

Nicotine *Exposé* Kit

2

Grade 9 Student Workbook Answer Key

Thank you for using the Nicotine Expose Kit 2.

Please take a few minutes to complete the feedback form so that your experiences and recommendations can be used to make future enhancements.

Here is the link: <https://forms.gle/sTDgaD7APyApCxzm6>

As educators, you have the discretion to use the Grade 9 Student Workbook in ways that you determine are best suited to your students. You may choose to complete the entire workbook, or assign selected activities and allow students to choose a few of their own. **It is highly recommended that all grade 9 students complete activity 10, Vaping -The Big Review (see page 18 for instructions).**

Use this resources in ways that you feel will engage your students and supplement any learning objectives that you may have, The skills being used and developed in these activities, and the content presented can be applied to outcomes in English Language Arts, Social Studies, Health, Science and Math classes.

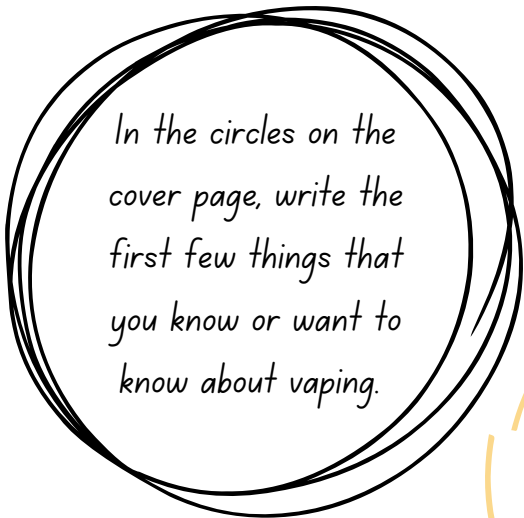
This answer key will provide answers to the factual information, however, some activities allow such a range of choice that we are unable to anticipate all possible responses.

If we can be of further assistance, please contact Melissa Moore, Program and Education Coordinator with The NL Alliance for The Control of Tobacco at melissamoore@actnf.com.

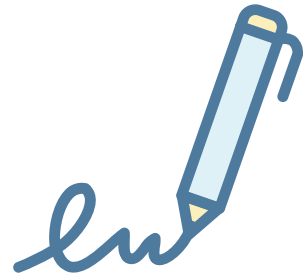
Workbook Activities

Thoughts Upfront	Evaluation at Teacher discretion
What You and Your Friends Need to Know	Answer key provided
Vaping in the Bathroom	Answer key provided
Nicotine by the Numbers	Answer key provided
Ceremonial Tobacco Matters	Answer key provided
A Peek at Vaping Marketing	Answer key provided
Exposing the Facts About Vaping: What the Science Says	Answer key provided
Meet Morgan	Evaluate based on completeness and quality of responses
Vaping Slideshow Showcase	Evaluate based on completeness and quality of responses
The Big Review - Kahoot	Answer key provided

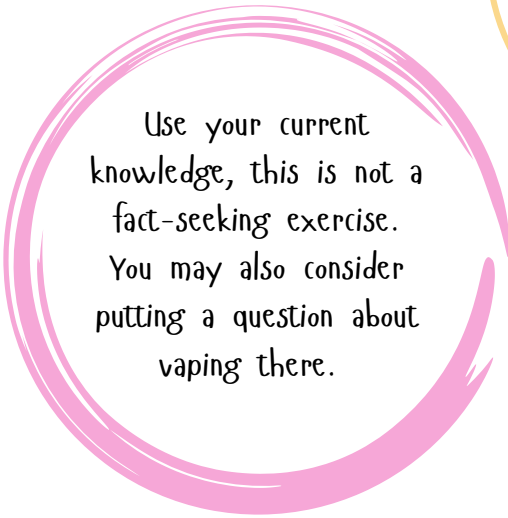
Thoughts Up Front



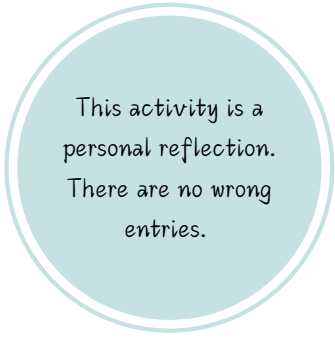
In the circles on the cover page, write the first few things that you know or want to know about vaping.



Use various colours. One space could be for an image or a slogan or catch-phrase you like to personalize your workbook.



Use your current knowledge, this is not a fact-seeking exercise. You may also consider putting a question about vaping there.



This activity is a personal reflection. There are no wrong entries.

Teachers can use their own discretion on whether or not to evaluate this cover-page activity.

Vaping: What You and Your Friends Need to Know

- Read the booklet What You and Your Friends need to Know.
- <https://smho-smso.ca/wp-content/uploads/2020/06/Vaping-Student-Resource-EN.pdf>
- Answer question #1, and 3 others of your choice.
- You may need to investigate and use additional sources for information.



1. The booklet is a resource from Ontario and references legislation from that province. Find the following information about Newfoundland and Labrador Legislation:

Use the site linked to the QR code.



The [Tobacco and Vapour Products Control Act](#) restricts how tobacco and vapour products, products can be displayed, stored and promoted in stores.

The [Smoke-Free Environment Act \(2005\)](#) prohibits smoking and using e-cigarettes in all indoor public places (including bars, decks and bingo halls), workplaces and schools.

In NL it is illegal for anyone, including retailers, family and friends, to give or sell tobacco or vaping products to youth under the age of [19](#).

It is illegal in NL to smoke or vape in motor vehicles when anyone younger than [16](#) years of age is present.

2. What substances are typically inhaled when vaping, and how can they affect your health?
E-liquids often contain nicotine, chemicals, and flavorings, which can cause lung irritation and damage.

