

Chastity Harris's 7th Grade Science Class
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Welcome back to school! I am looking forward to a great year. Please read the following carefully. This is to prepare you for the requirements and expectations for this class.

Course Description

This 7th grade class explores a variety of fields including Measurement, Chemistry, Life Science and Science Inquiry. I plan to incorporate interesting demonstrations, fun labs, and comprehensive instruction on the topics listed under the "course outline".

Course Outline

Topics we will be covering in 7th grade Science:

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.

		<ul style="list-style-type: none"> • Explain that the 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).
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

		<p>probability of 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., mutations) located on chromosomes may result in harmful, beneficial, or neutral effects to the structure and function of the organism.
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 and Policy

All grades weigh the same! It is important to try your best on everything!

Numerical Scale Reporting Grade:

100-93 A

92-85 B

84-75 C

74-70 D
69-0 F

Assessment Types

Synergy is the online grade book. Your student will be provided with a username and password if you do not have one. If you used ParentVue last year, your log-in information is the same. Grades consist of:

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

Re-do 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.

Make up work

Make-up work is your responsibility. You will need to see ME to get it. You have two days to turn in any missed work. If an assignment was posted and you miss it then you will take it/turn it in on the day you return.

Student work and folders

All printed student work will stay in my room in a folder.

Classroom Dynamics

Students will need to bring a composition book, pencil, computer, and loose leaf paper to class **EVERY** day. You will take notes in class. Comprehensive assessments will be given over the notes... You will need to keep up with your notes all year because your Case Benchmark test will cover everything we have discussed throughout the year, not just the topics we are currently covering. I do not assign books so your notes are your book.

I normally do not do not assign written homework unless it is a write off. **This does not mean you do not have homework. You will need to review your notes at least 10 minutes each night (Monday-Thursday unless you have a test on Monday).** This will keep you prepared for class discussions, quizzes, and test. If you are not doing this it usually shows itself. I reserve the right to have you copy your notes if I suspect you are not reviewing them.

Classroom rules

I have high expectations of my students. I expect you to follow the rules at all times. They are as follows:

1. Always listen and follow directions the first time.
2. No cheating
3. Bring all supplies to class with you- you will NOT go back to you locker.
4. Be in your seat when the bell rings and stay there until you are given permission to get up.
5. Do not touch anything that does not belong to you without permission.

6. Lab rules are posted in the class... follow them or you will be give a 0 on your lab.

Restroom Breaks

Students will be given three passes for the 9 weeks. I will keep a record to avoid any confusion. There is plenty of time for students to go to the restroom between classes. The passes are to be used for emergency because once they are gone, they are gone. If your child has a medical issue please send me a doctor's note.

Extra Credit

I do not allow extra credit.

4H

We will be using class time to have 4H so students are required to participate in 4H in my class. Community service projects will focus on our community.

Supplies

Composition book, pencils, paper, computer and a folder for paper... remember to bring them daily!!!

Wish List

If you would like to contribute some things to the class I have put together a list of things that would help us out...

Germ X

Kleenex

Clorox wipes

Index cards

Glue sticks

Tape

Corn starch/Baking soda/vinegar

Zip lock bags

Dry erase markers

*******This is a syllabus and is subject to change without notice if needed!!!**

Please sign and return the following so that I know you have read this syllabus. Thank you so much!! Let's have a great year!

Student Name: _____

Student Signature: _____

Parent/Guardian Signature: _____

Parent e-mail: _____

Parent phone number: _____

Please list anything you think I should know about your child...