

Vaping 101: Resource Guide for Educators

Grades 4-6



Davis
COUNTY
HEALTH DEPARTMENT

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Background Information

Why is learning about e-cigarettes important?

There are many misconceptions about e-cigarettes and the danger they pose to a person's health and well-being. E-cigarettes are still harmful and contain nicotine that can lead to addiction.

The use of e-cigarettes, also called vaping, is a growing health concern among youth. The aerosol released from e-cigarettes contains chemicals that are harmful to a person's health. 99% of e-cigarettes contain nicotine, which is the addictive drug in tobacco. Nicotine use in adolescence is especially damaging to the developing brain.

How will my students learn about the dangers of e-cigarettes?

Throughout this Resource guide, there are activities and educational information that will help students understand key concepts about e-cigarettes. Students will use the information they learn to develop and practice refusal skills.

Goals:

- Prevent youth in Davis County from vaping
- Provide cessation resources for youth

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LEARNING OBJECTIVES

By the end of the lesson students will:

- learn what e-cigarettes are
- pledge to be vape-free
- practice refusal skills
- understand how vaping and nicotine affects various parts of our body and brain

MATERIALS:

- Computer
- Projector
- Fortune teller handout
- Crayons, colored pencils, markers, etc (optional)
- Scissors
- Vape-free pledge

KEY TERMS:

Addiction

Not having control over doing, taking, or using something to the point where it could be harmful to you.¹

Aerosol

The tiny particles or droplets that are inhaled and exhaled by an e-cigarette user after the flavored e-liquid is heated.²

E-cigarette

E-cigarettes are battery powered devices that heat a liquid to produce an aerosol that is inhaled by the user.²

Nicotine

A highly addictive drug found in tobacco and other e-cigarette products.²

Refusal skills

Something that can help you say "no" in a creative way.²

Vaping

The act of using an e-cigarette.²

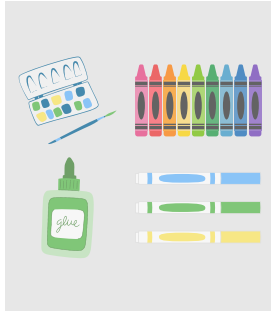
Vapor

Refers to the gas phases of a substance that can exist in the liquid or solid state depending on the temperature. For example, water can be frozen, liquid, or steam.²

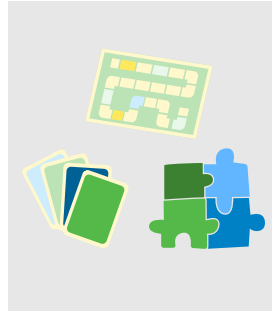
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SLIDE 2: WHAT HEALTHY ACTIVITIES MAKE YOU FEEL GOOD?

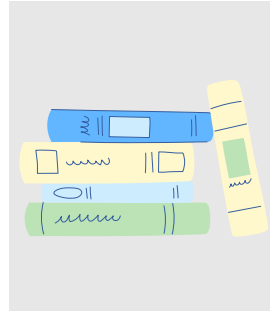
- Ask students to share what activities make them feel good
 - Some examples may include:



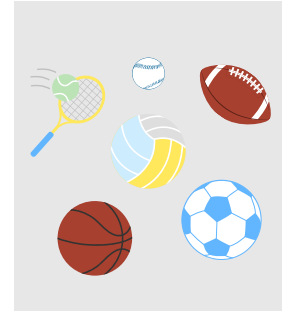
Art



Games



Reading



Sports

SLIDE 3: WHAT IS VAPING?³

- Electronic cigarettes or e-cigarettes are devices that heat a liquid that usually contains nicotine, flavorings, and other chemicals creating an aerosol that users will inhale
- E-cigarettes are commonly referred to as “e-cigs” or “vapes”
- Vaping is the act of using an e-cigarette