3. Why is vaping particularly risky for people under 25 years old?
The brain is still developing, making youth more vulnerable to nicotine addiction and long-term health effects.

4. What are some common short-term health effects of vaping?
Coughing, shortness of breath, and throat irritation.

5. How does the vape industry target young people, and why is this concerning?
The use of appealing flavors, marketing, and packaging is aimed at younger audiences. This is concerning because it is creating addiction to nicotine among these young people.

6. How can you respond if a friend offers you a vape?
Responses may vary, but the text suggests assertively say no, suggest healthier alternatives, or explain the risks.

7. There are many resources available to help people quit smoking and/or vaping. Name three, with contact information (phone or online).

Possibilities include:

- a. Kids Help Phone - call 1-800-668-6868, texting CONNECT to 686868 or visiting www.kidshelpphone.ca
- b. NL Smokers' Helpline - www.smokershelp.net or 1-800-363-5864
- c. Bridge the gApp - <https://nl.bridgethegapp.ca/youth/info-booth/vaping-2/>
- d. Truth About Vaping website - <https://truthaboutvaping.ca/youth/>
- e. Quash App - <https://www.quashapp.com/>

Activity 3

Vaping in the Bathroom

Watch this short video and answer the following questions.

https://www.youtube.com/watch?v=elieorX7eKoYour_paragraph_text



1. Define Toilet Plume.

When a toilet is flushed, it can create an aerosol of tiny water droplets mixed with contents from the toilet bowl. This is referred to as a toilet plume.

2. What contents from the toilet become aerosolized (4 things)?

The plume can contain:

- Water
- Fecal matter (poop particles)
- Urine
- Pathogens (like bacteria or viruses)

3. In this study, how high were toilet plumes projected into the air after flushing? Where is this in relation to your nose and mouth? Studies have shown that toilet plumes can be projected up to 3 feet (1 meter) into the air after flushing, which is near the height of your nose and mouth.

4. After learning about toilet plume, what do you think about hanging out in the bathroom longer than necessary? Spending extra time in the bathroom, especially in places that have multiple toilets that are frequently flushed without lids, could increase exposure to airborne contaminants, which might not be pleasant or sanitary. It's best to minimize time spent in such environments when possible.

Schools report that students are vaping in the bathrooms.

- Vaping is an exercise that requires deep breathing.
- Vaping in bathrooms means that students are staying in there for an extended period of time.
- While hanging in the bathroom, people may be leaning on and touching more surfaces.
- Talking and laughing may trigger deeper inhalations.

Complete one of the following activities:

Poster (digital or hand-drawn)

Create a poster with a message to discourage vaping in your school's bathrooms.

Slide show

Create a slide show that explains to a lower grade why vaping in bathrooms is not something you want to do.

Poem or song

Write a poem or song that shares a message about how unwise it is to be vaping in the school's bathrooms.

Teachers can use their expertise in evaluating this portion of the activity. You may look for:

- 3-4 facts in the content
- Overall presentation quality
- Audience appeal
- Humor, satire or logic approaches to the message(s) in the work.

If this exercise generates an entry that is particularly creative and appealing to a student audience, you may consider posting it in your school's bathrooms, with author's permission.

If posted in the school, the student could remain anonymous if desired.


Also consider sharing quality entries with Melissa Moore at ACT - melissamoore@actnf.com

Nicotine by the Numbers

Nicotine is a very addictive drug. Vape liquids often contain very high amounts of nicotine. The more nicotine a young person uses, the higher the risk for addiction and other negative effects on the brain.

- How much nicotine a vape liquid contains must be printed on products and shared with people who purchase/use vapes – this is called the Nicotine Concentration.
- The maximum nicotine concentration for e-liquid products legally sold in Canada is 20 mg/ml which means that there are 20 milligrams of nicotine in each milliliter of e-liquid.
- Products can have lower concentrations, or claim to be nicotine free. Sometimes products labeled as nicotine free have been found to actually have nicotine in them.
- To compare, one cigarette delivers approximately 1 mg of nicotine, so a regular pack of 20 cigarettes provides 20 mg of nicotine to smokers. **While we can calculate how much nicotine is in a vape, we don't know for sure how much of that nicotine is absorbed into your body.**
- To calculate the amount of nicotine in the following vaping products:

multiply the nicotine concentration x the volume of e-liquid.

<p>VUSE Banana Ice</p>  <p>The image shows a yellow and white package for VUSE Banana Ice e-liquid. It features the VUSE logo, the flavor name 'BANANA ICE BANANE GLACÉE', and a swirl of banana and ice. At the bottom, it says '2 pods per pack', '1900 mg e-liquid', and 'BALANCED EQUILIBRE'. A warning label is also present.</p>	<p>Calculate the total amount of nicotine in this package:</p>	<p>1 pod = 18mg/ml x2 ml = 36 mg of nicotine per pod 2 pods per package so 2 x 36 mg = 72 mg nicotine in the package</p>
	<p>How many packages of cigarettes would deliver the same amount of nicotine?</p>	<p>Since a package of regular cigarettes delivers 20 mg of nicotine to users, it would take 3.5 packs of cigarettes to match this much nicotine.</p>
<p>Nicotine Concentration = 18 mg/ml Volume of pod = 2.0 ml 2 pods per package</p>	<p>Why do you think the names of many vaping products have references to fruit and ice?</p>	<ul style="list-style-type: none"> • To make the product appealing • To encourage experimentation - try them all • To relate the product to something familiar • To lessen the perception of potential health risks (fruits are healthy) • Ice and “cool mint” or other such labels convey that the e-liquid has a cooling effect, which is easier on the throat

VUSE GO XL



Nicotine Concentration = 20 mg/ml
Volume of e-liquid = 4.8 ml
1 device per package

Calculate the total amount of nicotine in this **device**:


Device = 20 mg/ml x 4.8 ml = 96 mg of nicotine in this device

How many packages of cigarettes would deliver the same amount of nicotine?

