

## Sample Science Test Question

### Sample OGT Science Extended-Response Question

*Aligned to Life Sciences Standard*

Below is a sample extended-response test question from the March 2007 Ohio Graduation Test in science. Following this test question is a response written by an Ohio student, as well as a notation explaining why that student received full credit for the answer. The test question is worth up to four points.

A study is planned to investigate the potential environmental impact of storing animal wastes in large, open lagoons on commercially owned farms. These lagoons sometimes rupture or overflow, spilling their contents into lakes and waterways.

Identify one negative consequence of increased animal waste in lakes and waterways and describe how the increased animal waste results in this consequence.

Then identify a second negative consequence of increased animal waste in lakes and waterways and describe how the increased animal waste results in this consequence.

The following Ohio student response was awarded all four points.

One negative consequence is eutrophication. The animal feces is full of phosphates that algae uses for nutrients. This kills fish and other life in the lakes.

Another consequence is disease spreading. This happens when the feces washes ashore and flies come to lay their eggs in the feces. Then the flies spread germs when they feed.

This response provides two acceptable consequences with appropriate explanations for each. The first consequence is described (kills fish and other life in the lakes) and offers an explanation (The animal feces is full of phosphates that algae uses for nutrients). The second consequence is also described (disease spreading) and offers an explanation (flies come to lay eggs in the feces. Then the flies spread germs).