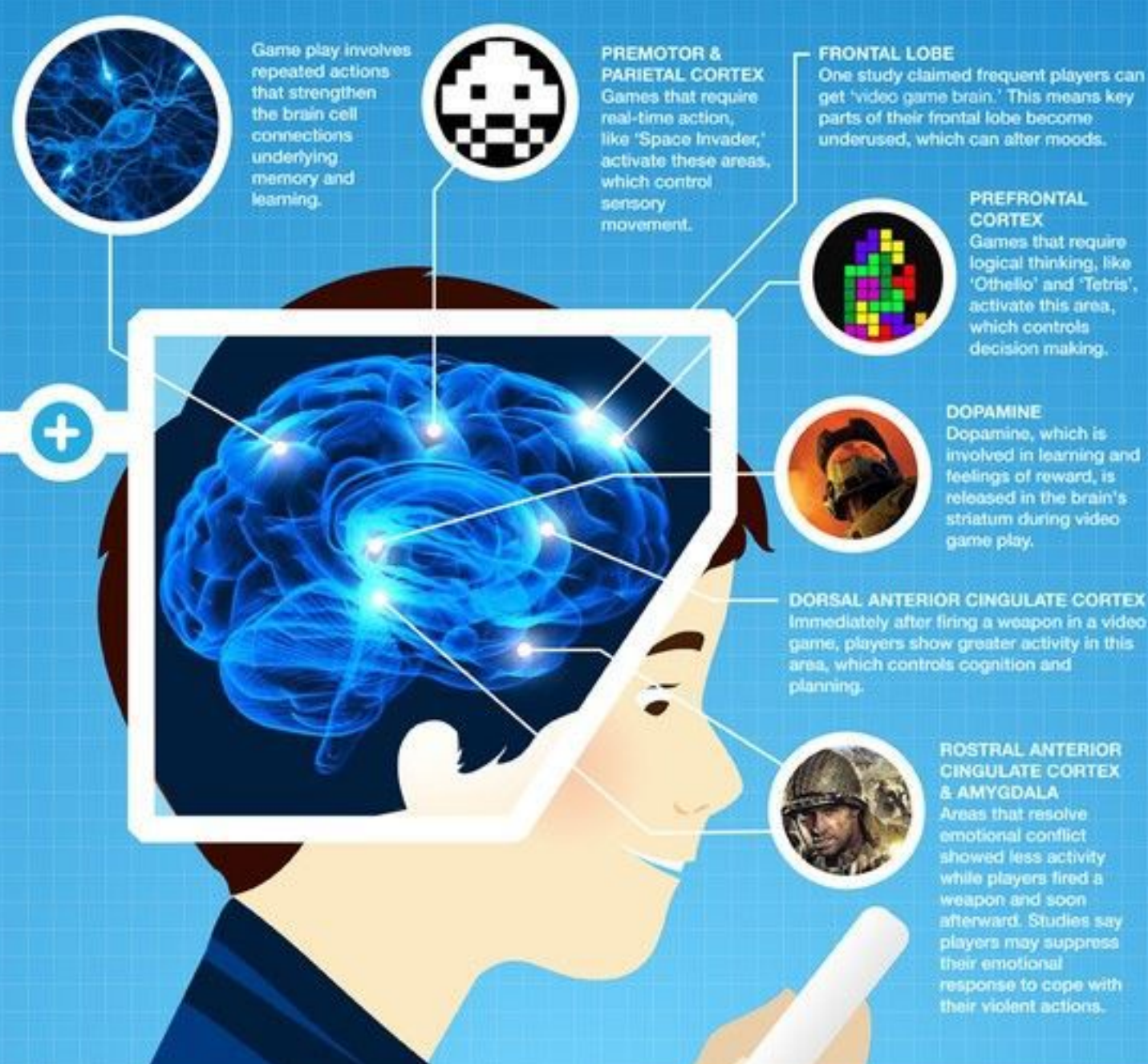


The Neurology of Gaming

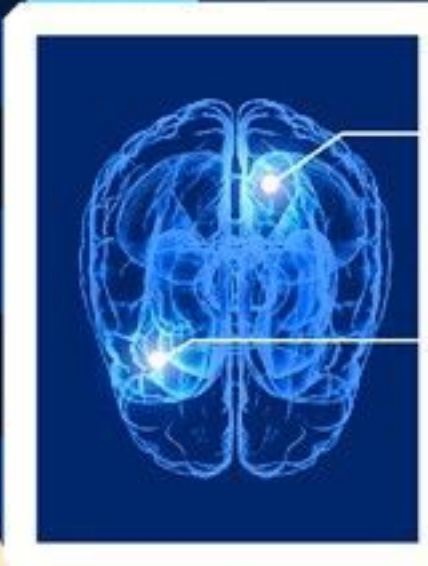
Video games have both positive and negative effects on the human brain. They can be used to educate through repetition and feedback, but they also have some less-positive side effects:

The parts of the brain impacted by games

Different gaming scenarios and situations affect different areas of the brain by provoking certain reactions:



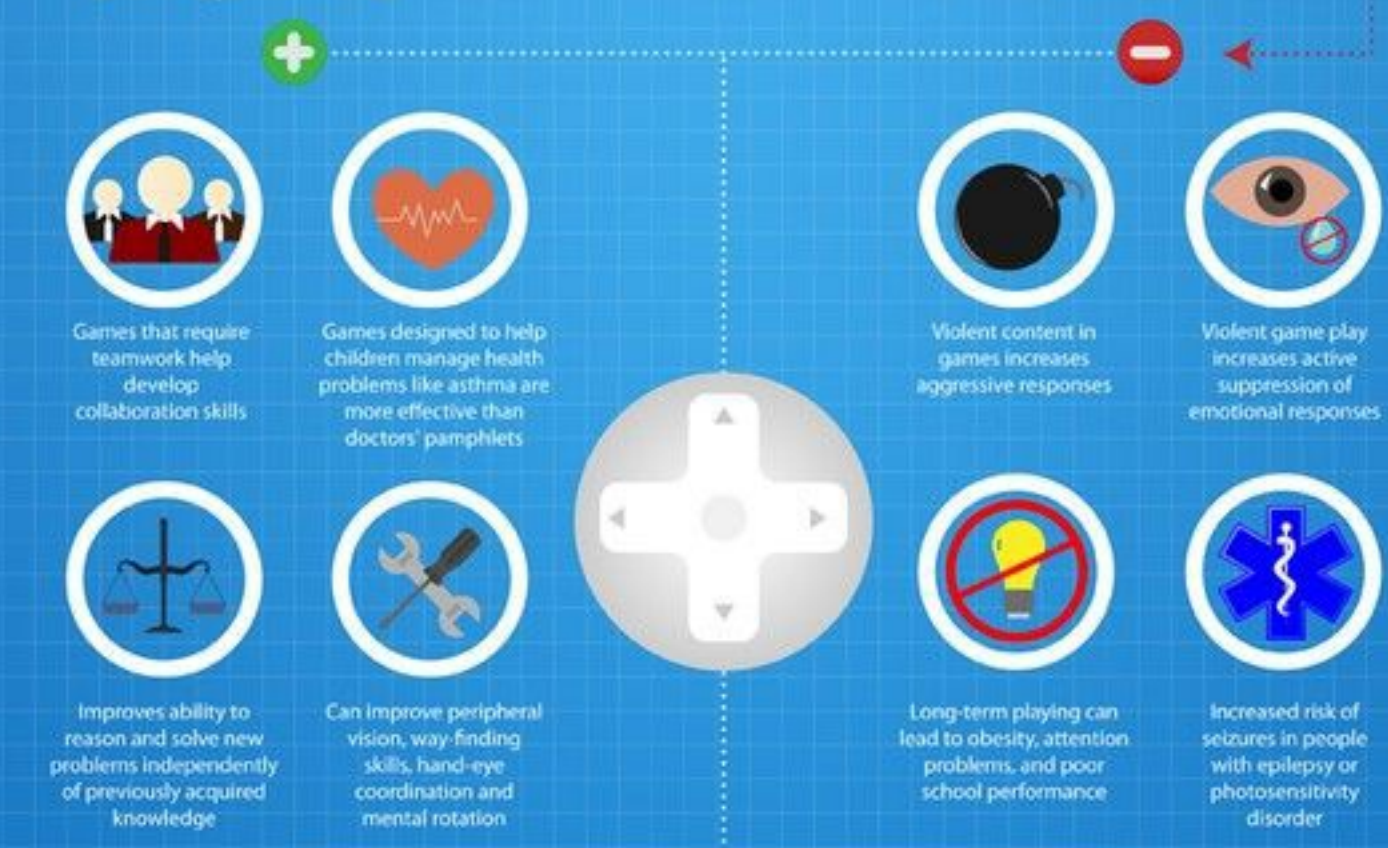
The effects of violent video games



- When gamers play frequently, there's a decrease in prefrontal lobe activity. This can lead to altered moods and aggressive behavior, which can last even after the game is turned off.
- One week of violent game play can lead to lower activation of the left inferior frontal lobe during emotional tasks and also in the anterior cingulate cortex during numerical tasks.
- Those who play high-aggression games are significantly more anxious than those who don't.
- Playing violent games increases aggressive thoughts, feelings and behaviors in the short and long-term.

The positive and negative effects of video game

Depending on what area of the brain is being tested, studies can produce very different results.



MALE GAMERS VS. FEMALE GAMERS

On average, male brains show a much greater activation in the mesocorticolimbic center (associated with reward and addiction) than female brains. This amount correlated directly with how much advancement they made through the game-play.

