

THE DANGERS OF YOUTH VAPING AND E-CIGARETTES

GRADE 8 AND UP READING

Improve students'
literacy skills

Sub Plan

Science Applicability



SCROLL
to take a look inside!

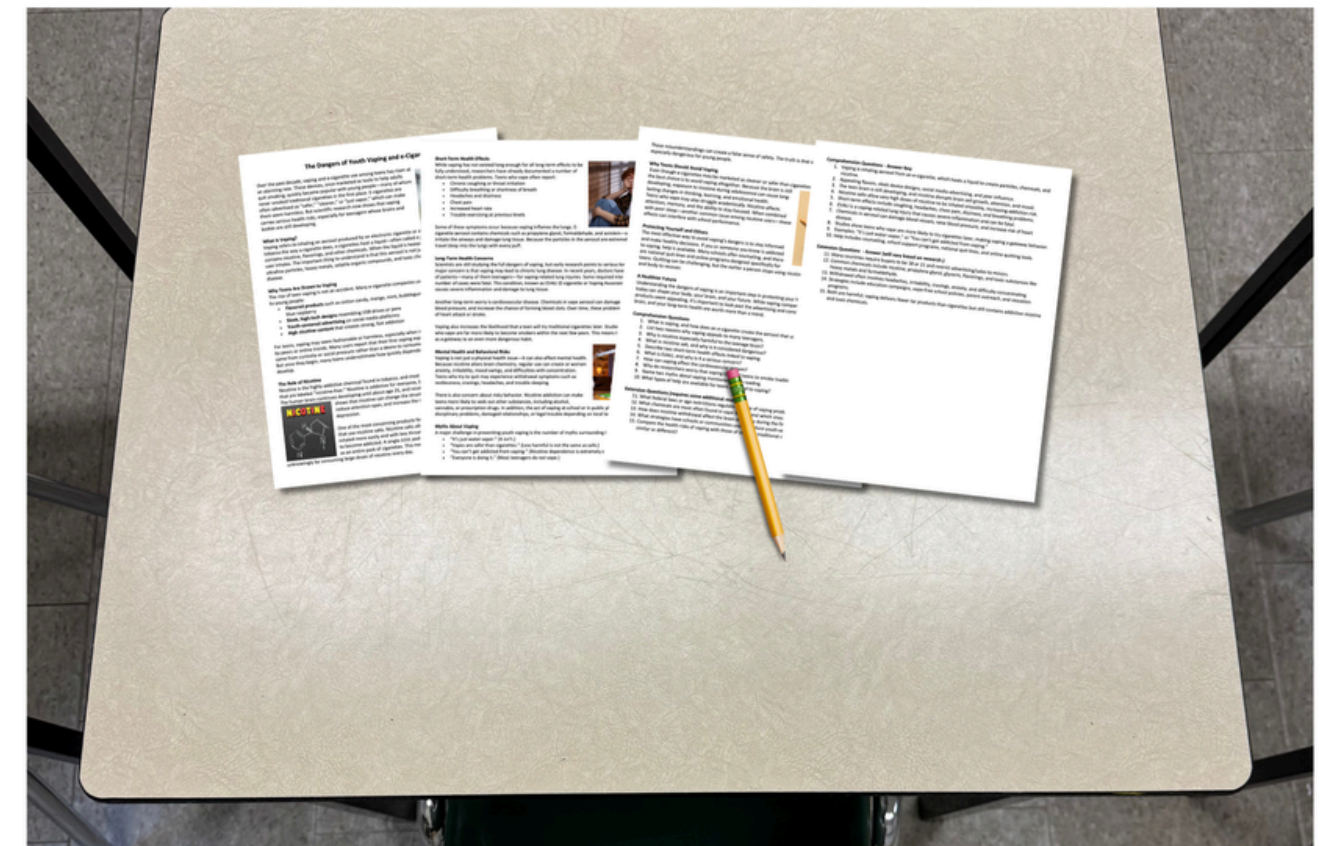


THE PROBLEMS YOU FACE

- Limited time to teach scientific literacy and strengthen students' reading and analysis skills.
- Need meaningful extension activities to engage fast-moving learners.
- Difficulty creating effective last-minute sub plans that still support student learning.

