

APES OBJECTIVES & VOCABULARY

On a separate document or in your iPad write out “answers” to the following objectives and vocabulary. I will collect it. Do the vocabulary words as needed.

Test will be 2nd day of the school year.

FriRel: CHAPTER 2 Objectives- ENVIRONMENTAL SYSTEMS

KEY OBJECTIVES: The major objectives of this chapter are for students to understand different systems in nature, matter, and the various forms of energy.

4. Systems & Matter

- Describe how matter comprises atoms & molecules that move among different systems.
- Explain why water is an important component of most environmental systems.
- Discuss how matter is conserved in chemical & biological systems

5. Energy, Flows, & Feedback

- Distinguish among various forms of energy & understand how they are measured.
- Discuss the first & second laws of thermodynamics & explain how they influence environmental systems.
- Explain how scientists keep track of energy & matter inputs, outputs, & changes to environmental systems.
- ◆ Explain scientific method and its application to the study of environmental problems.
- ◆ Summarize underlying causes of environmental problems. Describe a simple model of relationships among population, resource use, technology, environmental degradation, and pollution.

VOCABULARY TERMS

• matter	• polar molecule	• closed system
• mass	• energy	• outputs
• atom	• electromagnetic radiation	• inputs
• element	• photons	• system analysis
• periodic table	• joule	• steady state
• molecules	• potential energy	• feedback
• compounds	• kinetic energy	• negative feedback loops
• atomic number	• chemical energy	• positive feedback loops
• mass number	• temperature	• adaptive management plan
• isotopes	• first law of thermodynamics	
• radioactive decay	• second law of thermodynamics	
• half-life	• energy efficiency	
• covalent bond	• energy quality	
• ionic bond	• entropy	
• hydrogen bond	• open system	