APES Unit 1 Calendar*

*All dates are tentative and subject to change

Indicates days we will be outside, please plan and dress accordingly and wear sunscreen!!

Monday 8/12	Tuesday 8/13	Wednesday 8/14	Thursday 8/15	Friday 8/16
Welcome to APES 2019-2020!!	Safety and Syllabus Big Idea Jigsaw Unit 1 Notes **HW:** Get safety contract signed, join Google Classroom and log in to the textbook	Tallest Tower Challenge Team-Building Activity	Unit 1 Learning Guide Scientific Method Review Scientific Method Lab **HW:** Read Chapter Intro and 1.1 Review Scientific Method PPT	Submit Signed Syllabus/ Safety Agreement/Supplies Finish & Submit Scientific Method Lab **Outside Monday!!** Have a great weekend!!
Monday 8/19	**Tuesday 8/20**	**Wednesday 8/21**	**Thursday 8/22**	**Friday 8/23**
Biodiversity Discussion Cell Phone Bioblitz Choose Project Groups **HW:** Read 1.2 watch http://www.bozemanscience.com/ap-es-002-environmental-systems	Project Introduction Benchmark 1 Introduction Team Contracts and Roles Project Planning Log Begin Brainstorming Ideas **HW:** Read 1.2 & 1.3	Brainstorming Landscaping Ideas Benchmark 1 **HW:** Read 1.4 & 1.5	Teacher Check – Landscape Ideas & Plot Map Chapter 1 Notes Benchmark 1 (If time)	Guest Speaker Jeff Holba Landscape Architect **HW:** Research commons and bring a current event related to a tragedy of the commons for tomorrow's discussion
Monday 8/26	**Tuesday 8/27**	**Wednesday 8/28**	**Thursday 8/29**	**Friday 8/30**
Tragedy of the Commons Lab **HW:** Read 2.2 Watch http://www.bozemanscience.com/ap-es-021-environmental-economics	Tragedy of the Commons Current Event Discussion **HW:** Complete Discussion Reflection on Google Classroom	Submit TOTC Reflection & Lab Questions on Google Classroom Finish Chapter 1 notes Work on Benchmark 1	Intro Unit 2 Work on Benchmark 1 **HW:** Read Chapter Intro and 1.1 Online Unit 2 Personal Progress Check. Due Tomorrow at 12:00 am!	Unit 2 Notes Work on Benchmark 1 Benchmark 1 Teacher Check - Rough Draft Benchmark 1

Monday 9/2	Tuesday 9/3	Wednesday 9/4	Thursday 9/5	Friday 9/6
NO SCHOOL	Unit 2 Notes Intro Benchmark 2 Make adjustments to Benchmark 1 as needed	Work on Benchmarks 1 & 2	**Benchmark 1 due (Include Report & Work Logs)** Complete Benchmark 1 **Group Evaluation** and **Individual Reflection**	(Continue Unit 2)

It is your responsibility to review the online notes, videos and reading. It is suggested that as you review these materials, you take notes on your own. Periodic checks for understanding will be made throughout the unit. Be prepared for in class and online quizzes according to the assigned topics.

**Everyone is required to be working on something APES related in class on designated project days. Failure to comply will result in points being deducted and possible group removal (as per team contract)

Unit 1 Objectives

1. Define "environmental science" and briefly describe the role of Earth systems in environmental science.
2. Characterize the nature and importance of environmental science as a scientific discipline.
3. Describe common themes underlying various environmental issues, including
   - Sustainability
   - tragedy of the commons
   - ecological footprint
   - consumption
4. Briefly describe "sustainable development".
5. Distinguish the characteristics of highly developed countries, moderately developed countries, and less developed countries.
6. Explain how both population and affluence can lead to unsustainable consumption.
7. Connect the interdependence of resource/energy consumption to environmental degradation and lifestyle choices.
8. Identify the types of resources available and classify them as renewable or nonrenewable.
9. Determine human impact on the environment as it relates to the I=PAT equation.
10. Relate Garrett Hardin's description of the tragedy of the commons to common-pool resources today and to the concepts of sustainability and conservation.
11. Explain how human activities affect global systems.
12. Describe and use the scientific process in laboratory and field investigations throughout the course.
    - Observe organisms and natural phenomena and record observations in the field.
    - Formulate and test hypotheses by designing laboratory and field experiments.
13. List and briefly describe environmental problems and possible solutions
14. Describe the history of humanity's relationship with nature and its use of resources and describe the social institutions and ideas which have influenced that relationship and resource use. (Chapter 2 Environmental Laws, Economics and Ethics)