<table>
<thead>
<tr>
<th>Title</th>
<th>Obesity Crisis: Soda Health Effects</th>
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<tbody>
<tr>
<td>Subject area/Course</td>
<td>Fifth Grade English and Health Class</td>
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<tr>
<td>Investigative Question</td>
<td>How does drinking sodas contribute to the obesity crisis in the United States?</td>
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<tr>
<td>PA Teaching Standards</td>
<td>Reading, Writing, Speaking, and Listening</td>
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<td></td>
<td>R5.A.1.3.1: Make inferences and/or draw conclusions based on information from text.</td>
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<td>History 8.1.5.C: Locate primary and secondary sources for the research topic and summarize in writing the findings.</td>
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<td>Health Safety and Physical Education 10.1.6.E: Identify health problems that can occur throughout life and describe ways to prevent them.</td>
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<td>• diseases (e.g., cancer, diabetes, STD/HIV/AIDS, cardiovascular disease)</td>
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<td>• preventions (i.e. do not smoke, maintain proper weight, eat a balanced diet, practice sexual abstinence, be physically active)</td>
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<td>10.2.6.C: Explain the media’s effect on health and safety issues.</td>
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<tr>
<td>Objectives</td>
<td>Upon completing this unit the students will be able to:</td>
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<td>• Identify the effects of drinking soda and the increasing obesity rates.</td>
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Create 5 questions to interview a parent or guardian.

Conduct an interview uncovering a person’s view on the links between drinking sodas and the increase in obesity rate.

Plan and develop a 7 paragraph paper based on their interview.

**Duration**: 60 Minutes

**Materials**

http://www.hsph.harvard.edu/nutritionsource/healthy-drinks/sugary-vs-diet-drinks/index.html

http://www.fitnessforyouth.umich.edu/frames/frameset_parents.html

http://www.loc.gov/pictures/item/fsa2000057118/pp

http://memory.loc.gov/ammem/ccmphtml/colahist.html#intrn

**Inquiry-Based Learning**

“I will use an Inquiry-Based Learning Model (IBLM) with the following components:”
**Connect** – The teacher will have the students develop context about the health effects of drinking soda by asking the students questions to gain the students prior knowledge.

**Wonder** – The teacher will have the students write questions that reflect the theme or investigation question.

**Investigate** – The teacher will show different forms of media to help the students understand the health effects of drinking soda.

**Construct** – The students will take the knowledge learned about the topic to develop questions to have them interview a parent or guardian.

**Express** – The students will use reading, writing, and speaking skills to discuss the finding of the oral history.

**Reflection** – The students will reflect on what they learned by writing a 7 paragraph essay talking about what they discovered in classroom discussion and the oral history.
| Description of procedures | Throughout this unit, we are discussing the effects of drinking soda and its relationship to increased obesity rates in the United States. Prior to this detailed lesson, we completed the first two steps of the Inquiry- Based Learning Model. (IBLM)

I began this unit by showing pictures of government workers in the 1940’s eating a sandwich and drinking a bottle of Coke and commercials (“Snowflake”, “Charity”, and “First Experience”) from the International Approach at the Millennium Coke Collection on the Library of Congress Website. This will give the students visualization that people all over the world drink coke. We will have a discussion asking them to recognize what the people are doing in these photographs, if it seemed like the people were enjoying themselves, and if they could see themselves as a person in the photograph. This discussion shows that people have been drinking sodas for decades. By reviewing these items from the Library of Congress this also reinforces that advertisements for Coca Cola are geared to the younger generation. These ads are colorful; people in the ads are having fun and fitting in with friends. After watching these commercial kids are more likely to want to drink sodas because they may feel it will make them cool and fit in society. This will lead into a discussion of drinking soda, and its link increase obesity rates in the United States that I will go into detail in the later steps of my Inquiry Based Learning Model. |
These exercises helped get students interested in the topic and connect to their prior knowledge. These activities took care of the first two steps of the IBLM. I am going to talk in detail about what I plan to cover in the investigate stage of the IBLM.