Since a package of regular cigarettes delivers 20 mg of nicotine to users, it would take just under 5 packs of cigarettes (4.75 to be exact) to match this much nicotine.

What characteristics of this package and the device may be appealing to young people?

- Attractive colours and design
- Small package – discrete
- The flavour option is appealing – familiar, but inviting curiosity
- Bang for buck- 1500 puffs in this small device
- No gross pictures like those found on cigarette packages

<p>VUSE GO 5000</p>  <p>Nicotine Concentration = 20 mg/ml Volume of e-liquid = 10 ml One device</p>	<p>Calculate the total amount of nicotine in this device:</p>	<p>Device = 20 mg/ml x 10 ml = 200 mg of nicotine in this device</p>
	<p>How many packages of cigarettes would deliver the same amount of nicotine?</p>	<p>This single device contains an equivalent amount of nicotine as 10 packages of cigarettes.</p>
	<p>What risks does this VUSE Go Edition 5000 product pose?</p>	<ul style="list-style-type: none"> • Unlike cigarettes, vapes do not have a finite end point (cigarettes have about 10 puffs then they are finished). So a vape unit delivering 5000 puffs can deliver a substantial amount of nicotine in a short period of time. • People can count the number of cigarettes they consume, which helps to monitor consumption. A device with 10 ml of e-liquid provides a large amount of nicotine with no indication of rate of consumption. • Even though there is a large amount of e-liquid and high nicotine concentration, this device is still small and discrete. • Nicotine is absorbed through the skin. If a vaping device were damaged and nicotine leaked out or if a child or pet found it and swallowed it, it could cause serious harm or even death via nicotine poisoning.

Message you can share with students:

These examples of disposable vape products contain a large volume of e-liquid and thousands of puffs. You can talk about how frequent/discrete use through a day, vaping freely with friends, vaping inside, (sometimes unaware of how often it is being puffed), likable flavors, can enable a young person to consume a lot of nicotine from these easy to use devices.

Ceremonial Tobacco Matters

When we hear the word "tobacco," our minds often jump to cigarettes and other harmful products. However, not all tobacco is the same, and it is important to distinguish between ceremonial and commercial tobacco when creating public health laws and regulations.



Ceremonial Tobacco vs. Commercial Tobacco

Ceremonial tobacco is used by Indigenous peoples in Canada in spiritual, religious, and healing practices. It is considered sacred and is used with respect and intention during ceremonies, prayers, and rituals. It is not altered with chemicals, and not smoked or used in ways that can harm people.

Commercial tobacco, however, is the kind of tobacco sold in stores, like cigarettes and cigars. These products are full of chemicals and are linked to serious health problems like lung cancer, heart disease, and breathing issues. Commercial tobacco is sold by big companies to make money and is often connected to addiction and harmful behaviors.

Why It's Important to Separate Ceremonial and Commercial Tobacco?

Respecting Indigenous Cultures: Indigenous peoples have faced a lot of unfair treatment, including having their religious and cultural practices restricted. When public health laws don't make a difference between ceremonial and commercial tobacco, it can disrespect these important traditions. Recognizing ceremonial tobacco in laws can help protect Indigenous cultures and rights.

Health Differences: Commercial tobacco is much more harmful because of the chemicals added to it, which can lead to serious health issues. Ceremonial tobacco is un-refined and used only in small amounts during important rituals. Health laws should focus on reducing the dangers of commercial tobacco rather than restricting ceremonial tobacco, which is much safer.

Preventing Confusion: When ceremonial tobacco is treated the same as commercial tobacco in laws, it can spread the wrong idea that all tobacco is bad, even the kind that is sacred in Indigenous cultures. By making a clear difference, we help people understand and respect these traditions while focusing health efforts on the real risks of commercial tobacco.

Balanced Public Health Policies: Public health laws need to protect people's health while also respecting cultural practices. If ceremonial tobacco is treated the same as commercial tobacco, Indigenous ceremonies could be unfairly affected. A better approach would focus on the harms of commercial tobacco while allowing the safe and respectful use of ceremonial tobacco.

As governments continue to work on public health laws, it's important they see the difference between ceremonial and commercial tobacco. This not only respects Indigenous traditions but also helps public health efforts focus on reducing the real dangers of commercial tobacco. This approach can protect both public health and cultural heritage, creating a fairer and more respectful society.

Questions to answer:

What are some key differences between ceremonial tobacco and commercial tobacco?

- Ceremonial tobacco is used by Indigenous peoples in religious, spiritual, and healing practices, and it is considered sacred. It is natural and not used to cause harm. Commercial tobacco, on the other hand, is sold in stores like cigarettes and cigars. It contains harmful chemicals and is often associated with addiction and serious health problems.

Why is it important for public health laws to recognize ceremonial tobacco separately from commercial tobacco?

- Recognizing ceremonial tobacco separately helps protect the cultural and spiritual practices of Indigenous peoples. It shows respect for their traditions and helps ensure their rights are upheld. If ceremonial and commercial tobacco are treated the same, it could undermine Indigenous rights and disrespect their sacred practices.

Why is it important to respect Indigenous cultural practices when creating public health policies about tobacco use?

- Respecting Indigenous cultural practices ensures that public health laws do not unfairly restrict or criminalize sacred ceremonies and gatherings that involve ceremonial tobacco. It also helps maintain a balance between protecting public health and preserving cultural heritage.

