

## Chills And Chemistry Answer Key

1. The amygdala detects threats and signals the body to react with fear responses.
2. Adrenaline increases heart rate, alertness, and readiness to respond to danger.
3. Fear helped early humans survive by alerting them to potential threats and triggering quick reactions.
4. Today, fear often comes from imagined or controlled situations rather than real physical danger.
5. Controlled fear releases dopamine, which creates feelings of pleasure or excitement.
6. Both fear and excitement activate similar brain chemicals, linking them as emotional opposites that share a biological pathway.

### Teacher's Guide

- **Differentiation Tips:**
  - For younger readers, highlight key vocabulary (amygdala, adrenaline, dopamine) before reading.
  - Encourage advanced students to research the fight-or-flight response in more depth.
- **Engagement Ideas:**
  - Begin with a quick class discussion: "What makes you scared-and why?"
  - Play a short suspenseful sound clip before reading to set the mood for discussion.
- **Extension Ideas:**
  - Have students write a paragraph explaining how fear could be both helpful and enjoyable.
  - Create a "Brain Map of Fear" activity where students label how different parts of the body react to fear.