



GROW
NEXT GEN

Photoperiod Quiz Answers

1. Explain why we have different photoperiods in the same location at different times of the year? Drawing a picture may aid you in your explanation.

Earth's axis remains tilted in the same direction with reference to the background stars throughout a year. This means that one hemisphere, will be directed away from the Sun at one side of the orbit, and a half year later, this pole will be directed towards the Sun. The portion of the year where the location is tilted towards the Sun will have a longer photoperiod than when it is pointed away from the Sun.

2. Why might a plant evolve a certain photoperiod response or sensitivity?

Photoperiod controls flowering and flowering leads to the production of the next generations. Plants with photoperiods that are well adapted to their location will produce better-prepared and more offspring.

3. Why is it important for a farmer to plant beans that are classified for their regions specific photoperiod?

It ensures that the seed will be fully matured and ready when harvest comes. If a field flowers too early, a farmer may lose out on their yield due to a lack of vegetative growth. If a field flowers too late, seed might not be fully matured or harvestable.

4. Below is a series photoperiods, denote the effects of the light regime on the short and long-day plants (flowering or vegetative):

Light Regime		Flowering Response	
Light	Dark	SDP	LDP
		Flowering	Vegetative
		Vegetative	Flowering
		Vegetative	Flowering
		Vegetative	Flowering
		Flowering	Vegetative