Grade 8 Sample Lesson Plan:
Unit 7– E Cigarettes

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

Handout
The next page includes a handout for the lesson.
E-Cigarettes and Vaping

8.1.i Describe the short and long term health issues related to ATOD
8.1.j Research signs, symptoms, and causes of addiction
8.1.k Explain how drugs affect the brain

<table>
<thead>
<tr>
<th>Link</th>
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<tbody>
<tr>
<td>You have probably heard of E-cigarettes and/or vaping. What do you know about E-cigarettes and vaping, are they harmful or safe products? Write a response:</td>
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<table>
<thead>
<tr>
<th>Explore</th>
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<tr>
<td>What are e-cigarettes and what is vaping? In 2016, the U.S. Department of Health and Human Services published a report from the Surgeon General outlining e-cigarette use among youth and young adults. In this report are messages from Sylvia Burwell (Secretary of the U.S. Department of Health and Human Services), Thomas R. Frieden (Director of the Centers for Disease Control and Prevention), and Vivek H. Murthy (U.S. Surgeon General), which outline the study’s findings on e-cigarette use among youth and young adults. Read each of the messages below and note what you think are the two most important pieces of information from each.</td>
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I. Message from Sylvia Burwell

Secretary, U.S. Department of Health and Human Services
The mission of the Department of Health and Human Services is to enhance and protect the health and well-being of all Americans. This report confirms that the use of electronic cigarettes (or e-cigarettes) is growing rapidly among American youth and young adults. While these products are novel, we know they contain harmful ingredients that are dangerous to youth. Important strides have been made over the past several decades in reducing conventional cigarette smoking among youth and young adults. We must make sure this progress is not compromised by the initiation and use of new tobacco products, such as e-cigarettes. That work is already underway.

To protect young people from initiating or continuing the use of e-cigarettes, actions must be taken at the federal, state, and local levels. At the federal level, the U.S. Food and Drug Administration (FDA) —under authority granted to it by Congress under the Family Smoking Prevention and Tobacco Control Act of 2009—took a historic step to protect America’s youth from the harmful effects of using e-cigarettes by extending its regulatory authority over the manufacturing, distribution, and marketing of e-cigarettes. Through such action, FDA now requires minimum age restrictions to prevent sales to minors and prohibits sales through vending machines (in any facility that admits youth), and will require products to carry a nicotine warning.

We have more to do to help protect Americans from the dangers of tobacco and nicotine, especially our youth. As cigarette smoking among those under 18 has fallen, the use of other nicotine products, including e-cigarettes, has taken a drastic leap. All of this is creating a new generation of Americans who are at risk of nicotine addiction.

The findings from this report reinforce the need to support evidence-based programs to prevent youth and young adults from using tobacco in any form, including e-cigarettes. The health and wellbeing of our nation’s young people depend on it.

Information/fact #1:
Information/fact #2:

II. Message from Thomas R. Frieden M.D., M.P.H.
Director Centers for Disease Control and Prevention

Tobacco use among youth and young adults in any form, including e-cigarettes, is not safe. In recent years, e-cigarette use by youth and young adults has increased at an alarming rate. E-cigarettes are now the most commonly used tobacco product among youth in the United States. This timely report highlights the rapidly changing patterns of e-cigarette use among youth and young adults, assesses what we know about the health effects of using these products, and describes strategies that tobacco companies use to recruit our nation’s youth and young adults to try and continue using e-cigarettes. The report also outlines interventions that can be adopted to minimize the harm these products cause to our nation’s youth. E-cigarettes are tobacco products that deliver nicotine.
Nicotine is a highly addictive substance, and many of today’s youth who are using e-cigarettes could become tomorrow’s cigarette smokers. Nicotine exposure can also harm brain development in ways that may affect the health and mental health of our kids.

E-cigarette use among youth and young adults is associated with the use of other tobacco products, including conventional cigarettes. Because most tobacco use is established during adolescence, actions to prevent our nation’s young people from the potential of a lifetime of nicotine addiction are critical.

