

Name _____

Algae Reproduction and the Rise of Harmful Blooms

Open-Ended Response Answer Key

1. Answers may vary but could include descriptions of asexual reproduction through cell division and sexual reproduction involving the fusion of gametes.
2. Warm temperatures and abundant nutrients can trigger rapid reproduction of algae, leading to the formation of harmful algal blooms. Excess nutrients provide the necessary resources for algae to thrive, while warm temperatures accelerate their growth.
3. Harmful algal blooms can harm aquatic life, deplete oxygen levels, disrupt food webs, and lead to fish kills. These consequences can have long-term effects on the health and stability of aquatic ecosystems.
4. Early warning systems can alert communities to the presence of toxic blooms, allowing for timely responses to protect public health and minimize economic and environmental impacts. Monitoring water quality and implementing measures to reduce nutrient pollution can help prevent the formation of harmful algal blooms.