A Peek at Vaping Marketing

Millions of dollars is invested into vaping product development, marketing and advertising and it is effective in attracting new, often young, customers. The industry calls these new customers 'entrants'.



E-cigarette ads and packaging often include features like images of candy, bright colors, and images of “cool” people. Do you think these features are designed to attract the attention of youth or adults? Explain.

Features like candy images, bright colors, and images of “cool” people in e-cigarette ads and packaging are deliberately designed to attract youth. Bright colors and candy imagery specifically appeal to younger audiences by resembling sweets and treats typically marketed to kids and teens. These design choices aim to make the products look fun and harmless. Including images of "cool" people can make teens associate vaping with popularity, attractiveness and exciting lifestyle, which further targets a younger audience.

Some e-cigarette companies have partnered with social media influencers who have large numbers of young followers on apps like Instagram. Some influencers are paid to promote e-cigarettes by talking positively about them in their posts. How do you think this might impact their young followers?

When social media influencers promote e-cigarettes, it can significantly increase the number of teens who try them. Many teens look up to influencers and feel that using the same products will make them more like these admired figures. Paid promotion from influencers might make vaping seem normal, trendy, or even harmless, making teens more likely to try it themselves, especially if they see it repeatedly in their feeds.

Since 2020, Canada has prohibited the advertising of vaping products in public spaces if the ads can be seen or heard by youth, whether in brick and mortar stores, online or other media channels. In addition, the display of vaping products at point-of-sale where youth have access is prohibited. What do you think is the goal of this law?

The goal of Canada’s law restricting the advertisement and display of vaping products is intended to reduce youth exposure and interest in these products. By removing ads and displays that teens can see, it becomes harder for e-cigarette companies to target youth, potentially reducing the curiosity or desire to try these products. This law aims to limit the appeal of vaping and protect young people from starting to use nicotine products with known health risks.

Activity 7

Exposing the Facts about Vaping: What the Science Says...

Read 'Exposing the Facts About Vaping' and complete the following statements as they are presented in the document.



1. More than 60 chemicals have been found in vape liquid. Heating this liquid causes chemical reactions that create even more harmful chemicals.
2. Just like second-hand smoke, second-hand vape aerosol is dangerous for those around you. It contains toxic chemicals, nicotine, and cancer-causing substances.
3. Some teens think vaping nicotine will help to get rid of stress, anxiety, and depression, but it doesn't. Vaping nicotine can actually make feelings of stress and anxiety worse.
4. Puffing a vape sends a huge hit of nicotine right to your brain in 10 seconds.
5. E-cigarettes left on the street eventually break down into microplastics and chemicals that flow into storm drains and end up polluting waterways, soil and wildlife.
6. Vaping creates garbage and hazardous waste. Hazardous waste includes batteries, the electronic parts inside the vaping devices, and nicotine residue. They can also leak toxic metals into the ground.
7. Youth often identify peer pressure and curiosity as the main reasons for trying a vape.
8. Vapes are the most used nicotine product among youth. The younger a person is when they start using nicotine products, the harder it is to quit.
9. Commercial tobacco industries have a history of targeting youth through candy and fruit- flavoured tobacco products and are now using the same tactics to encourage youth to vape.
10. Vaping marketing is strongly associated with increased vaping at the individual level, but provinces with stronger marketing regulations and restrictions have lower overall vaping prevalence.

Every statement presented in this document is presented as a FACT and backed up by scientific EVIDENCE. As a whole, this represents a large body of high quality and trusted scientific evidence surrounding vaping.

Meet Morgan



Meet Morgan

Vaping has emerged as the new, cool and popular nicotine product, especially among teens and young adults. Marketed with attractive designs, with sweet flavours such as fruit, candy and desserts, vaping has surpassed traditional cigarettes as the most commonly used nicotine products among youth. Vaping isn't harmless though - it is costing youth much more than they may have bargained for when those first few puffs were taken. Let's meet Morgan and see what vaping is costing them.

Financial Costs: A Drain on Your Wallet

How do teens afford things they want? Some may get an allowance, others may have to work. Money is either spent or saved. Some people are very goal-focused and can save a long time for a big purchase, such as a PS5, the latest phone, university tuition or even a car. Vaping will cost you those dollars. A reusable vape requires the initial purchase of the device and then the e-liquids, pods, or cartridges need regular replacement. Others may be buying disposables. Either way, for anyone who is vaping regularly, these costs add up quickly.

Health Costs - Cause it's Not Just Water Vapour!

Inhaling anything other than fresh air puts your health at risk. E-liquids contain nicotine, an addictive substance that can harm adolescent brain development. Beyond addiction, there's growing evidence that vaping can cause respiratory issues, lung damage, and cardiovascular problems. The long-term effects are still being investigated, but as more evidence becomes available, it is clear that vaping is causing harm and youth are paying a price with their health.

Morgan purchases one disposable vape each week, at \$21 each.

How much will Morgan spend in a year?

$$\$21 \times 52 = \$1092$$

What would you do with this amount of money? **Student responses will vary**

Morgan's disposable vape device has a nicotine concentration of 20mg/ml, and a 5 ml volume. This means that Morgan is exposed to 100mg or nicotine per week (equal to 100 cigarettes).

Do you think this is a lot of nicotine for a young person? Why or why not? **That is a lot of nicotine for anyone, regardless of age.**

Heart disease is the leading cause of death among smokers. Young people who vape are showing early signs of heart disease.

What are the effects of nicotine on the heart and circulatory system?

- Increased blood pressure
- Increased heart rate
- Less flexible arteries
- Together these effects causes extra 'wear' on the circulatory system, leading to heart disease.