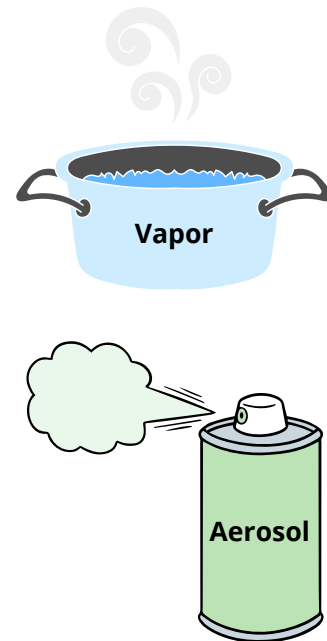


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SLIDE 4: VAPOR VS. AEROSOL⁵

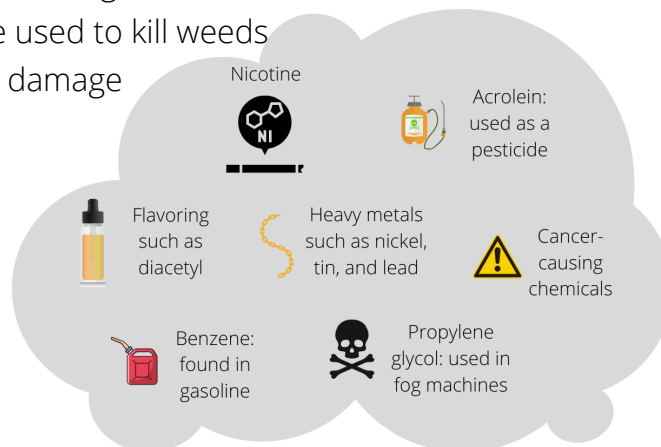
- Vapor is a substance in a gaseous state
 - For example, if you boil water, the steam is water that has changed from a liquid to a gas
- Aerosol is a suspension of solid or liquid particles within a gas
 - Commonly used aerosol products include hairspray, spray paint, air freshener, etc.
- E-cigarette "vapor" is not actually water vapor
The aerosol contains harmful chemicals



SLIDE 5: CHEMICALS IN AEROSOL⁶

Chemicals found in e-cigarette aerosol:

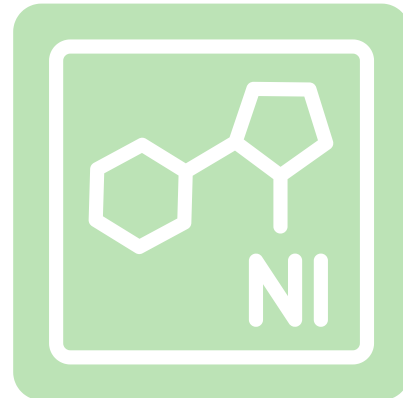
- Heavy metals like iron, tin, and lead
- Propylene glycol, (pro-pyl-ene gly-col) a common food additive
 - Also used in fog machines to create fake smoke
- Acetaldehyde (a-see-tal-die-hide) and formaldehyde (form-al-de-hyde), chemicals known to cause cancer
- Benzene (ben-zeen), which is found in gasoline
- Acrolein (ak-ro-leen), a pesticide used to kill weeds
 - Can cause irreversible lung damage
- Various flavor chemicals
- Nicotine



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SLIDE 6: NICOTINE

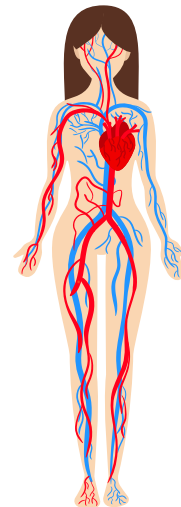
- Nicotine is found in 99% of e-cigarette products⁷
- Nicotine is a highly addictive drug
- Nicotine can affect various areas of the body



SLIDE 7: CARDIOVASCULAR SYSTEM⁵

Organs affected: Heart and blood vessels

- In a healthy cardiovascular system the heart pumps oxygen through the blood to all of the organs
- Nicotine causes blood vessels to narrow, which limits the amount of blood that can flow
 - Nicotine stays in your system for six to eight hours⁸
- The lack of blood flowing to the heart can cause blockages, which can lead to serious health conditions, including heart disease and stroke
 - Heart disease: Heart disease is a range of conditions that affect the heart
 - An example of this is when the blood stops flowing to your heart, which leads to a heart attack⁹
 - Stroke: A stroke is when the blood stops or is interrupted from going to your brain¹⁰

