

1. **Answer:** C

Explanation: Thigmonastism is a phenomenon shown by the *Makahiya* plant where there is rapid movement due to touch.

2. **Answer:** B

Explanation: Phytochromes in plants come in two forms. One form, phytochrome red (P_r), absorbs red light and is quickly converted to the other form phytochrome far-red (P_{fr}), which then absorbs far-red light and converts back to P_r form.

3. **Answer:** D

Explanation: Plants use three types of defenses to fend off herbivores:

- Physical defenses such as thorns and spines;
- Chemical defenses such as distasteful or toxic compounds; and
- Chemicals that recruit other animals that kill the herbivore.

4. **Answer:** C

Explanation: The environmental stimulus plants often use to detect the time of year is called photoperiod, the relative lengths of day and night.

5. **Answer:** B

Explanation: Proteins with light-absorbing components, phytochromes can detect different wavelengths of light.