Social Costs: Relationship Jeopardy

Vaping may affect your social life in unexpected ways. While some young people say they started vaping to fit in, others have found that vaping has hurt their relationships with family and friends. Some friends might be turned off by vaping, leading to strained relationships or social isolation. Schools are cracking down on vaping, with consequences that can affect academics and extracurricular activities. Relationship with parents or other trusted adults (ex. coaches) may suffer due to lying and deception about vaping.

Psychological Costs: The Mental Toll

Teens that vape often say that they started vaping as a way to handle stress, but it often has the opposite effect. The anxiety of concealing vaping activity, planning when and where to vape, managing the costs, and needing nicotine to feel 'normal' can add to stress rather than lessen it. When someone vapes with nicotine their body will go through withdrawal when they go without nicotine for a while. One of those withdrawal symptoms is increased feelings of anxiety, so the person will feel they need to vape again to get nicotine back in the body to help ease the anxiety. Relying on nicotine for stress relief can prevent youth from learning and developing healthier coping mechanisms.



Like Morgan, some decisions that you make in grade 9 will influence and impact your future. Choose wisely and prioritize your health and happiness over a nicotine product.

Morgan has great soccer skills but did not try out for the team this year. How might vaping be affecting Morgan's relationships with teammates and parents?

- Teammates might be upset and angry, they were depending on Morgan.
- Lying to parents causes stress

How might vaping be affecting Morgan's sport performance?

- Vaping affects lung function, so Morgan may not have the same lung capacity and stamina.

Morgan has been vaping for a year. The family is planning a trip. Morgan is totally freaking out about the 4-hour drive to a small cabin and staying there together for a week. Why might Morgan be feeling this way?

- Concealing the vaping will be difficult
- Morgan may experience nicotine withdrawal
- Thinking about vaping/not vaping causes stress and anxiety

Is vaping increasing or reducing Morgan's stress? Explain. Increasing anxiety due to lying, concealing, withdrawal symptoms, planning when & where to vape to feel normal.

What are healthier ways for Morgan to deal with stress? Physical activities, reading, journaling, hobbies, music, time with pets, friends or family, etc.

Activity 9

Vaping - Slideshow Showcase

The activities in this workbook have explored broad issues surrounding vaping such as the health risks, environmental pollution, and vaping advertising and marketing. This approach is intended to introduce you to the 'big picture' and the many societal impacts of vaping and the industry behind all nicotine products.

Select ONE theme relating to vaping and create and present a slide show. Reference materials are provided.

This exercise may be completed in pairs, with teacher approval.

Teachers will have to use their expertise to evaluate the student presentations. The suggested components are a guide.

Slide Show Layout	Components to Include
Introduction of your topic relating to vaping	The overall esthetic (how it looks)
Why this topic is a concern	Slide composition (not too much info)
Presentation of facts, possibly statistics	Flow of presentation
Possible actions or ways to improve the situation	Quality of speakers notes
Conclusion	<i>If presented:</i> Quality of presentation to the class (speaking, eye-contact, responses to questions)

QR codes for recommended reference materials:



[Vaping: What You and Your Friends Need to Know](#)



[Hooking the next generation: how the tobacco industry captures young customers](#)



[Exposing the Facts about Vaping](#)



[A toxic, plastic problem: E-cigarette waste and the environment](#)

The Big Review - Kahoot

Kahoot!

To complete this activity, you can add this as an assignment to your google classroom:

1. Sign in to classroom.google.com and click the class.
2. Click Create in the Classwork section.
3. Open the Add-ons menu and select Kahoot!.
4. Log in to your Kahoot! account in the pop-up window.
5. Find the kahoot you want to assign and click Add.

Here is the link to Vaping: The Big Review
<https://create.kahoot.it/share/vaping-the-big-review-grade-9/c3003e60-7112-471d-bcb8-bb4baa611589>

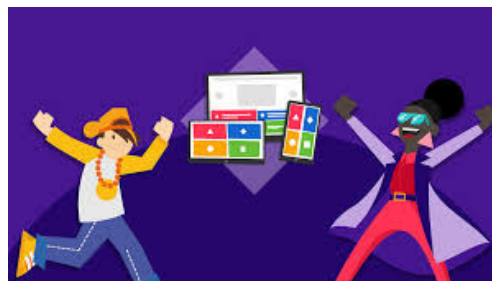
You may copy or duplicate this Kahoot into your own account if that is easier for you.

Content from the student workbook:

If you have been doing the Vaping Exposé Kit workbooks since Grade 7 then you may know A LOT about vaping. If this is your first workbook, you have still been given important information that you can use to make future decisions.

Dig deep into everything you remember and everything you have learned about vaping and complete this Review Kahoot! Ask your teacher for the link, grab your phone or computer or tablet and play. You may know all the answers or you may learn something new.

So ready or not, here's the BIG REVIEW!



Kahoot Answer Key

Vaping – The Big Review (40 Questions)

- Correct Answers are bolded, and shown in corresponding the Kahoot Answer colour.
- Additional information is provided for the teacher/educator.

1 - What drug is commonly found in vape liquid?

Nicotine

Benadryl

Acetaminophen

Alcohol

***Nicotine** is the addictive drug found in vape liquid. It reaches the brain within seconds of taking a puff. In the brain, nicotine increases the release of brain chemicals called neurotransmitters, which help regulate mood and behavior. Dopamine, one of these neurotransmitters, is released in the reward center of the brain and causes feelings of pleasure and improved mood. The more a person vapes or smokes, the more nicotine is needed need to feel good. Nicotine quickly becomes part of daily routines and intertwined with behaviours and feelings.*

2 - Why is it important to distinguish ceremonial tobacco from commercial tobacco use?