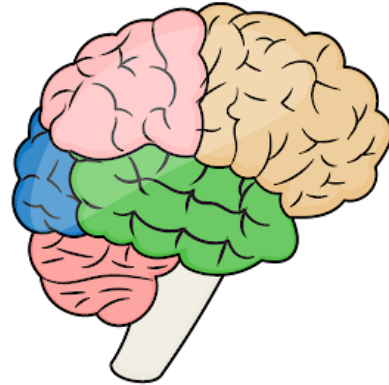


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SLIDE 8: NERVOUS SYSTEM⁵

Area affected: Front part of the brain

- Using nicotine when you are young can harm the front part of the brain which affects attention, learning, mood, and impulse control
- This part of the brain is still developing until the age of 25



Area affected: Hypothalamus

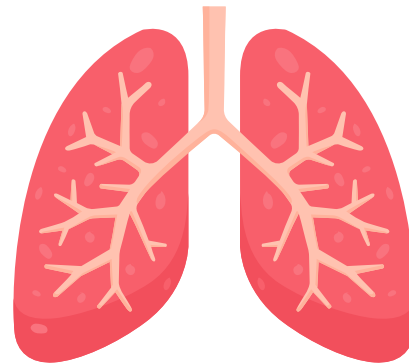
- When you inhale nicotine from vaping, your brain releases the chemical, dopamine, in your brain
- Dopamine can make you feel good, which can lead to addiction



SLIDE 9: RESPIRATORY SYSTEM⁵

Organ affected: Lungs

- Harmful chemicals from e-cigarettes can trigger asthma attacks
- Vaping can also cause mild to severe damage to your lungs that's irreversible
 - It can affect your quality of life, which means it's harder to run, play, and do all the things you enjoy

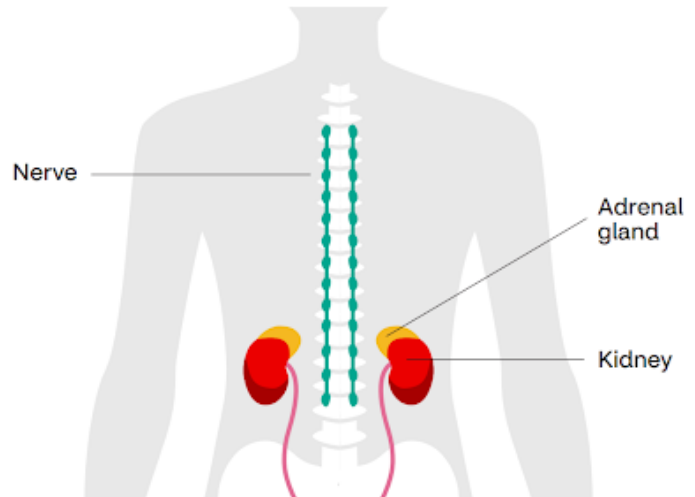


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SLIDE 10: ENDOCRINE SYSTEM⁵

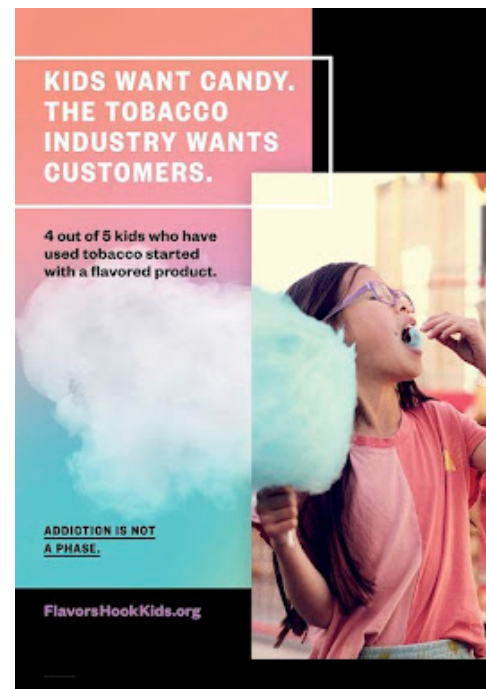
Area affected: Adrenal glands

- When you vape nicotine, an excess amount of a hormone called epinephrine (ep-uh-nef-rin) is released in the bloodstream
- Epinephrine increases your blood pressure and heart rate
- High blood pressure and heart rate increases your risk of heart disease.
 - The heart gets tired and starts to wear down sooner than someone who doesn't vape