CLASSROOM READY

- Questions and Answer Key
- **No Prep, Ready-to-Use:** Print or assign digitally with Google Docs, Microsoft Word, and PDF formats for flexible classroom use
- **Includes Varied Question Types:** Knowledge, thinking, connecting, application, and open-ended questions.



What Will Your Students Learn?

READING COMPREHENSION ARTICLE & QUESTION BUNDLE

Article with
Comprehension
Questions

Grade 8 and Up

Print & Digital

- What is Vaping?
- Why Teens Are Drawn to Vaping
- The Role of Nicotine
- Short and Long-Term Health Effects of Vaping
- Mental Health and Behavioral Risks
- Myths About Vaping
- Why Teens Should Avoid Vaping
- Protecting Yourself and Others
- A Healthier Future

Comprehension Questions

1. What is vaping, and how does an e-cigarette create the aerosol that users inhale?
2. List two reasons why vaping appeals to many teenagers.
3. Why is nicotine especially harmful to the teenage brain?
4. What is nicotine salt, and why is it considered dangerous?
5. Describe two short-term health effects linked to vaping.
6. What is a long-term health concern?
7. How can teens protect themselves from the risks of vaping?
8. What are some signs of nicotine addiction?
9. Name two ways to quit vaping.
10. What are some resources for help with quitting?

Extension Questions

11. Why do you think vaping is so popular among teens?
12. How can parents and teachers help teens make better choices?
13. What are some ways to reduce the harm of vaping?
14. How can we create a healthier environment for teens?
15. What are some ways to encourage teens to quit vaping?

The Dangers of Youth Vaping and e-Cigarettes

Over the past decade, vaping and e-cigarette use among teens has risen at an alarming rate. These devices, once marketed as tools to help adults quit smoking, quickly became popular with young people—many of whom never smoked traditional cigarettes in the first place. E-cigarettes are often advertised as “safer,” “cleaner,” or “just vapor,” which can make them seem harmless. But scientific research now shows that vaping carries serious health risks, especially for teenagers whose brains and bodies are still developing.



What Is Vaping?

Vaping refers to inhaling an aerosol produced by an electronic cigarette or similar device. Instead of burning tobacco the way a cigarette does, e-cigarettes heat a liquid—often called e-juice or vape juice—that usually contains nicotine, flavorings, and other chemicals. When the liquid is heated, it turns into an aerosol that the user inhales. The important thing to understand is that this aerosol is not just “water vapor.” It can contain ultrafine particles, heavy metals, volatile organic compounds, and toxic chemicals linked to lung and heart disease.

Why Teens Are Drawn to Vaping

The rise of teen vaping is not an accident. Many e-cigarette companies used strategies that appealed directly to young people:

- **Flavored products** such as cotton candy, mango, mint, bubblegum, and blue raspberry
- **Sleek, high-tech designs** resembling USB drives or pens
- **Youth-centered advertising** on social media platforms
- **High nicotine content** that creates strong, fast addiction

For teens, vaping may seem fashionable or harmless, especially when influenced by peers or online trends. Many users report that their first vaping experience came from curiosity or social pressure rather than a desire to consume nicotine. But once they begin, many teens underestimate how quickly dependence can develop.



The Role of Nicotine

Nicotine is the highly addictive chemical found in tobacco, and e-cigarette liquids that are labeled “nicotine-free” are not truly nicotine-free. Nicotine is addictive and can be harmful to the developing brain.

Google Access

Thank you for your purchase. Clicking the link below will automatically create a copy of your resources inside your Google Drive. You'll find the file inside the "Shared with me" section on the left side of your Drive.

Important: Before you click, make sure you're signed in to the Google account you'd like the resources placed into. If the resources are added to the wrong account, simply sign out and then into the correct one and repeat the process.

Click here to place a copy directly into your Google Drive Account

TWTF

PDF



Your Reading

The Dangers of Youth Vaping and e-Cigarettes

Over the past decade, vaping and e-cigarette use among teens has risen at an alarming rate. These devices, once marketed as tools to help adults quit smoking, quickly became popular with young people—many of whom never smoked traditional cigarettes in the first place. E-cigarettes are often advertised as “safer,” “cleaner,” or “just vapor,” which can make them seem harmless. But scientific research now shows that vaping carries serious health risks, especially for teenagers whose brains and bodies are still developing.



What Is Vaping?

