Yes, vaping is a problem

- Vaping is linked to **lung disease, nicotine addiction, and impaired brain development for youth** (Glantz & Bareham, 2018).
- Vaping use has skyrocketed among teens, with **14.1% of high school students** reporting e-cigarette use in 2022 (CDC, 2023).
- Many adolescents **perceive vaping as harmless** due to widespread **misinformation and marketing strategies** that downplay risks (U.S. Department of Health and Human Services [USDHHS], 2016).
- Studies show that **youth often underestimate** the addictive nature of nicotine in e-cigarettes and the potential for long-term health effects (USDHHS, 2016).
- Furthermore, vaping devices are intentionally designed to **resemble everyday objects such as USB drives and pens**, making them easier to hide from authority figures (Truth Initiative, 2023).
- And lastly, nicotine exposure in **adolescence can harm brain development, affecting attention, learning, and memory** (USDHHS, 2016).

So then who is this game for?

Target Audience

This game is targeted towards **adolescents aged 12-18**, particularly high school students.

Demographics

Middle and high school students, with a focus on communities **disproportionately targeted by tobacco companies**.

Risk Factors

There are many risk factors contributing to vaping usage such as **peer pressure, social media influence, and misconceptions about vaping safety** (CDC, 2023; Truth Initiative, 2023).

Why focus on youth?

Studies show that the earlier someone starts using nicotine, the **harder it is to quit later** (USDHHS, 2016).

Disparities

Tobacco companies use flavored products and appealing marketing tactics to **disproportionately target youth and minority groups** (Truth Initiative, 2023).

The Narrative of "Quit It!"

Game Premise

Players navigate real-life situations related to vaping, choosing responses that earn "Healthy Choices" points.

Core Messages

- Vaping is harmful and addictive.
- Peer pressure can be resisted with confidence.
- Healthy coping strategies exist for stress and social situations.

Realistic Scenarios

"Your best friend insists that 'just one puff won't hurt.' How do you respond?"

"A social media influencer claims vaping is harmless. What would you say in a comment?"
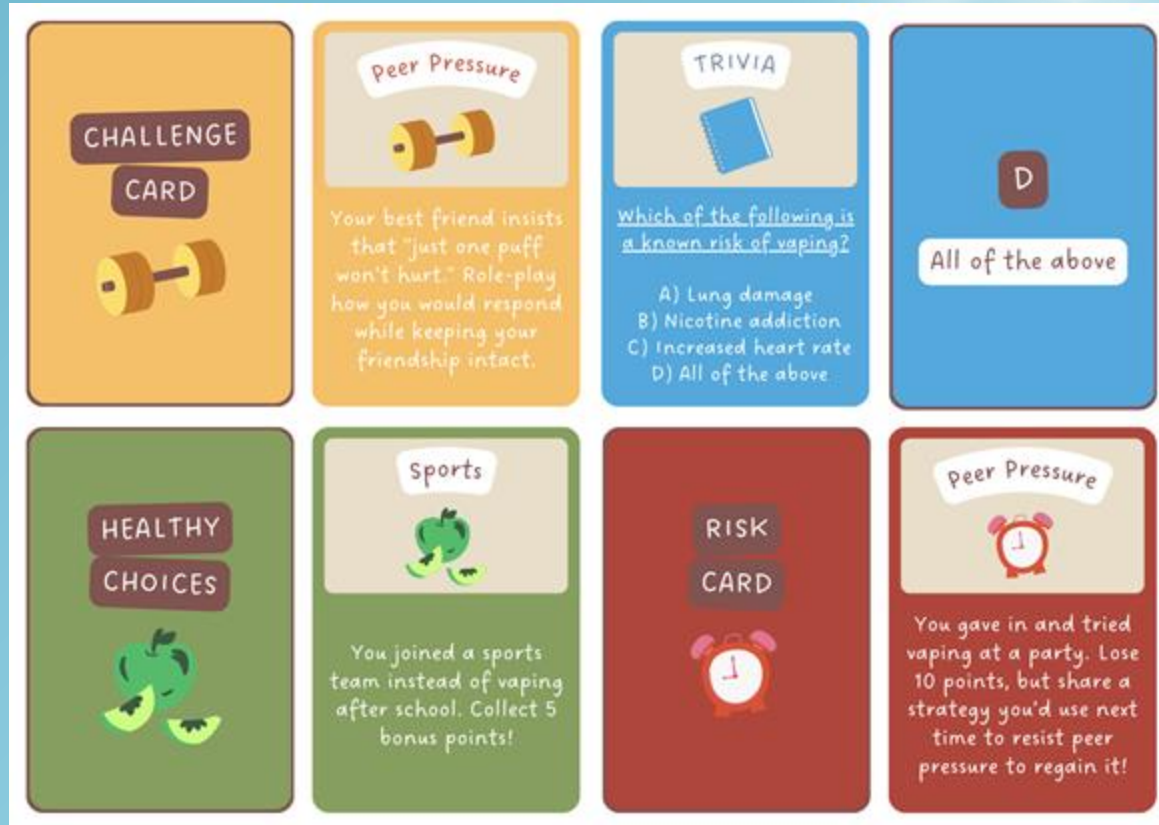
Game Components