It is not an important issue to raise

They are made from different plants

Ceremonial tobacco is sacred to Indigenous peoples

All tobacco should all be treated the same

*It's important to distinguish **ceremonial tobacco** from commercial tobacco because ceremonial tobacco is used in spiritual and cultural practices by many Indigenous peoples. Unlike commercial tobacco, which is processed and highly addictive, ceremonial tobacco is considered sacred and used in rituals like offerings or prayers. Understanding this distinction helps preserve cultural traditions and respects their importance.*

3 - What does vaping do to your lungs over time?

Strengthens them

Causes lung damage

Has no effect

Tar deposits build up

*Over time, vaping can cause serious **lung damage** by exposing the lungs to harmful chemicals like nicotine, diacetyl, and formaldehyde. This can lead to respiratory issues such as chronic bronchitis, asthma, and even irreversible lung damage. Prolonged use can also impair lung function, making it harder to breathe and engage in physical activities.*

4 - What term best describes the second-hand vapour cloud?

Water vapour

Aerosol

Harmless

Mist

*The vapour cloud from a vape, is best describes as **aerosol**. Unlike water vapor, it carries particles from nicotine, heavy metals, and other toxic substances. This second-hand aerosol contains harmful chemicals that can be inhaled by others, posing health risks, especially in enclosed spaces.*

5 - What is a common short-term effect of vaping on your heart?

Has no effect

Decreases heart rate

Increases heart rate

Reduces strength of heart beats

A common short-term effect of vaping on the heart is an **increased heart rate**. Nicotine is a stimulant that can cause the heart to beat faster and raise blood pressure. Over time, these effects put stress on the cardiovascular system, increasing the risk of heart-related conditions like hypertension.

6 - Which chemical found in vape aerosol can cause cancer?

Propylene Glycol

Formaldehyde

Vitamin E Acetate

Nicotine

Chemicals like **formaldehyde**, found in vape aerosol, are known carcinogens. When vape liquids are heated at high temperatures, these toxic substances can form, which are then inhaled. Prolonged exposure to such chemicals increases the risk of developing cancer.

7 - Which organ is susceptible to and responsible for the development of nicotine addiction?

Lungs

Heart

Liver

Brain

The **brain** is the organ responsible for nicotine addiction, particularly the areas controlling reward and impulse. Nicotine triggers the release of dopamine, a neurotransmitter linked to pleasure, reinforcing the desire to use it. Over time, the brain becomes dependent on nicotine to feel normal, making quitting difficult.

8 - At what age does the human brain fully develop?

16

21

18

25

The human brain continues developing until around **age 25**. During adolescence, the brain undergoes critical growth in areas related to decision-making, impulse control, and risk assessment. Exposure to harmful substances like nicotine during this period can interfere with this development, leading to long-term cognitive and emotional challenges.

9 - What brain functions are most negatively impacted by nicotine use during adolescence?

Creativity and imagination

Attention, learning, and impulse control

Motor skills and physical strength

Short-term memory

Nicotine use during adolescence primarily affects **memory, attention, and learning**. Because the brain is still developing, nicotine disrupts neural pathways, making it harder for teens to concentrate, retain information, and control impulses. This can negatively affect academic performance and social relationships.

10 - How might nicotine use affect a teen's mental health?

Increases the risk of developing anxiety and depression

- Improves problem-solving and decision-making abilities
- Strengthens emotional resilience
- Has no long-term effect

Nicotine use can significantly worsen a teen's **mental health**, increasing feelings of anxiety, stress, and depression. It can create a cycle where the user relies on nicotine to alleviate stress, but the withdrawal symptoms and chemical effects actually exacerbate mental health issues. Over time, this can lead to more severe mental health disorders.

11 - What types of wastes are in disposable vapes?

Electronic, chemical and plastic wastes

- Plastic and heavy metal wastes
- Hazardous and bio-chemical wastes
- Electronic, organic and industrial wastes

Disposable vapes contain harmful **waste** materials, including plastics, batteries, and toxic chemicals. These materials are not biodegradable, contributing to pollution when they end up in landfills or the environment. The improper disposal of these devices poses risks to wildlife and ecosystems.

12 - Why are teenagers more vulnerable to nicotine addiction than adults?

- Teens are exposed to more advertising
- Teens have no impulse control
- Adults are immune to addiction

Teen brains are still developing, making them more susceptible

Teenagers are more vulnerable to nicotine addiction than adults because their **brains are still developing**, particularly in areas related to impulse control and decision-making. Nicotine can alter these pathways, making them more susceptible to addiction. Once hooked, quitting becomes much harder, and the effects on their health can be long-lasting.

13 - How many electric vehicles could be powered by the lithium that is discarded in used vape devices in the US each year?

- 1000
- 4000
- 2000
- 6000**

Demand for lithium and other critical minerals needed to power the clean energy transition is soaring, while e-cigarettes with millions of tiny batteries' worth of those elements are being tossed into landfills each year. Most disposable vapes contain a rechargeable lithium-ion battery (capable of up to 700 charging cycles), however they are designed to be discarded once the e-liquid runs out.

"Five disposable vapes are being thrown away every second by young people in the United States despite the devices containing reusable lithium-ion batteries," reports the Bureau of Investigative Journalism.

"Over a year, this amounts to 150 million devices—which together contain enough lithium for about 6000 Teslas.

<https://shorturl.at/FYdwj>

14 - Why are vape cartridges bad for the environment?

- They contribute to plastic pollution
- The components are contaminated by nicotine, so not suitable for recycling
- Chemicals leak from the cartridges polluting soil and water

All of the above

Vape cartridges are bad for the environment because they contain **non-biodegradable materials** like plastic and toxic chemicals. These components do not break down easily and contribute to land and water **pollution**. Additionally, the extraction of materials for these products, such as lithium for batteries, depletes natural resources.

15 - What is a common withdrawal symptom when someone stops vaping?

