

Unit Project: Water Cycle Unit Project

(please complete on google slides)

1. Water Cycle Diagram

Items to think about when presenting your understanding of the water cycle:

- Define and explain the three main processes of the water cycle
- Explain how water is exchanged among the hydrosphere, atmosphere, and geosphere
- How is this a continuous cycle?
- What role does solar energy and gravity play?
- How does water move through the biosphere
- Where do we find water on Earth?

2A. What is water pollution?

- Define/explain point source pollution. Give examples
- Define/explain non-point source pollution. Give examples

2B. How can pollutants affect food chains and ecosystems?

- ❖ Explain bioaccumulation
- ❖ Explain biomagnification

3. Choose one of these topics to research:

Persistent Organic Pollutants (POPs)

What are some human-made compounds that bioaccumulate and biomagnify?

- ❖ POPs (persistent organic pollutants)
 - PCBs (polychlorinated biphenyls)
 - DDT (dichloro-diphenyl-trichloroethane)
 - Dioxins
 - Furans

What is it?

What is it used for?

How did it enter the food chain?

Which organisms are at greatest risk?

- Effects on producers, primary consumers, and secondary consumers, tertiary consumers
- Effects on humans

OR

Heavy Metals

What are some heavy metals that bioaccumulate and biomagnify?

- Lead
- Cadmium
- Mercury
- Arsenic
- Chromium

Where is it found naturally?

Why/how did humans increase the amount found naturally?

How did it enter the food chain?

Which organisms are at greatest risk?

- Effects on producers, primary consumers, and secondary consumers, tertiary consumers
- Effects on humans

Evaluation:

Content: 75%

- ★ How well you explain the process/ideas in your own words
- ★ How complete your explanation is
- ★ How well you use examples to explain ideas
- ★ Sentence and paragraph structure, spelling and grammar

Visual Professional Appearance: 20%

- ★ Google Slides: Layout, title size, heading size, font size, transitions and pictures

Bibliography: 5%

- ★ Content use EasyBib
- ★ Pictures use URL Shortener

Total Marks: 100