Deck of Cards (60 cards total):

- **Challenge Cards (20):** Scenarios where players must perform or respond to situations. (*+15 points*)
- **Trivia Cards (15):** Questions about vaping, its health effects, and quitting strategies. (*+10 points*)
- **Healthy Choices Cards (10):** Rewards for making good decisions. (*+5 points*)
- **Risk Cards (5):** Simulate setbacks or risky scenarios. (*-10 points*)
- **Custom Cards (10):** 5 Blank challenge cards, 3 blank risk cards, and 2 blank healthy choices cards.

Hourglass: Players have 30 seconds to complete tasks when required.

Notepad: Track points for each player.

Proposed Dissemination and Placement

Where will this game be used?	Middle and high school health classes, youth community centers and after-school programs, and can be used for public health campaigns on vaping prevention.
Dissemination Strategy	**Pilot Testing:** The game will be tested with youth focus groups in New York City schools to assess function, engagement, and learning outcomes.
	School & Government Partnerships: Collaboration with New York government health agencies and schools to integrate the game into middle and high school health curriculums citywide.
	Campaign & Promotion: After refinement, a multimedia campaign will promote the game via social media, New York City based youth influencers, and digital platforms.
	Final Evaluation: Surveys will measure effectiveness after full implementation, tracking changes in knowledge, attitudes, and behavior regarding vaping. Should this work in New York City, there can be a move towards nation-wide engagement.

Theoretical Justification

The Stages of Change Model describes the process of behavior change through five stages: precontemplation, contemplation, preparation, action, and maintenance (Prochaska & DiClemente, 1983). The game helps move players from **precontemplation** (unaware of risks) to **action** (avoiding vaping) and **maintenance** (keeping healthy habits).

Social & Behavioral Influence

- Social Learning Theory (Bandura, 1977): **Youth learn behaviors through observation and peer influence**, making an interactive game an effective prevention tool.
- The game **builds self-efficacy**, helping players gain confidence in resisting vaping (Bandura, 1977).
- **Tobacco companies target youth** through flavors, sleek device designs, and even features like music players in vapes, reinforcing the need for early intervention (Truth Initiative, 2023).

Why a card game?

Why a card game?

- A card game offers a **dynamic and engaging format** for delivering health messages, increasing information retention through interactive learning (Hamari et al., 2016).
- This approach enables players to **encounter real-life scenarios and practice decision-making in a safe environment**, enhancing their ability to navigate social situations involving vaping (Cugelman, 2013).
- Moreover, the game **fosters peer discussion**, which supports the reinforcement of anti-vaping attitudes and strategies (Lister et al., 2014).
- The portability and replayability of card games also allow for **repeated engagement**, which strengthens knowledge and skills over time (Hamari et al., 2016).

Effectiveness of Gamification in Public Health:

- Games **improve learning outcomes** and behavior change, especially for **adolescents** (Hamari et al., 2016).
- Gamification **increases motivation and engagement** in health interventions (Cugelman, 2013).
- Adolescents **prefer card games over board games** due to portability, fast-paced play, and ease of social interaction (Hamari et al., 2016). Production costs for card games are also **significantly cheaper than** for board games (EditionCards, n.d.).
- Card games also allow for **customization and replayability**, making them an ideal choice for peer-led learning.

Why "Quit It!" Will Work

Targets early prevention

Youth who avoid vaping early are less likely to smoke or use nicotine long-term.

Addresses industry tactics

Vape companies use flavors, sleek designs, and hidden features like music players to attract teens (Truth Initiative, 2023).

Creates long-term impact

Developing healthy habits while in school helps prevent chronic disease and ensures better health outcomes in adulthood (USDHHS, 2016).

Gamification's proven impact

Studies show that interactive learning improves retention and behavior change (Cugelman, 2013).

Empowers youth

Encourages decision-making and critical thinking, reducing susceptibility to misinformation.

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