E-cigarette companies appear to be using many of the advertising tactics the tobacco industry used to persuade a new generation of young people to use their products. Companies are promoting their products through television and radio advertisements that use celebrities…and claims of independence to glamorize these addictive products and make them appealing to young people.

Comprehensive tobacco control and prevention strategies for youth and young adults should address all tobacco products, including e-cigarettes. Further reductions in tobacco use and initiation among youth and young adults are achievable by regulating the manufacturing, distribution, marketing, and sales of all tobacco products—including e-cigarettes, and particularly to children—and combining those approaches with other proven strategies. These strategies include funding tobacco control programs at levels recommended by the Centers for Disease Control and Prevention (CDC); increasing prices of tobacco products; implementing and enforcing comprehensive smoke free laws; and sustaining hard-hitting media campaigns, such as CDC’s Tips from Former Smokers that encourages smokers to quit for good, and FDA’s Real Cost that is aimed at preventing youth from trying tobacco and reducing the number of youth who move from experimenting to regular use. We can implement these cost-effective, evidence-based, life-saving strategies now. Together with additional effort and support, we can protect the health of our nation’s young people.

Information/fact #1:

Information/fact #2:

III: Vivek H. Murthy M.D., M.B.A.

E-cigarette use among U.S. youth and young adults is now a major public health concern. E-cigarette use has increased considerably in recent years, growing an astounding 900% among high school students from 2011 to 2015. These products are now the most commonly used form of tobacco among youth in the United States, surpassing conventional tobacco products, including cigarettes, cigars, chewing tobacco, and hookahs. Most e-cigarettes contain nicotine, which can cause addiction and can harm the developing adolescent brain.
Compared with older adults, the brain of youth and young adults is more vulnerable to the negative consequences of nicotine exposure. The effects include addiction, priming for use of other addictive substances, reduced impulse control, deficits in attention and cognition, and mood disorders. Furthermore, fetal exposure to nicotine during pregnancy can result in multiple adverse consequences, including sudden infant death syndrome, altered corpus callosum, auditory processing deficits, effects on behaviors and obesity, and deficits in attention and cognition. Ingestion of e-cigarette liquids containing nicotine can also cause acute toxicity and possibly death if the contents of refill cartridges or bottles containing nicotine are consumed.

This report highlights what we know and do not know about e-cigarettes. Gaps in scientific evidence do exist, and this report is being issued while these products and their patterns of use continue to change quickly. For example, the health effects and potentially harmful doses of heated and aerosolized constituents of e-cigarette liquids—including solvents, flavorants, and toxicants—are not completely understood. However, although e-cigarettes generally emit fewer toxicants than combustible tobacco products, we know that aerosol from e-cigarettes is not harmless.

Although we continue to learn more about e-cigarettes with each passing day, we currently know enough to take action to protect our nation’s young people from being harmed by these products. Previous reports of the Surgeon General have established that nearly all habitual tobacco use begins during youth and young adulthood. To prevent and reduce the use of e-cigarettes by youth and young adults, we must work together as a society. We must implement proven prevention and education strategies. Health care providers, parents, teachers, and other caregivers should advise youth about the dangers of nicotine and discourage tobacco use in any form, including e-cigarettes. They can set a positive example by being tobacco-free and encouraging those who already use these products to quit.

Free help is available at 1-800-QUIT-NOW or http://www.smokefree.gov. Preventing tobacco use in any form among youth and young adults is critical to ending the tobacco epidemic in the United States.

Information/fact #1:

Information/fact #2:

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**Explain**

“E-cigarettes include a diverse group of devices that allow users to inhale an aerosol, which typically contains nicotine, flavorings, and other additives. E-cigarettes vary widely in design and appearance, but generally operate in a similar way.”
manner and are composed of similar components. These devices are referred to, by the companies themselves, and by consumers, as "e-cigarettes," "e-cigs," "cigalikes," "ehookahs," "mods," "vape pens," "vapes," "tank systems," or JUULs/JUULing.

Although vaping may seem like the new product from the tobacco industry, the idea of vaping has been around for some time. The first vaping patent was filed in 1930 and in 1960 a device that closely models the modern day e-cigarette was created. In 2003 the first electronic cigarette was created in China and vaping has been a topic of research and interest since this introduction.

