

Name \_\_\_\_\_  
APES Topic 9 – Toxicology

Date \_\_\_\_\_  
Mr. Romano

**Fooling with Nature: Are Manmade Chemicals in the Environment Hazardous to Humans?  
Follow-Up Questions**

1. a. What do the letters PCB stand for? \_\_\_\_\_  
b. What are PCBs specifically used for?

\_\_\_\_\_

2. What is the biggest concern researchers have regarding human exposure to PCBs still in the environment?

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

3. a. What is a paradigm? \_\_\_\_\_  
b. What is the paradigm shift that the article makes reference to?

\_\_\_\_\_  
\_\_\_\_\_

4. A question is posed: "Has the fetus become the unfortunate mining canary for human exposure to toxicants in the environment?" What does this quote mean?

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

5. a. In what year was the Toxic Substances Control Act passed by Congress? \_\_\_\_\_  
b. What were the main objectives of the TSCA?

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

6. Why are there disagreements about the link between environmental pollution and diseases in humans? Support your response with details from the article and/or by using your own rationale.

---

---

---

7. Name 3 known chemicals that affect the Great Lakes region stated in the article?

---

8. Why would a subsistence fisherman be at a greater risk for health problems?

---

---

9. a. Who are scientists most concerned about when it comes to toxic chemicals, even at very low-levels?

---

b. What statistical data support these concerns?

---

---

---

---

10. What does bioaccumulate mean?

---

\*\*Maybe you didn't realize at the time you were reading the article, but these are other key points referenced in the reading that you should have explored to gain more understanding.\*\*

11. Why is there such scrutinization of the Great Lakes? What is the history of pollution in the Great Lakes region and the affects it has had on local wildlife?

12. A quote from the article:

“Critics of the endocrine disruption hypothesis say it's one thing to study deformities of alligator penises and bird bills in polluted areas, but they say blaming human diseases and deficiencies on environmental chemicals is a stretch.” Is there a history of such deformities? Is the quote possibly just poking fun at the types of studies being conducted? Is this just a random, off-the-cuff statement?