SLIDE 11: FLAVORS¹¹

- You've now learned about how vaping affects different parts of your body
- The tobacco industry uses fun flavors to tempt young people to use e-cigarettes
- Flavors hide the harshness of nicotine and other chemicals, which makes it easier and more tempting to use
 - Flavors make vaping seem safe and are similar to your favorite treats

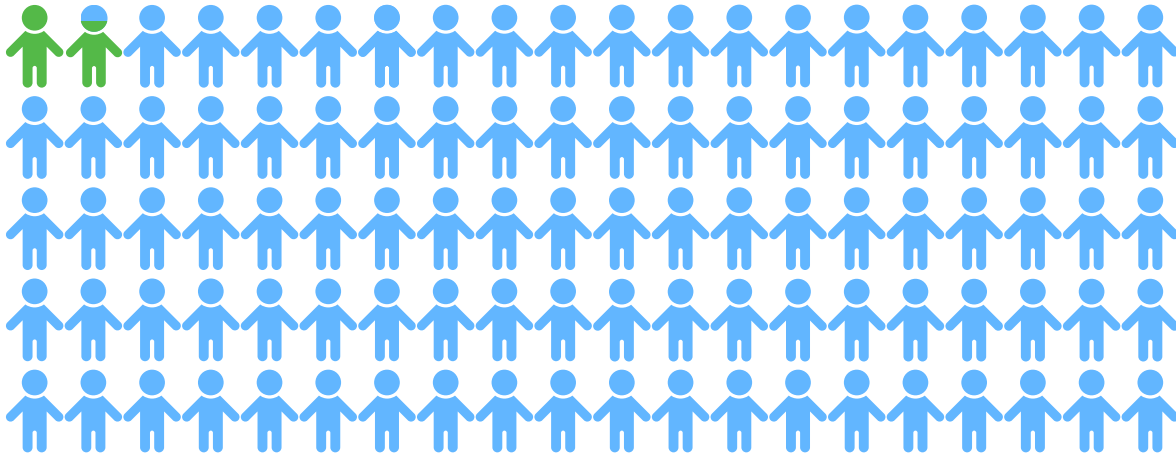


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SLIDE 12: VAPING ISN'T AS POPULAR AS YOU THINK

- The media makes it seem like vaping is more common than it is
- Only 1.8 out of 100 6th graders in Utah have vaped in the last 30 days¹³



SLIDE 13: WAYS TO SAY "NO" TO VAPING^{14, 15, 16}

Make a joke.

Humor is a good way to deal with a situation, as it can lighten the mood.

Say "No thanks."

In some situations, a simple "No thanks" will do the job.

Give an excuse.

Example: "My parents would ground me if they knew" or "I need to go and do my school work."

Change the subject.

Pretend that you didn't hear the suggestion to vape and change the subject to a different topic.

Keep saying no.

You may have to say "no" more than once. You don't have to give in just because someone asks you multiple times.

Suggest another activity.

Example: sports or playing games

Give a reason why it's a bad idea.

Example: "Vaping is harmful to your mind and body" or "Vaping is addictive."

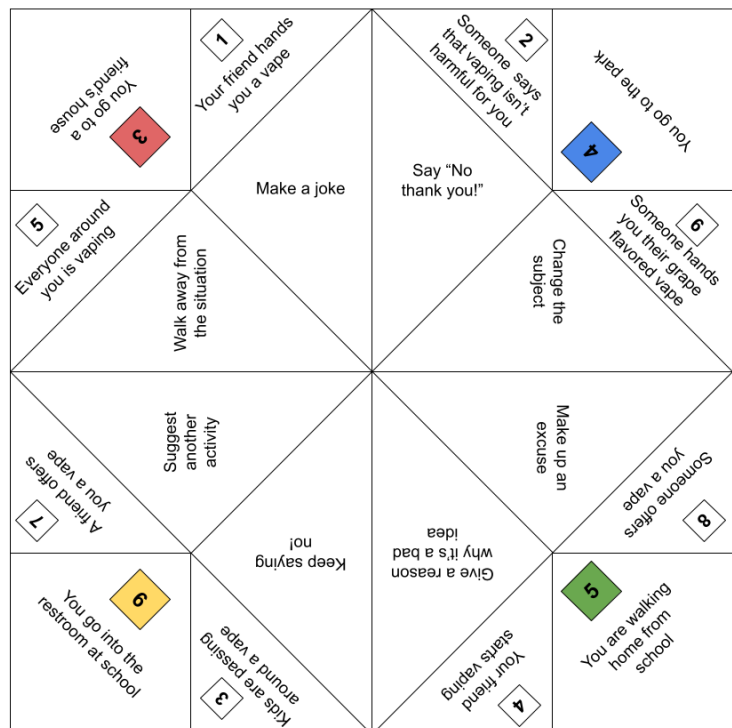
Walk away from the situation.