- Feeling more energetic
- Better focus
- Irritability and anxiety**
- Improved mood

One of the most common **withdrawal symptoms** when someone stops vaping is irritability or mood swings. As the body craves nicotine, the individual may feel restless, anxious, or have difficulty concentrating. Other symptoms can include headaches, cravings, and trouble sleeping.

16 - How do the batteries in e-cigarettes affect the environment?

They can leak toxic chemicals into the soil and water

- They do not cause any harm
- The minerals fertilize plants
- Most batteries are recycled to prevent environmental harm

The batteries in e-cigarettes, which are often **lithium-ion**, pose a significant environmental threat if not disposed of properly. When they end up in landfills, they can leak harmful chemicals into the soil and water. Additionally, improper disposal increases the risk of fires in waste facilities, causing further environmental harm.

17 - How is ceremonial tobacco different from commercial tobacco?

- It is used to help people quit smoking
- It is used in the same way as commercial cigarettes
- It is used for spiritual and cultural purposes**
- It is smoked in large amounts

Ceremonial tobacco is considered sacred and is used in spiritual practices by Indigenous communities, often as an offering, in prayers, or during healing ceremonies. It is used with respect and is not inhaled in the same way as commercial tobacco.

18 - What are the 4 D's that people use to manage nicotine cravings?

- Dance, Drive, Delay, Draw
- Delay, Drink water, Deep Breathing, Distract**
- Doodle, Delay, Divide, Discourage
- Drink hot beverages, Drive, Dream, Distract

The 4 D's for managing nicotine cravings are **Delay, Distract, Drink water, and Deep breathing**. These strategies help individuals cope with the urge to use nicotine by focusing their mind on healthier activities. By practicing these techniques, people can reduce their dependence on nicotine and regain control over their cravings.

19 - The Smokers' Helpline has trained counsellors who can help teens quit vaping.

True

False

The Smokers' Helpline provides trained counselors who specialize in helping people quit smoking and/or vaping. They offer support, resources, and personalized quit plans that can make the process easier. These services can be a valuable tool for those struggling with nicotine addiction.

20 - How does vaping during pregnancy affect the fetus?

It has no effect on the fetus

It can harm the baby's brain and lung development

It strengthens the baby's immune system

It increases the birth weight of the fetus

*Vaping during pregnancy can harm the fetus, increasing the risk of **low birth weight** and developmental problems. Nicotine crosses the placenta, reducing oxygen flow and interfering with fetal growth. Long-term effects on the child's health may include cognitive and behavioral issues.*

21 - What does the Tobacco and Vaping Products Act (TVPA) regulate in Canada?

Only tobacco products

Only vaping products

The manufacturing, sale, labeling, and promotion of tobacco and vaping products

The packaging of tobacco and vaping products

The Tobacco and Vaping Products Act (TVPA) in Canada regulates the manufacture, sale, labeling, and promotion of tobacco and vaping products to protect public health, particularly reducing youth access and exposure to these products.

22 - What strategies are used by vape companies to appeal to younger customers?

Offering fun flavors like candy, fruit, and desserts

Refusing to show tobacco use & vaping in movies and TV programs

Using recycled materials for packaging to be eco-friendly

Clearly stating health risks on product packaging

*Vape companies target younger customers by using **flavored products, appealing packaging, and social media marketing**. Flavors like fruit, candy, and mint make the products more attractive to teens. In addition, their marketing often portrays vaping as trendy or cool, despite its health risks.*

23 - Your brain can tell the difference between synthetic nicotine (made in a lab) and nicotine from tobacco plants.

True

False

The brain cannot distinguish between synthetic nicotine (made in a lab) and nicotine derived from tobacco plants. Both types of nicotine have the same chemical structure and produce the same effects on the brain, leading to addiction regardless of the source.

24 - How can vaping impact an athlete's recovery time after intense exercise?

Vaping speeds up recovery

It has no effect on recovery

It slows down recovery by reducing lung and heart function

Vaping increases blood pressure which helps muscles repair faster

*Vaping can negatively impact an athlete's recovery time after intense exercise by reducing **lung capacity and oxygen intake**. The harmful chemicals in vape aerosol damage lung tissue and impair the body's ability to deliver oxygen efficiently. This slows down recovery, limits endurance, and can reduce overall athletic performance.*

25 - What are early signs of nicotine addiction that young people who vape may experience?

Craving for the next dose of nicotine

Feeling moody or irritable

Thinking about & planning when and where to vape

All of the above

*Early signs of nicotine addiction in young people include **strong cravings, irritability, and trouble concentrating**. These symptoms can occur soon after starting to vape, making it hard to quit. Over time, users may find themselves needing more nicotine to feel the same effects, leading to increased use.*

26 - What actions do vaping companies take to reduce the environmental impacts of their products?

Vape devices are made with 100% recycled materials

The industry provides a recycling program for products

The industry takes limited action for product disposal or pollution

Vape companies dedicate millions of \$\$ to environment protection activities

*Vaping companies have taken **limited action** in addressing the environmental impacts of their products. While some may offer recycling programs or promote responsible disposal, these efforts are often not widespread or heavily enforced. The industry continues to generate significant amounts of waste, particularly from disposable vapes.*

27 - What dangers do flavoured vaping products present to youth?

Flavours are appealing and encourage experimenting

Flavours appear harmless (ex. Is Luscious Lemon really harmful?)

Flavours are made from chemicals, which can be harmful

All of the above

*Flavored vaping products pose a particular risk to youth by making vaping seem more appealing and less harmful. **Sweet or fruity flavors** can mask the harshness of nicotine, making it easier for teens to start using. This increases the likelihood of nicotine addiction and long-term health problems.*

28 - Which item is the most littered item world-wide?