Vaping refers to inhaling an aerosol produced by an electronic cigarette or similar device. Instead of burning tobacco the way a cigarette does, e-cigarettes heat a liquid—often called *e-juice* or *vape juice*—that usually contains nicotine, flavorings, and other chemicals. When the liquid is heated, it turns into an aerosol that the user inhales. The important thing to understand is that this aerosol is not just “water vapor.” It can contain ultrafine particles, heavy metals, volatile organic compounds, and toxic chemicals linked to lung and heart disease.

Why Teens Are Drawn to Vaping

The rise of teen vaping is not an accident. Many e-cigarette companies used strategies that appealed directly to young people:

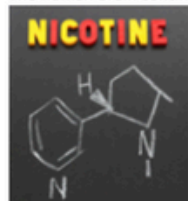
- **Flavored products** such as cotton candy, mango, mint, bubblegum, and blue raspberry
- **Sleek, high-tech designs** resembling USB drives or pens
- **Youth-centered advertising** on social media platforms
- **High nicotine content** that creates strong, fast addiction



For teens, vaping may seem fashionable or harmless, especially when influenced by peers or online trends. Many users report that their first vaping experience came from curiosity or social pressure rather than a desire to consume nicotine. But once they begin, many teens underestimate how quickly dependence can develop.

The Role of Nicotine

Nicotine is the highly addictive chemical found in tobacco, and most e-cigarette liquids contain it—even some that are labeled “nicotine-free.” Nicotine is addictive for everyone, but it poses extra risks for young people. The human brain continues developing until about age 25, and nicotine interferes with this process. Research shows that nicotine can change the structure of brain cells, weaken impulse control, reduce attention span, and increase the risk of mood disorders such as anxiety and depression.



One of the most concerning products for youth has been JUUL and similar devices that use nicotine salts. Nicotine salts allow extremely high levels of nicotine to be inhaled more easily and with less throat irritation, making it much simpler for a teen to become addicted. A single JUUL pod delivers about the same amount of nicotine as an entire pack of cigarettes. This means students who vape regularly may unknowingly be consuming large doses of nicotine every day.

Short-Term Health Effects

While vaping has not existed long enough for all long-term effects to be fully understood, researchers have already documented a number of short-term health problems. Teens who vape often report:

- Chronic coughing or throat irritation
- Difficulty breathing or shortness of breath
- Headaches and dizziness
- Chest pain
- Increased heart rate
- Trouble exercising at previous levels



Some of these symptoms occur because vaping inflames the lungs. E-cigarette aerosol contains chemicals such as propylene glycol, formaldehyde, and acrolein—substances that irritate the airways and damage lung tissue. Because the particles in the aerosol are extremely small, they can travel deep into the lungs with every puff.

Long-Term Health Concerns

Scientists are still studying the full dangers of vaping, but early research points to serious long-term risks. One major concern is that vaping may lead to chronic lung disease. In recent years, doctors have treated thousands of patients—many of them teenagers—for vaping-related lung injuries. Some required intensive care, and a number of cases were fatal. This condition, known as EVALI (E-cigarette or Vaping Associated Lung Injury), causes severe inflammation and damage to lung tissue.

Another long-term worry is cardiovascular disease. Chemicals in vape aerosol can damage blood vessels, raise blood pressure, and increase the chance of forming blood clots. Over time, these problems may raise the risk of heart attack or stroke.

Vaping also increases the likelihood that a teen will try traditional cigarettes later. Studies show that teenagers who vape are far more likely to become smokers within the next few years. This means that vaping may serve as a gateway to an even more dangerous habit.

Mental Health and Behavioral Risks

Vaping is not just a physical health issue—it can also affect mental health. Because nicotine alters brain chemistry, regular use can create or worsen anxiety, irritability, mood swings, and difficulties with concentration. Teens who try to quit may experience withdrawal symptoms such as restlessness, cravings, headaches, and trouble sleeping.



There is also concern about risky behavior. Nicotine addiction can make teens more likely to seek out other substances, including alcohol, cannabis, or prescription drugs. In addition, the act of vaping at school or in public places can lead to disciplinary problems, damaged relationships, or legal trouble depending on local laws.

Myths About Vaping

A major challenge in preventing youth vaping is the number of myths surrounding it. Some teens believe that:

- “It’s just water vapor.” (It isn’t.)
- “Vapes are safer than cigarettes.” (Less harmful is not the same as safe.)
- “You can’t get addicted from vaping.” (Nicotine dependence is extremely common in teen users.)
- “Everyone is doing it.” (Most teenagers do *not* vape.)