If you feel uncomfortable, do what you can to leave the situation. If someone continues to ask them to vape and won't leave them alone, talk to a trusted adult.

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SLIDE 14 AND 15: VAPE-FREE FORTUNE TELLER ACTIVITY ^{17, 18}

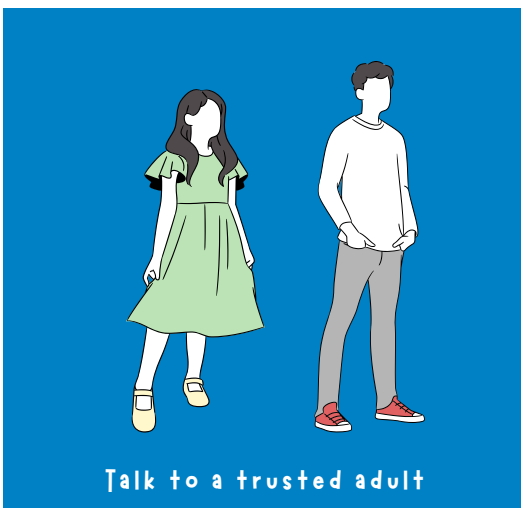
- Pass out Vape-Free Fortune Teller to each student (see Appendix A)
- Optional: Have students personalize their fortune tellers with crayons, colored pencils, markers, etc
- Students cut out and fold fortune tellers (["How to fold a fortune teller"](#))
- Put students in groups of two
- Students will take turns holding the fortune teller
- One student, the "player" will pick a scenario from the outside flap and the "fortune teller" will count out the corresponding number
- The "player" will then choose one of the four inner scenarios and the "fortune teller" will count out the corresponding number
- One last time, the "player" will choose a number and the "fortune teller" will lift the flap up and read the scenario for the corresponding number
- Students will then use the prompts from the fortune teller to act out the scenario
 - Examples: "You go to a friends house," "Your friend hands you a vape," and "You say, 'No thank you!'"



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SLIDE 16: HELP A FRIEND QUIT¹⁹

- Talk to a trusted adult
- My Life, My Quit "is the free and confidential way to quit smoking or vaping" just for young people
- You can text "Start My Quit" to 36072 or go to ut.mylifemyquit.org/ to chat with a coach online



SLIDE 17: TEST YOUR KNOWLEDGE

- True or False: E-cigarettes are not safe to use and contain harmful chemicals
 - Answer: True
- True or False: Flavors aren't safe to vape
 - Answer: True
- True or False: Nicotine is addictive
 - Answer: True



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SLIDE 18: PLEDGE TO BE VAPE-FREE

- Hand out the pledge to each student
- Have students fill out their name and why they choose to be vape-free
- Examples include:
 - "Vaping is addictive"
 - "There are dangerous chemicals in e-cigarettes"
 - "I want to stay healthy"



YOUR NAME:

I PLEDGE TO BE VAPE-FREE BECAUSE

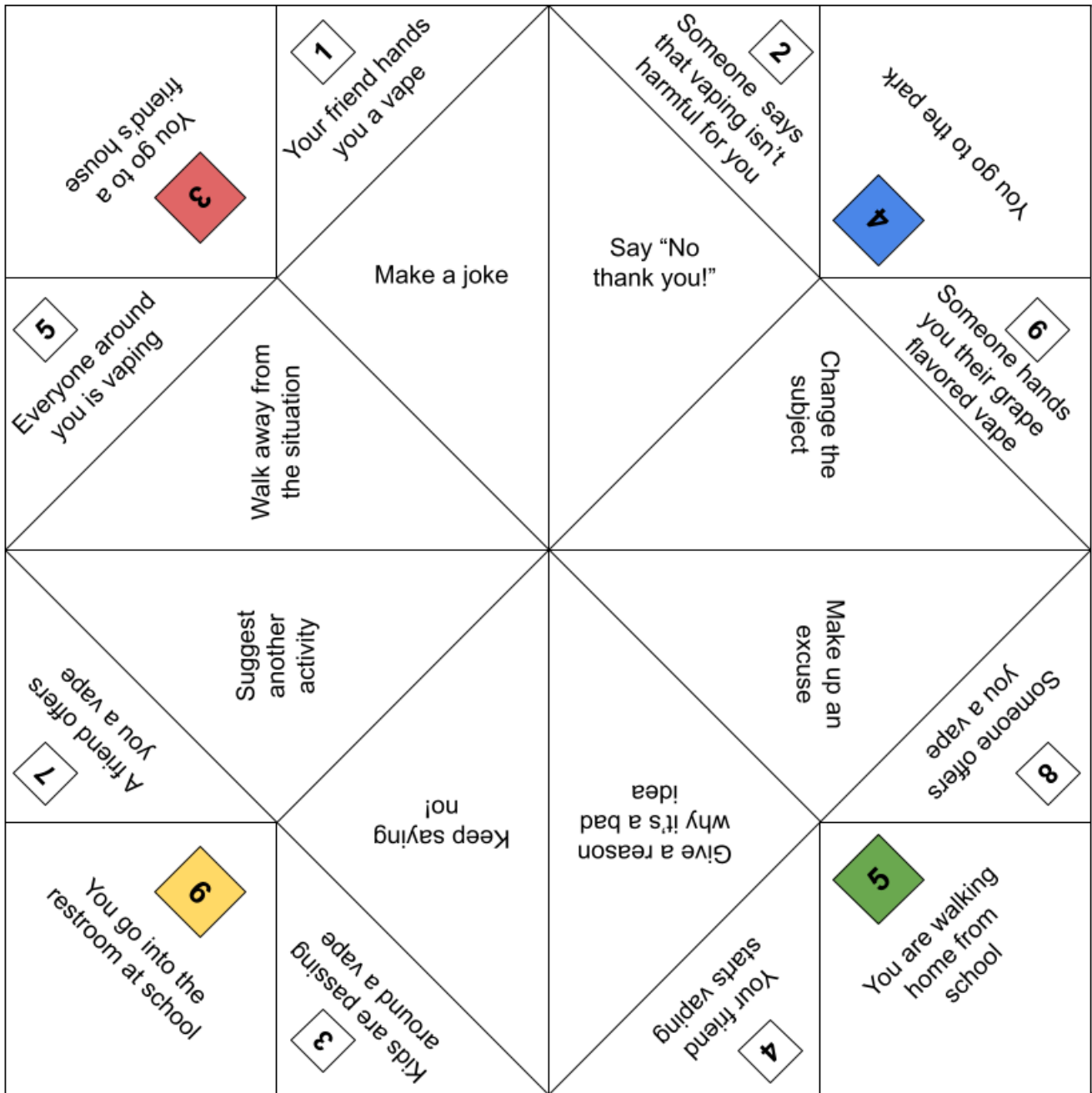
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SLIDE 19: REFERENCES

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APPENDIX

APPENDIX A - VAPE-FREE FORTUNE TELLER



APPENDIX B - PLEDGE TO BE VAPE-FREE

PLEDGE TO BE VAPE-FREE

YOUR NAME: _____

I PLEDGE TO BE VAPE-FREE BECAUSE



PLEDGE TO BE VAPE-FREE

YOUR NAME: _____

I PLEDGE TO BE VAPE-FREE BECAUSE



PLEDGE TO BE VAPE-FREE

YOUR NAME: _____

I PLEDGE TO BE VAPE-FREE BECAUSE



PLEDGE TO BE VAPE-FREE

YOUR NAME: _____

I PLEDGE TO BE VAPE-FREE BECAUSE

