Vape pens, also known as e-cigarettes or vapes, are often referred to as JUULs, the name of a popular brand. They deliver nicotine, flavorings and other chemicals to the user in an aerosol.

Vape pens are lithium battery-powered devices which can be charged with a USB drive connected to a computer. The atomizer heats up the liquid, also called “e-juice,” to its boiling point and that becomes the vapor which the user inhales. The term “vaping” or “juuling” refers to the act of inhaling and exhaling the vapor.
While vape pens were originally marketed to traditional cigarette smokers as a way to quit smoking, growing research shows that vaping is harmful to health and addictive, particularly for youth. Although the long-term health effects are not completely known, here’s what we do know:

Flavoring is NOT just flavoring:
The e-cigarette industry is not regulated so there are many “hidden” chemicals found in e-juices. Of the 65 identified chemicals, 26 are on the FDA's list of harmful/potentially harmful substances, and 9 are known to cause cancer, including formaldehyde, benzene (found in pesticides/gasoline) and cadmium (toxic metal used in car batteries). (CDC Surgeon General Report on E-Cigarette Use among Youth, 2016)

Many vape liquids DO contain nicotine and in more concentrated levels:
Most vape cartridges and all JUUL pods contain nicotine in levels that are addictive. According to the manufacturer, a single JUUL pod contains about 200 puffs and as much nicotine as a pack of 20 regular cigarettes. In teens, exposure to nicotine might lead to changes in the central nervous system that predispose youth to dependence on other drugs of abuse (Pediatrics, April 2018)

Vaping can alter teen brain chemistry:
The developing teen brain is experiencing tremendous growth. Studies show the introduction of nicotine and other harmful chemicals found in e-cigarette vapor can alter the brain chemistry of young teens and lead to increased risk of attention problems, depression, and addiction to other drugs. (JAMA Pediatrics, October 2017)