

Marijuana & My Brain

Activity Guide Grade 3-5



Know Your Neuro

Quiz Questions

- 1) What are the two types of cannabis? **Answer:** Hemp and Marijuana
- 2) What is the difference between Hemp and Marijuana? **Answer:** Hemp is used for food, fabrics and construction material. Marijuana is used as a drug that makes users feel intoxicated or high. Marijuana can cause addiction.
- 3) What is the chemical our body makes that regulates appetite, pain relief, sleep, memory, and mood? **Answer:** Anandamide
- 4) What is the chemical in marijuana that imitates anandamide and interferes with the body's natural ability to regulate appetite, pain relief, sleep, memory, and mood? **Answer:** Tetrahydrocannabinol (THC)
- 5) What is the chemical in marijuana that helps reduce pain and swelling? **Answer:** Cannabidiol (CBD)
- 6) What is addiction? **Answer:** When the brain wants more and more and cannot stop using a substance.

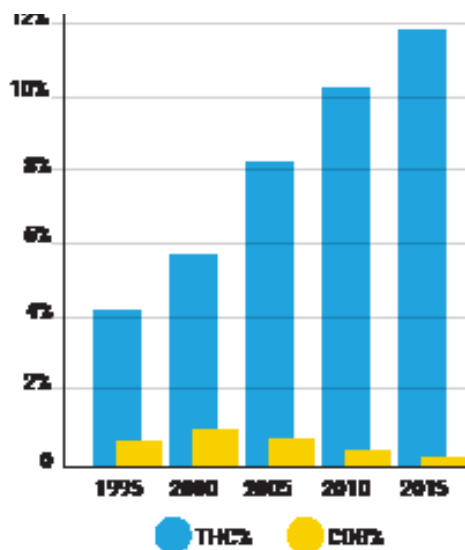
Critical Thinking Section

Discussion

- What are your beliefs about marijuana use?
- Do you know someone who uses marijuana? How do they act? How does it affect you?
- Does your family have a rule about marijuana use? Do you agree with it? Why or why not?
- Why are marijuana manufacturers breeding plants that have less CBD if CBD is the medicinal part of marijuana?
- What are the short-term vs. the long-term effects of marijuana use?
- What are your consequences at home and school if you use marijuana at home or on campus?
- Why have so many states passed recreational and medicinal marijuana use laws? Who do marijuana lobbyists represent?

CBD or Cannabidiol:

A compound extracted from the Cannabis sativa plant that does not cause euphoria or intoxication and is sometimes used medicinally to reduce pain and swelling. Why do cannabis manufacturers reduce the amount of CBD in their products? **Answer:** CBD modulates and reduces the impact of THC in marijuana, which is why CBD is being bred out of marijuana by the marijuana industry.



Short-Term Effects

- Altered senses, including time
- Changes in mood, euphoria, excitement
- Impaired coordination and memory
- Sedation, drowsiness
- Difficulty thinking and problem-solving
- Altered judgment
- Hallucinations, delusions, psychosis

Long-Term Effects

- Changed structure, functions and chemical activity of the brain
- Diminished executive function, attention, learning, memory and motor skills
- Diminished visuospatial function, verbal learning, short-term memory and cognitive function
- Altered emotional functioning, depression, anxiety, mania, paranoia, psychosis
- Increased risk of schizophrenia
- Cannabis dependence
- Lower life satisfaction
- Overall lower lifetime achievement
- Exacerbation of emerging or existing mental health issues
- Sleep problems, lung problems, stroke
- Testicular cancer
- Drugged driving accidents
- Poor school or work performance
- Potential loss or lower IQ and less crystallized intelligence