Cigarette butts

Plastic water bottles

Plastic shopping bags

Disposable vapes

Cigarette butts are the most littered item worldwide, contributing to a significant amount of plastic pollution. They contain toxic chemicals that leach into soil and water, harming wildlife and ecosystems. The improper disposal of cigarette butts is a major environmental issue.

29 - What is ceremonial tobacco traditionally used for in Indigenous cultures?

Spiritual practices and offering prayers

Woven into baskets

To reduce stress

To flavour and season foods

*In Indigenous cultures, ceremonial tobacco is traditionally used for **spiritual purposes** like offerings, prayers, and healing. It is seen as a way to communicate with the Creator or ancestors. The use of ceremonial tobacco is deeply rooted in respect, unlike commercial tobacco.*

30 - The vaping industry contributes to environmental degradation.

True

False

The production of vape devices involves the extraction of raw materials such as metals (e.g., lithium for batteries), plastics, and other electronic components. Mining and manufacturing these materials often contribute to environmental degradation, including deforestation, especially in regions where resources like lithium or rare metals are extracted.

31 - Why is vaping in school bathrooms inappropriate?

People need a safe place to access toilets

It's illegal to vape indoors in schools
(Smoke Free Environment Act)

There are urine and fecal particles in
bathroom air

*Vaping in school bathrooms is inappropriate because it exposes others to **second-hand aerosol**. Some people may feel intimidated to go to the bathroom. It is illegal, as per the SFEA, which prohibits smoking and vaping in all indoor public spaces. Vaping in bathrooms can expose people to fecal and urine particles, and other germs from the toilet plumes after flushing.*

All of the above

32 - Which Canadian agency is responsible for enforcing vaping regulations?

Environment Canada

The Canadian Food
Inspection Agency

Health Canada

Natural Resources Canada

*Health Canada enforces vaping regulations under the **Tobacco and Vaping Products Act (TVPA)**. This includes regulating the sale, labeling, advertising, and promotion of vaping products to ensure they are not marketed to youth. Additionally, the **Canada Border Services Agency (CBSA)** assists by controlling the importation of vaping products, while local law enforcement may also play a role in enforcement at the provincial and territorial levels.*

33 - What is one benefit of getting enough sleep when dealing with stress?

It makes you more irritable **It**

helps your body and mind recover, reducing stress

It leads to more anxiety

It prevents mid-day yawning

*Getting enough sleep helps with stress by improving **cognitive function, emotional regulation, and overall well-being**. Sleep allows the brain to process emotions and stressors, reducing feelings of anxiety. It also boosts concentration and mood, making it easier to manage stressful situations.*

34 - What disease can be transmitted between people by sharing vapes?

Colds, Flu and Covid

Herpes Simplex Virus - 1 (Cold sores)

Mononucleosis (Kissing Disease)

All of the above

*Sharing vapes can transmit diseases like **herpes, influenza, and COVID-19**. Because vapes involve contact with the mouth, they can easily spread bacteria and viruses between users. Sharing devices can also increase the risk of respiratory infections.*

35 - How will vaping affect athletes who rely on cardiovascular endurance?

It can lead to lung damage and decreased stamina

Vaping increases blood pressure, which increases blood flow to muscles

Vaping helps athletes breathe better

Vaping increases the heart rate, which delivers more oxygen to muscles

*Vaping negatively affects athletes by reducing **lung capacity and cardiovascular endurance**. The chemicals in vape aerosol damage lung tissue, making it harder for athletes to take in oxygen and perform at peak levels. This can lead to decreased stamina and slower recovery times.*

36 - How does vaping affect your oral and dental health?

The sticky vape residue coats teeth and increases cavities

It reduces saliva production, leading to dry mouth

Bacteria in the mouth are stressed so creates extra slime as protection

All of the above

*Vaping can lead to poor **oral and dental health**, causing issues like gum disease, tooth decay, and dry mouth. The chemicals in vape aerosol irritate the gums and can lead to inflammation or infection. Long-term vaping can also discolor teeth and increase the risk of cavities.*

37 - Which of the following is a healthy way to cope with stress?

Vaping

Ignoring your feelings

Exercising or going for a walk

Spending lots of time on social media

***Exercise** is a healthy way to cope with stress, as it helps release endorphins that improve mood and reduce tension. Physical activity also serves as a distraction from stressful situations and allows for better emotional regulation. Other healthy coping methods include meditation, deep breathing, and spending time with loved ones.*

38 - What is the maximum legal nicotine concentration allowed in vaping products sold in Canada?

20 mg/mL

50 mg/mL

100 mg/mL

5 mg/mL

*In Canada, the maximum legal nicotine concentration allowed in vaping products is **20 mg/mL**. Consuming high concentrations or a high volume of nicotine can lead to quicker dependence and more severe withdrawal symptoms.*

39 - How can vape liquids harm young children if accidentally ingested or touched?

Nicotine poisoning can occur, which is potentially life-threatening

Children are not affected

Nicotine is a stimulant, so children may be hyperactive for a short time

Small amounts won't hurt them

*Vape liquids can be extremely dangerous for young children if **ingested or touched**, leading to poisoning, seizures, or chemical burns. Nicotine poisoning can occur quickly, causing symptoms like vomiting, rapid heart rate, and in severe cases, coma or death. It's important to keep vape liquids out of reach of children.*

40 - How many Newfoundlanders & Labradorians die each year as a result of tobacco-related diseases?

1200

500

1000

250

*Each year, around **1,000 Newfoundlanders & Labradorians** die from tobacco-related diseases such as lung cancer, heart disease, and chronic obstructive pulmonary disease (COPD). Tobacco use remains a leading cause of preventable death in the province. Reducing tobacco consumption could significantly lower these mortality rates.*