7th Grade Science Syllabus

Alcoa Middle School - Ms. Kruk

This class is designed to provide an introduction to basic concepts concerning physical, earth, and biodiversity. Students will learn how to think scientifically, ask questions, and explore the world around them. What students get out of the class will depend largely on the amount of effort that they put into the class.

Instructional Topics/Competencies/Skills:

Matter and Its Interaction:

Structure of atom

Pure substances and mixtures

Chemical reactions

Law of Conservation of Mass

Physical and chemical properties

States of matter

Ecosystems:

Cycle of Matter - Carbon and Oxygen

Heredity:

Genes

Dominant and recessive alleles

Genotype and phenotype

Punnett Squares

Molecules to Organisms: Structures and

Processes:

Cell organelles and function

Organisms across kingdoms

Hierarchical organization of multicellular organisms

Body systems

Structural and behavioral adaptations

Types of reproduction

Photosynthesis and cellular respiration

Engineering and Design:

Engineer and design on biomaterials

This class is technology integrated and depends heavily on web-based apps, programs, and websites. Assignments and resources will be provided online.

Resources:

Videos: Possible videos discussed or used in part or whole during the appropriate units include: Biographies of Famous Scientists, Disney Nature, Various Science Channel videos, Bill Nye, BBC Life, & BBC Planet Earth

Websites: Nasa.gov, sciencespot.com, MiddleSchoolScience.com, Flinnscientific.com, PBS.org, Youtube.com, ProblemAttic.com, and NatGeo.com, PheT Simulations, Explore Learning Gizmos, Google Apps, and Mastery Connect.

**Science is a dynamic field with new discoveries and breakthroughs happening constantly. The above list is a partial sampling of possible resources as new resources for science education are always being developed. **

Safety Procedures:

Students will not be allowed to participate in any labs until a signed safety contract is returned to class. Lab safety is taken very seriously. Students are expected to learn the lab safety rules and procedures. They will be held responsible for their lab conduct.

Grading Policy:

50 % - Tests and Quizzes (Projects will count in this category throughout the year)

40% - Homework / Classwork

10% - Bellringers

Grading Scale: A = 90-100 B = 80-89 C = 70-79 D = 60-69 F = Below 60

Make-Up Work Policy/Late Work Policy:

<u>YOU</u> are responsible for getting the work that you missed from me. Assignments from each day are posted on Google Classroom. For excused absences, you have the number of days missed to complete any make-up work.

* Bellringers only * If students are absent, they may complete bellringers upon return or put ABSENT for full credit. If students are present in class and fail to complete the bellringer, credit will not be given and cannot be made up.

Classroom Policy/Procedures: Throughout the year the Student Handbook and classroom rules will be followed. You are expected to:

- 1. <u>Be respectful to each other and to me</u>. This means that cruel remarks, bullying, profanity, and rude gestures are absolutely NOT acceptable.
- 2. <u>Be prepared and on time for class</u>. In order to learn, you need to have all of your learning materials (**charged** Chromebook, homework, notes, and writing utensils) with you.
 - **Being prepared includes turning your work in on time. **
- 3. Respect my property. Leave the room like it was before you were here.
- 4. Do your own work.
- 5. Get involved in group projects and work. Other group members are counting on you.
- 6. Be neat. Take pride in the work you do. Sloppy work does not leave me with a good impression.
- 7. The school cell phone/smartwatch policy from the Student Handbook will be followed in this class.

Communication:

If a parent or guardian has a question or a comment, I would love to talk with you. I am here to help in any way that I can. You can reach me through email *ckruk@alcoaschools.net* or call the front office and leave a message.

Please check your Google Classroom page on a regular basis.

I'm excited to have you in class and looking forward to a great year!