Repeat steps 3-5 for questions 3-6.
8. Demonstrate to students how much sugar is in the drink that contains the most sugar. Using the teaspoon, spoon out the number of teaspoons of sugar in the entire drink into a pile on the paper plate. Walk around the class showing each table. Do the same for the drink with the least amount of sugar. (Remember, to get the number of teaspoons of sugar in the entire drink, divide the grams of sugar by 4.2, then multiply by the number of serving sizes).
9. Reveal which drink has the most juice (100% juice box). Show students how they can tell from the front label, nutrition label, and ingredients list.
10. Reveal which drink has the least juice (Soda, Sports Drink, and Tea all have no fruit juice).
11. Now set out a cup or glass on the table. Tell students to assume that they drink one glass (one serving) of each drink. When answering questions 7-10, students are to assume all drinks are the same size.
12. Repeat steps 3-6.
13. Repeat step 8. You can allow a student to spoon out the sugar if you wish. (To get the number of teaspoons of sugar per serving size, just divide the grams of sugar by 4.2.)
14. Repeat steps 9 and 10. 8-10.
15. Go over the discussion questions with the class or use the discussion questions for a grade.



Juice Jumble Activity 2

Super Sugar & Fruit Experiment

Student Handout

Introduction

There are 6 drinks. Each drink is a different size, shape, color, and flavor. All drinks are supposed to taste like juice, but not all drinks actually have juice in them.

Directions

As directed by your teacher, circle the answer to each question that you believe is correct. Don't let anyone see your answers, and don't get ahead of your teacher.

1. Which drink do you think has the most number of servings (is the largest)?
 - a. Juice box
 - b. Sports drink
 - c. Fruit Soda
 - d. Lemonade
 - e. Fruit Punch juice pouch
 - f. Fruit Tea
2. Which drink do you think has the least number of servings (is the smallest)?
 - a. Juice box
 - b. Sports drink
 - c. Soda
 - d. Lemonade
 - e. Fruit Punch juice pouch
 - f. Fruit Tea

Remembering that some drinks are larger than others...

3. Which drink do you think has the most sugar?
 - a. Juice box
 - b. Sports drink
 - c. Soda
 - d. Lemonade
 - e. Fruit Punch juice pouch
 - f. Fruit Tea
4. Which drink do you think has the least sugar?
 - a. Juice box
 - b. Sports drink
 - c. Soda
 - d. Lemonade
 - e. Fruit Punch juice pouch
 - f. Fruit Tea



Juice Jumble Activity 2 Super Sugar & Fruit Experiment

5. Which drink do you think has the most fruit juice?
- Juice box
 - Sports drink
 - Soda
 - Lemonade
 - Fruit Punch juice pouch
 - Fruit Tea
6. Which drink do you think has the least fruit juice?
- Juice box
 - Sports drink
 - Soda
 - Lemonade
 - Fruit Punch juice pouch
 - Fruit Tea

If you drink one glass of each drink (i.e. assuming all the drinks are the same size)...

7. Which glass do you think has the most sugar?
- Juice box
 - Sports drink
 - Soda
 - Lemonade
 - Fruit Punch juice pouch
 - Fruit Tea
8. Which glass do you think has the least sugar?
- Juice box
 - Sports drink
 - Soda
 - Lemonade
 - Fruit Punch juice pouch
 - Fruit Tea
9. Which glass do you think has the most fruit juice?
- Juice box
 - Sports drink
 - Soda
 - Lemonade
 - Fruit Punch juice pouch
 - Fruit Tea
10. Which glass do you think has the least fruit juice?
- Juice box
 - Sports drink
 - Soda
 - Lemonade
 - Fruit Punch juice pouch
 - Fruit Tea



Juice Jumble Activity 2 Super Sugar & Fruit Experiment

Discussion questions

1. Did the number of servings make a difference in the amount of sugar that was in each drink? Why or why not?

2. Did the number of servings make a difference in the amount of fruit juice that was in each drink? Why or why not?

3. If you were to drink one glass (one serving) of each drink, which drink(s) do you think would count as a serving of fruit? Why?

