



Article Guide: Born to runoff - How fertilizer use is damaging the Ohio River's ecosystem

<http://scienceovereverything.com/2018/03/06/runoff-fertilizer-ohio-river/>

Part 1: What is runoff?

Directions:

- Read the section of the article titled “What is runoff?”
 - Box vocabulary words or words that you have not seen before
 - Underline in the text where the focus questions are addressed
- Answer each focus question

Focus questions

1. What made the Ohio River Basin so good for farming and agriculture?

2. What kind of chemicals are in fertilizers? How do they end up getting into local watersheds?

3. What was done to the land around the Ohio River that has made the runoff problem worse?

Part 2: Environmental impact

Directions:

- Read each understanding question
 - Think about what you would need to know to answer that question
- Read the section of the article titled “Environmental impact”.
 - Box vocabulary words or words that you have not seen before
- Answer each understanding question

Understanding questions

1. What would a lower level of dissolved oxygen in the water hurt an ecosystem?

2. What sorts of animals could be affected by algae blooms other than fish and aquatic invertebrates?

Part 3: Impact on Humans

Directions:

- Read the section of the article titled “Impact on Humans”
 - Box vocabulary words or words that you have not seen before
 - Discuss with a partner how you would address the extension questions.
 - Write a response to the extension questions
3. Imagine you work for the United States Department of Agriculture, which regulates what farms can do with their crops and land. Propose a law that would protect rivers and streams from runoff pollution, but still allow farmers to make enough money.
