

7th Grade Science 2019-2020

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Welcome back to school! I hope everyone had a restful and enjoyable summer. I am looking forward to a great year. Please read the following carefully because this is to prepare you for the requirements of this class.

Mantra

Our school mantra for this year is “Grit, Growth, and Gratitude.” You will hear lots of discussion about these words and how they will apply to your lifelong journey.

Classroom Expectations

- 1. We will do our best.** We will make mistakes, but we will have the *grit* to try and try again until we are successful at reaching our goals.
- 2. We will have a positive attitude.** We acknowledge that bad days happen from time to time, but we know that every day is a day to *grow* and learn.
- 3. We will respect ourselves, respect others, respect our school.** We will hold ourselves accountable for our actions, recognize that everyone has opinions/ideas that may differ from our own, and follow school rules and be *grateful* that we have the opportunity to get an education.
- 4. We will come to class prepared.** We will have our books, pencils, and supplies in order to have grit, growth, and gratitude so that we can reach our goals not only in Mrs. Murley’s class but also our future!

***We will have special rules on lab days!

Class Supplies-BRING TO CLASS EVERYDAY!

- Composition notebook (for notes)
- Pencils
- Loose leaf paper

**OPTIONAL but helpful supplies:

Hand Sanitizer

Kleenex

Index Cards

Glue Stick

Scotch Tape

Clorox Wipes

Access to Instructional Materials

We will take notes often in this class. Your composition notebook is to be treated as a textbook because it will be used as a resource along with Summit. Parents have access to login to see your progress with Summit.

Textbooks will be used in class as a resource. They will not be sent home. However, your notes in your composition notebook come from the textbook. It is important that you take good notes so you can study!

Topics to be mastered throughout this course with Tennessee Science Standards:

Atoms, Molecules, and Mixtures	PS1.1 PS1.2 PS1.3	<ul style="list-style-type: none">• Develop and use models to illustrate the structure of atoms, including the subatomic particles with their relative positions and charge.• Compare and contrast elemental molecules and compound molecules.• Classify matter as pure substances or mixtures based on composition.
States of Matter	PS1.6	<ul style="list-style-type: none">• Create and interpret models of substances whose atoms represent the states of matter with respect to temperature and pressure.
Physical and Chemical Properties	PS1.5	<ul style="list-style-type: none">• Use the periodic table as a model to analyze and interpret evidence relating to physical and chemical properties to

		identify a sample of matter.
Law of Conservation of Mass	PS1.4	<ul style="list-style-type: none"> Analyze and interpret chemical reactions to determine if the total number of atoms in the reactants and products support the Law of Conservation of Mass.
Cells	LS1.1 LS1.2 LS1.3	<ul style="list-style-type: none"> Develop and construct models that identify and explain the structure and function of major cell organelles as they contribute to the life activities of the cell and organism. Conduct an investigation to demonstrate how the cell membrane maintains homeostasis through the process of passive transport. Evaluate evidence that cells have structural similarities and differences in organisms across kingdoms.
Multicellular Organisms	LS1.4 LS1.5	<ul style="list-style-type: none"> Diagram the hierarchical organization of multicellular organisms from cells to organism. Explain that the

		<p>body is a system comprised of subsystems that maintain equilibrium and support life through digestion, respiration, excretion, circulation, sensation (nervous and integumentary), and locomotion (musculoskeletal).</p>
Cycling of Matter	<p>LS1.9 LS2.1</p>	<ul style="list-style-type: none"> • Construct a scientific explanation based on compiled evidence for the processes of photosynthesis, cellular respiration, and anaerobic respiration in the cycling of matter and flow of energy into and out of organisms. • Develop a model to depict the cycling of matter, including carbon and oxygen, including the flow of energy among biotic and abiotic parts of an ecosystem.
Reproduction	<p>LS1.6 LS1.7</p>	<ul style="list-style-type: none"> • Develop an argument based on empirical evidence and scientific reasoning to explain how behavioral and structural adaptations in animals and plants affect the probability of

