Name _____

Chills And Chemistry

Directions: Read the nonfiction passage below about the science behind fear. Then, answer the critical-thinking questions that follow. Use evidence from the passage to support your answers.

Why Fear Feels So Real

When your heart races during a scary movie or you jump at a loud sound, that's your brain's **fear response** in action. The brain's command center for fear is the **amygdala**, a small, almond-shaped structure deep inside the brain. When it detects a possible threat-whether it's a sudden noise, a dark shadow, or even an unexpected test-it sends a signal to release **adrenaline**. This hormone speeds up your heartbeat, increases alertness, and prepares your muscles to react quickly.

Fear is actually part of our **survival system**. Early humans relied on it to escape predators or dangerous environments. Today, the same biological process helps us respond to emergencies. The difference is that many modern "threats" aren't physical. Watching a horror movie or walking through a haunted house still triggers the same response-even though your logical brain knows you're safe.

Interestingly, fear can also be enjoyable. Scientists think that when people experience fear in a controlled setting, such as watching scary films or riding roller coasters, their brains release **dopamine**, a chemical linked to pleasure and excitement. This explains why some people love the thrill of being scared-it's the body's way of turning fear into fun.

1. What role does the amygdala play in the experience of fear?
2. How does adrenaline affect the body during a fearful situation?
3. Why was fear an important emotion for early humans?
4. How do modern humans experience fear differently than ancient humans?
5. According to scientists, why do some people enjoy scary experiences like haunted houses or horror movies?
6. Based on the passage, what might be the connection between fear and excitement?