These misunderstandings can create a false sense of safety. The truth is that vaping is harmful, addictive, and especially dangerous for young people.

Why Teens Should Avoid Vaping

Even though e-cigarettes may be marketed as cleaner or safer than cigarettes, the risks are real. For teens, the best choice is to avoid vaping altogether. Because the brain is still developing, exposure to nicotine during adolescence can cause long-lasting changes in thinking, learning, and emotional health. Teens who vape may also struggle academically. Nicotine affects attention, memory, and the ability to stay focused. When combined with poor sleep—another common issue among nicotine users—these effects can interfere with school performance.



Protecting Yourself and Others

The most effective way to avoid vaping’s dangers is to stay informed and make healthy decisions. If you or someone you know is addicted to vaping, help is available. Many schools offer counseling, and there are national quit-lines and online programs designed specifically for teens. Quitting can be challenging, but the earlier a person stops using nicotine, the easier it is for the brain and body to recover.

A Healthier Future

Understanding the dangers of vaping is an important step in protecting your health. The choices you make today can shape your body, your brain, and your future. While vaping companies may try to make their products seem appealing, it’s important to look past the advertising and consider the science. Your lungs, your brain, and your long-term health are worth more than a trend.

Comprehension Questions

1. What is vaping, and how does an e-cigarette create the aerosol that users inhale?
2. List two reasons why vaping appeals to many teenagers.
3. Why is nicotine especially harmful to the teenage brain?
4. What is nicotine salt, and why is it considered dangerous?
5. Describe two short-term health effects linked to vaping.
6. What is EVALI, and why is it a serious concern?
7. How can vaping affect the cardiovascular system?
8. Why do researchers worry that vaping can lead teens to smoke traditional cigarettes?
9. Name two myths about vaping mentioned in the reading.
10. What types of help are available for teens addicted to vaping?

Extension Questions (requires some additional research)

11. What federal laws or age restrictions regulate the sale of vaping products in your country?
12. What chemicals are most often found in vape liquids, and which ones are considered toxic?
13. How does nicotine withdrawal affect the brain and body during the first 72 hours after quitting?
14. What strategies have schools or communities used to reduce youth vaping rates?
15. Compare the health risks of vaping with those of smoking traditional cigarettes. In what ways are they similar or different?

Comprehension Questions - Answer Key

1. Vaping is inhaling aerosol from an e-cigarette, which heats a liquid to create particles, chemicals, and nicotine.
2. Appealing flavors, sleek device designs, social media advertising, and peer influence.
3. The teen brain is still developing, and nicotine disrupts brain cell growth, attention, and mood.
4. Nicotine salts allow very high doses of nicotine to be inhaled smoothly, increasing addiction risk.
5. Short-term effects include coughing, headaches, chest pain, dizziness, and breathing problems.
6. EVALI is a vaping-related lung injury that causes severe inflammation and can be fatal.
7. Chemicals in aerosol can damage blood vessels, raise blood pressure, and increase risk of heart disease.
8. Studies show teens who vape are more likely to try cigarettes later, making vaping a gateway behavior.
9. Examples: “It’s just water vapor,” or “You can’t get addicted from vaping.”
10. Help includes counseling, school support programs, national quit-lines, and online quitting tools.

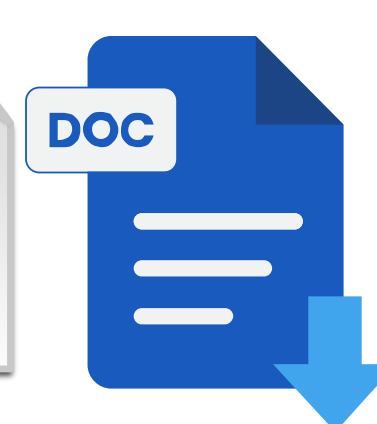
Extension Questions - Answer (will vary based on research.)

11. Many countries require buyers to be 18 or 21 and restrict advertising/sales to minors.
12. Common chemicals include nicotine, propylene glycol, glycerin, flavorings, and toxic substances like heavy metals and formaldehyde.
13. Withdrawal often involves headaches, irritability, cravings, anxiety, and difficulty concentrating.
14. Strategies include education campaigns, vape-free school policies, parent outreach, and cessation programs.
15. Both are harmful; vaping delivers fewer tar products than cigarettes but still contains addictive nicotine and toxic chemicals.