		<p>survival and reproductive success.</p> <ul style="list-style-type: none"> • Evaluate and communicate evidence that compares and contrasts the advantages and disadvantages of sexual and asexual reproduction.
Mitosis and Meiosis	<p>LS1.8 LS3.2</p>	<ul style="list-style-type: none"> • Construct an explanation demonstrating that the function of mitosis for multicellular organisms is for growth and repair through the production of genetically identical daughter cells. • Distinguish between mitosis and meiosis and compare the resulting daughter cells.
Heredity	<p>LS3.3</p>	<ul style="list-style-type: none"> • Predict the probability of individual dominant and recessive alleles to be transmitted from each parent to offspring during sexual reproduction and represent the phenotypic and genotypic patterns using ratios. • Hypothesize that the impact of structural changes to genes (i.e.,

		<p>mutations) located on chromosomes may result in harmful, beneficial, or neutral effects to the structure and function of the organism.</p>
Biomaterials	ETS2.1	<ul style="list-style-type: none"> Examine a problem from the medical field pertaining to biomaterials and design a solution taking into consideration the criteria, constraints, and relevant scientific principles of the problem that may limit possible solutions.
Earth's Atmosphere	ESS3.1 ESS3.2	<ul style="list-style-type: none"> Graphically represent the composition of the atmosphere as a mixture of gases and discuss the potential for atmospheric change. Engage in a scientific argument through graphing and translating data regarding human activity and climate.

Grading Scale

100-93 A

92-85 B

84-75 C

74-70 D

Below 70 F

Redo Policy

Your student may redo any assignment that I return to him/her. It must be returned within three days. The Summit Learning Platform provides the student with practice and review. I will be available for redos from 7:30-8:00. Instructional time will not be used for completing redos without permission from me.

Homework

I do not assign written homework. **This does not mean you do not have homework. You will need to review your notes at least 15 minutes each night.** This will keep you prepared for class discussions, labs, quizzes, and tests. I reserve the right to have you copy your notes if I suspect you are not reviewing them.

Tests, quizzes, and assignments

Synergy is the online grade book. If you used ParentVue last year, your log-in information is the same. If you need ParentVue information (username/password), please contact Steven Marise (steven.marise@chestercountyschools.org)

Grades consist of:

Do Nows, Focus Areas, Content area assessments, projects, standards based quizzes and tests, and lab grades

All written student work will stay in a folder in my room. You will keep a grade sheet in the folder so you can calculate grades. This should help you stay on top of what you are making in my class.

Make-up Work

If you have a planned absence, please make arrangements to get make-up work ahead of time. Make-up work is your responsibility. You will have a reasonable amount of time to complete assignments. Generally, the number of days absent is the number of days you have to complete and turn in the work.

Restroom Breaks

You will be given four restroom passes for the nine weeks. You will be required to sign out and then back in so I can keep a record. You will have time allotted to go to the restroom throughout the day so be sure to save the passes for emergencies only. If you have a medical need, please send a doctor's statement.

4H

We will have 4H in this class. Meetings will happen once a month from September to March. There will be service learning projects throughout the year. I encourage everyone to take part in service learning because they promote good citizenship and kindness.

Reminders and announcements:

Class announcements, reminders, and other news will be communicated through Google classroom. In order to receive announcements, you may get your child's username/password from your child and login as him/her.

Let's have a great year! If you have any questions or concerns, please contact me during school hours. The quickest and easiest way for me to get in contact with you is by email (amber.murley@chestercountyschools.org) or call 731-989-8135. Please complete the attached form and return to school ASAP.

***This syllabus is subject to change at teacher discretion.

Sincerely,

Amber Murley

Please sign and return

Student Name _____

Student Signature _____

Class Period _____ Science (Murley)

Parent/Guardian Signature _____

Email address _____

***Please list things that I should know or that you want me to know about your child.