Access the websites below to learn more about the facts and risks involved in E-cigarette use and vaping. Answer the questions that follow after viewing the sections of the websites listed.

Access the link and read the section, “Get the Facts,” from the U.S. Department of Health and Human Services and list three facts about E-cigarettes/vaping. Read “How an E-cigarette works,” “Did you know,” and “Test your knowledge.” List three facts you learned.

Access the section, “Know the Risks,” (either at the top or bottom of the website or by accessing https://e-cigarettes.surgeongeneral.gov/knowtherisks.html) and respond below.

What are the risks for teens? List the most important risk or fact for each.

Brain risks –

Addiction risks –

Behavior risks –

Use of two or more tobacco products –

Aerosol and other risks –

E-cigarettes and brain development –
In addition to the risks that teens and young adults will encounter when using an e-cigarette or vaping product it is also important to remember that these products are banned in and on all FCPS school grounds and property. In the FCPS SR&R it states that:

**Alcohol, Tobacco, and Other Drug Violations**

School disciplinary action may be taken regardless of whether the student’s age is such that his or her possession or use of alcohol, tobacco products, or over-the-counter drugs is permitted by law.

**a. Tobacco and Smoking Device Violations**

The following violations customarily result in school-based disciplinary action at the discretion of the principal, up to and including a five-day suspension. However, the principal may make a referral to the Division Superintendent for these violations in the event that the principal determines such misconduct has substantially disrupted the instructional program, endangered the well-being of others, or follows school-based interventions initiated in response to prior violations. Whenever a referral to the Division Superintendent is made, the principal may suspend the student for up to ten days.

Possessing or using tobacco products, or smoking devices (to include nicotine vapor products, alternative nicotine products, electronic cigarettes and Hookah pens), all of which are collectively referred to herein as “tobacco products.”

(1) For a first violation related to tobacco products, a student shall participate in an FCPS tobacco and smoking intervention program to be conducted by the Student Safety and Wellness Office. Failure to attend and successfully complete the intervention program shall result in a school-based disciplinary action not to exceed one day of suspension. Parents are expected to attend an evening information session to support a collaborative approach to help the student stop the use of tobacco.

(2) For a second or subsequent violation related to tobacco products, a student shall receive an in-school consequence or be suspended from school for no more than five days at the discretion of the principal.

School officials may report any such violation to the police in accordance with the Code of Virginia, Section 18.2-371.2.

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**Apply**

You are talking to your friend Kennedy on your walk home from school when you pass a group of students who are smoking cigarettes and vaping. Kennedy turns to you and
says, "I was thinking of buying a vape pen. They look pretty cool and I heard that they are a healthier option to cigarettes. They also have a ton of flavors and there seems to be no downside to vaping."

In the space below or on a separate sheet of paper, write (in paragraph form) how you would respond to your friend that is thinking of vaping. In your response, provide your friend with facts, myths, and risks when choosing to use E-cigarettes or to vape, along with healthy alternatives to vaping (healthier hobbies your friend can choose instead of smoking).

Response to Kennedy:

Reflect

What do you think is the most important thing to know about E-cigarettes/vaping?

Response:

It is important to understand that cigarettes, e-cigarettes, and vaping are bad for your health and are not allowed on FCPS school property. The materials you read noted a significant rise in e-cigarette and vaping use from 2011 - 2015 due to students not knowing the facts about these products. Tobacco companies want to sell products and will continue to direct advertisements to teens and young adults to entice them to begin tobacco use and become addicted to nicotine early in life to make a profit. Over 100 years ago tobacco companies told their users that cigarettes were healthy until people started getting certain types of cancer and dying and science proved the harm that cigarettes cause. Today there are warning labels on cigarette packaging and cigarette use has declined drastically due to people knowing the unhealthy facts related to cigarette use and the addictive properties of nicotine. Stop and think about your health before using a tobacco product or any other product that is harmful. Knowledge is power! Know the facts before you put your health at risk.