I am going to use different forms of media to help the students realize the seriousness of the increased obesity rates. I am going to open the class by proposing the question, “How many cans of soda do you drink in a week?” I will make a tally graph on a flip chart to graph the results. Next, I will share facts that I found on the Harvard School of Public Health’s website. (This website is full of facts that can be incorporated into other lessons within the unit.) According to figures from the beverage industry, soft drink makers produce a staggering 10.4 billion gallons of sugary soda pop each year. That’s enough to serve every American a 12-ounce can every day, 365 days a year. The average can of sugar-sweetened soda or fruit punch provides about 150 calories, almost all of them from sugar, usually high-fructose corn syrup. That’s the equivalent of 10 teaspoons of table sugar (sucrose). If you were to drink just one can of a sugar-sweetened soft drink every day, and not cut back on calories elsewhere, you could gain up to 15 pounds in a year. After we discuss the findings I am going to make a list showing the kids other healthy foods that can be eaten for a snack, instead of reaching for a soda. The following list the same amount of
calories as a soda and will stick with you longer.

- 3 cups of watermelon
- 1½ bananas
- 3 large peaches
- 2 small oranges
- 3 kiwis
- 2 apples
- ½ cup ice cream
- 2 small pancakes
- 2½ graham cracker squares
- 2 slices of bread
- 3 cups of popcorn

I conducted an interview with Katherine, a nutritional specialist in her office at the Washington Hospital, that I will show my students to give them professional advice and knowledge on these topics. In the interview, Katherine touched on maintaining a balanced diet, how many soda drinks are reasonable to drink, and exercise programs. Katherine explained the dangers of drinking more than one can of soda in a day. She also gave alternative beverages that they can drink to satisfy their tastes. Some examples of these beverages are water, milk, smoothies, and fruit juices with no sugar added, the sweetness is naturally in the fruit. She talked about thinking of having a soda as a reward or treat to be drank in moderation.
Katherine and I also touched on the fact that drinking soda is just one aspect of our country’s getting larger. It is unreasonable to think that we will eat healthy foods all the time and drink only water.

Incorporating daily exercise in your life will help to balance the excess sugar in sodas and other snacks. In the remaining lessons in this unit, I will break the class in groups to brainstorm possible questions that they could ask an adult in their home about soda consumption and the increase in obesity rates. The students will then go home and ask someone at home the questions the students developed. (See description in Assessment) The last day of the unit, the students will write a journal entry in their homeroom explaining what they learned in the unit and what they can do to keep healthy. We will have a class discussion in their reading class to close the unit, discussing the findings of the interviews and the students’ feelings on the information covered in class. We will also go back to the chart we made on day one and compare the children’s answers to the answers of the person the student interviewed. This will give the students a visualization of how the country is not making healthy choices.

**Assessment**

After we finish watching the interview I conducted, and brainstorm possible questions to ask an adult, I am going to assign the students to go home and ask an adult at home some questions. The students will have to develop 5 questions to ask an adult. They will comprise the answers into a 7 paragraph essay including an introduction paragraph, 1 paragraph for each question, and a conclusion paragraph. One of the questions must relate to the opening question about how many soda
drinks do you drink in a day when you were in 5th grade compared to how many they drink today?

**Student Assessment Based on Interview Essay**

<table>
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<tr>
<th>Rating</th>
<th>Criteria</th>
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| A      | - engaging, creative, and thoughtful  
       | - used varied patterns and lengths of sentences  
       | - coherent and organized structure  
       | - developed 5 questions  
       | - developed 7 paragraphs  
       | - used of details to convey personality of the person interviewed  
       | - contained less than 3 grammatical errors |
| B      | - clear and thoughtful  
       | - used varied patterns and lengths of sentences  
       | - logical organization  
       | - developed 4 questions  
       | - developed 6 paragraphs  
       | - used of details to convey personality of the person interviewed  
       | - contained less than 5 grammatical errors |
| C      | - quite well developed and detailed  
       | - generally precise vocabulary and complex sentence structures containing minimal errors  
       | - obvious organization  
       | - developed less than 6 paragraphs  
       | - developed less than 4 questions  
       | - chosen form appropriate for content  
       | - details from of person interviewed confusing or missing  
       | - contained less than 7 grammatical errors |
| D      | - confusing and difficult to understand  
       | - developed less than 3 paragraphs  
       | - developed only 3 questions  
       | - contains no details to convey personality and experience of person interviewed  
       | - more than 7 grammatical errors |
Interview Guide

General Background and Experience

- Name of interviewee
- Experience in the field

Education

- Where did you to college?
- What is your degree in?
- Why did you get into this field?

Professional Life

- Where do you work?
- Why did you choose this employer?
- How do you manage your work and a healthy lifestyle?

Cultural Aspects on Obesity

- Maintaining a healthy diet?
  - Healthy food options
  - Effects of drinking soda
  - Alternative drink options
  - Daily Exercise Programs

Interview Conclusion

- Explain to my class why this is an important career field to go into?
- Are there any other topics that you would like to share with the students?