Grade 7 Sample Lesson Plan:
Caffeine

Description
Please see attached handout for a lesson submitted by a Virginia teacher

Handout
The next page includes a handout for the lesson.
Caffeine

7.1.e Analyze the caloric and nutritional value of foods and beverages.
7.2.e Analyze the effects of nutrition on daily performance.

What types of drinks have caffeine?

What are the health risks of high caffeine consumption?


In the box, list beverages that you think have caffeine.

What do you know about caffeine?

Caffeine is the world's most popular stimulant. It is present in more than 60 different plants. Most people take caffeine in the form of coffee, tea, and cola. Is caffeine good or bad for you? In this lesson you will explore information about caffeine and decide for yourself.

Explore

Once consumed, caffeine is quickly absorbed from the gut into the bloodstream. From there, it travels to the liver and is broken down into compounds that can affect the function of various organs and affects the central nervous system. Caffeine affects different people in various ways. Some people can drink several cups of coffee or tea without feeling any ill effects. For others, drinking the same amount causes nervousness, migraines, and panic attacks. Long-term prolonged use of caffeine leads to addiction and may cause serious health problems, such as depression and insomnia (not being able to sleep).

Access the TeenHealth.org article, Caffeine at: https://teenshealth.org/en/teens/caffeine.html?WT.ac=ctg#

As you read, answer the questions in the box provided.

What is caffeine?

Why is caffeine defined as a drug?
How does caffeine affect the body?

Looking at the list of beverages and the amounts of caffeine per serving, do you consume any of these in a typical day? If so, calculate the amount of caffeine you think you consume in a day. If you do not, select 2-3 beverages that you see others consuming and calculate the amount of caffeine. Remember, if someone has two cups of coffee or a large coffee, the amount of caffeine may be doubled.

<table>
<thead>
<tr>
<th>Beverage Type</th>
<th>Caffeine Amount (mg.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td></td>
</tr>
<tr>
<td>2.</td>
<td></td>
</tr>
<tr>
<td>3.</td>
<td></td>
</tr>
<tr>
<td><strong>Total Amount of Caffeine:</strong></td>
<td></td>
</tr>
</tbody>
</table>

Does this amount exceed the recommended daily amount of caffeine that can lead to addiction?

Why do you think that caffeine is the most widely used drug in our world today?
Why do you think the advertisers use extreme sports to sell their energy drink?

Do advertisements like this, promote the selection of drinks with caffeine? Can you think of other drink advertisements for drinks with caffeine (list them)?

Apply

Using what you have learned, choose one of the activities to complete:

Activity 1: You notice that one of your friends or parents is consuming large amounts of caffeine with side effects that can cause them harm. What information would you share with them?

Activity 2: Create an infographic for other middle school students that give ways you could boost your energy levels without the use of caffeine? This activity may be done in a Google doc and shared with your teacher.

Note: According to dictionary.com, an infographic is, “a visual presentation of information in the form of a chart, graph, or other image accompanied by minimal text, intended to give an easily understood overview, often of a complex subject.” Infographics are usually one page of information that uses more graphics (pictures and charts) than words to share information. See an example from the Fairfax County Youth Survey:


Activity 3: You know someone who would like to cut back on their caffeine, what are safe ways that you could suggest?
Reflect

Using what you have learned, explain why you think caffeine is either good for you or bad for you?

It is important to monitor our nutritional habits. Sometimes we may not even realize we are consuming too much of something until after we begin to feel the negative effects. Understanding more about the food and beverages we put into our bodies enables us to be educated consumers.