The Best Beverage

Summary
The students will demonstrate an understanding of their amount of sugar intake of various beverages by stacking sugar cubes of the amount of their assigned beverage and completing the worksheet. Groups will present and report on their beverage after their work is complete.

Main Core Tie
Health Education - 5th Grade
Strand 5: NUTRITION (N) Standard 5.N.2:

Time Frame
1 class periods of 30 minutes each

Group Size
Small Groups

Life Skills
Thinking & Reasoning, Systems Thinking

Materials
- Work sheets (1 per group)
- pencils
- sugar cubes
- paper plates
- various beverages (juices, sports drinks, sodas, etc.)

Background for Teachers
Teachers should know the daily amount of sugar suggested to compare it with the amount of sugar in the provided drinks. Also, know the amount of sugar cubes in each drink (rounded up) to be sure your students are presenting the correct information.

Student Prior Knowledge
Understanding of a gram and that one sugar cube contains 4g of sugar. Long division and other basic math skills are needed to complete the worksheet.

Intended Learning Outcomes
Students will practice math skills that are applicable to real-life problems. Students will learn of the amount of sugar in their beverages and the negative health effects of such.

Instructional Procedures
Step 1
Ask students questions to gain interest and attention:
  "Do you like sugar?"
  "Where do we find sugar?"
  "What about in our drinks?"
  "What are some of your favorite drinks?"
"How much sugar is in your favorite drink?"
"How can we find out?"

Explain where to find sugar on nutrition facts labels. Review what grams are. Show a sugar cube which contains 4g of sugar, so students are more familiar with the concept.

"How much sugar should we have in a day?"

Allow students to guess how many grams the daily recommended amount of sugar is (for children it is 12g a day).

**Step 2**
Divide students into groups of 4 or 5.

**Step 3**
Review how to find the sugar amount of the labels, and remind them that one cube is 4g of sugar. Go over instructions and worksheets, and explain that they will presenting to the class. They only have 2 minutes!

**Step 4**
Pass out beverages and worksheets. Survey room as groups work. When a group has calculated their total sugar cubes, they should raise their hands and then the amount of cubes should be distributed to the group with a paper plate. Students stack cubes in a creative way to present to the class. Give a 1 minute warning.

**Step 5**
When all the groups are finished, regain attention. Have each group come up and present - showing their sugar cubes with their beverage, as well as reporting on their calculations.

**Step 6**
Discussion questions:

"Which beverage has the most sugar?"
"Which has the least?"
"What is the best beverage choice?" (Water!)
"Why do we want to avoid sugar? Why is it bad?"
"Are there good sugars?"

Explain why we should avoid too much refined sugar. Explain the "crash cycle" - getting too much energy from sugar and then crashing and needing more to get back up to our energy high.

**Step 7**
Give students an analogy to relate to:

"How many of you have a cell phone or an ipod? What about a computer or TV at home? Would you pour soda all over your phone or computer if you knew it would hurt it and make it not work very well? Would you do that to your body?"

Allow children time to respond and discuss.

**Step 8**
Give students a challenge to be aware of what they're drinking and eating and putting into their bodies. Challenge them to look at nutrition labels and to make good choices!

**Step 9**
Conclusion: It's so important that we are aware of what we put into our bodies, that we're eating a balanced diet, and getting lots of exercise so our bodies can last a long time. And for that, we need the best beverage: water!

**Step 10**
Clean up and put away sugar cubes and beverage bottles.

**Extensions**

Variation: Students may bring in an empty bottle or can of their favorite drink and complete the assignment in an individual effort. (More sugar cubes will be needed in this variation).
Assessment Plan

Students knowledge will be assessed by group participation and by evaluating the filled out worksheet. Students should also show an understanding given in their short presentation given by each group.

Authors

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