Answer Key Included

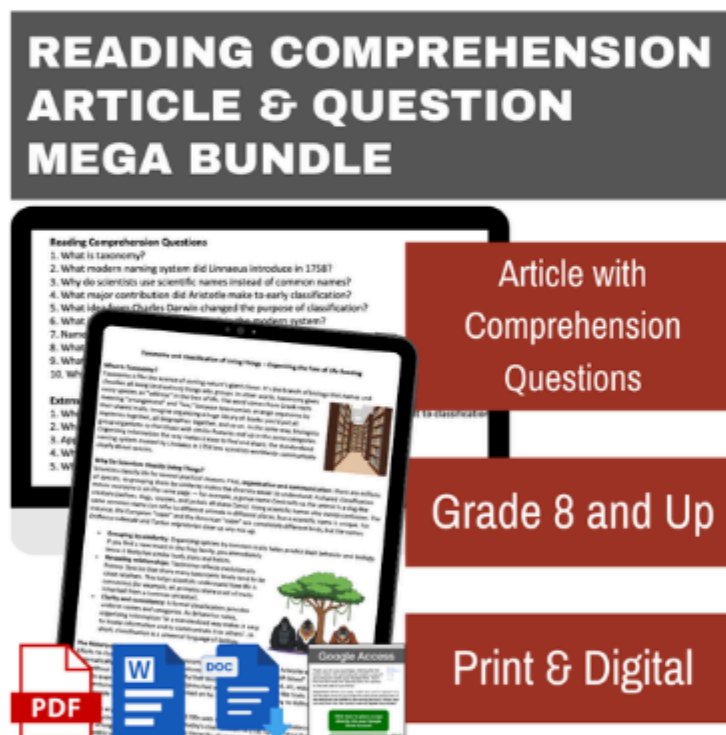
Office, Google, & PDF Versions

Comprehension and Extension Questions



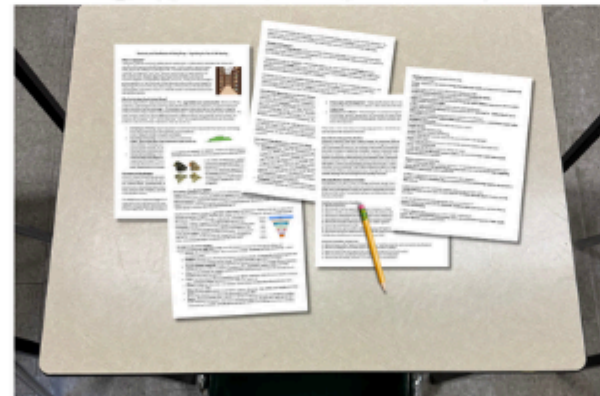
Upgrade to the Grade 8 and Up Reading Mega Bundle

Includes over 130 readings for students in grades 8 and up. The bundle covers all science topics and will save you over 75%.



CLASSROOM READY

- Questions and Answer Key
- **No Prep, Ready-to-Use:** Print or assign digitally with Google Docs, Microsoft Word, and PDF formats for flexible classroom use
- **Includes Varied Question Types:** Knowledge, thinking, connecting, application, and open-ended questions.



★★★★★ Extremely satisfied - It is a good supplemental activity either for review and at the same time introducing some concept. I also use this for sub plan. It is well presented, organized and interesting.

★★★★★ Extremely satisfied - This a great resource. I used this for a sub plan. It was fun and engaging for my students.

Grade 8 and Up Scientific Reading Comprehension Article Mega Bundle

ALL my current and future grade 8 and up readings, covering the following subject areas:

Biology
Chemistry
Earth and Space
Ecology and the Environment
Energy
Health
Natural Disasters
Physics



Improve your students' **Literacy and Analysis Skills**, use as an **Emergency Substitute Plan** or create **Applicability** in your classroom

**Click to
learn more!**

As a special bonus, I want to send you a few resources that you can use in your classroom tomorrow. Completely free and geared towards what you teach!



Just  **and then choose what you teach!**

thanks
**for your interest
in this resource!**



 devon@teachwithfergy.com