



SCIENCE NOTEBOOK: In addition to the school supplies and daily tracker used in all classes, you will be expected to keep a science notebook issued by the science department. If it is lost, you must replace it and copy all previous information from a classmate or your teacher. It will contain all of your daily work, labs, reflections and unit summaries as well as homework. DO NOT LOSE IT!

Wish List for our classrooms: Tons of refillable Scotch tape, clorox wipes, tissues, duct tape, post it notes and paper towels. *Thanks in advance!*

GRADING: *Extra Credit not offered. However, resubmittal of work for a higher grade is accepted if it has been approved and you have completed the editing/tutoring process. Late work is accepted for HALF credit until the end of the unit or grading period. Access to the grading system through <http://pxp.tanq.org> - get in the habit of checking all your grades regularly.*

Three Main Grading Areas	Assessment Description	Summary
Content Knowledge (What you know)	Thesis Papers	One per unit Rough draft/final draft
	Unit Tests or quizzes	One per unit
	Unit Projects *Science Fair for Challenge classes	At home project utilizing research, additional resources, and a presentation *Optional for any student in General Science
Interactive Notebooks (How you organize your knowledge)	Science & Engineering Practices	Labs and construction of models
	Daily work	Logging information/taping papers (Right side) Reflections/explanation (Left side) Aha Connections
	Notebook check	Quarterly
	Vocabulary	Cards, Quizzes, Quizlet
Citizenship (How you present yourself socially)	Participation/Behavior	Daily - engaged in activities, participating in class/group discussion, working well with team members, on-task
	Preparedness	Daily - Ready to learn, have materials, homework finished

ETHICS: Many times students will be assigned to work in groups. They will work together to solve problems and answer questions. Students are expected to do their own work and contribute to the learning process; therefore, copying from another student is not acceptable. Students will receive a 0 for the assignment, quiz or test if copying from another. When research is being done, information must be cited and attribution given in MLA format or as specified on the assignment.

ABSENCES: If you are absent for any reason, it is your responsibility to find out what you missed and make it up. You will be allowed two additional days for each excused day you missed. There are some activities that cannot be made up. See me for an alternative assignment if you miss one of these. Quizzes and tests must be made up within 5 days of the test date. If you miss just the day of the test, you will be expected to take it the next day.

8th Grade Course Outline (General/Challenge)

The year will be broken down into three large units. Each unit will have 3-4 big idea questions that are listed in the course outline table below. These big idea questions serve to help us focus on the key concepts we want to continually return to in the unit. You will be writing summaries and relating back to these big idea questions throughout the unit. These questions and your summaries will also form the basis for the thesis you will be writing at the end of the unit.

Crosscutting Concepts / Science and Engineering Practices			All Year
I can use the scientific process to help form valid claims using evidence and reasoning skills to conduct a fair test.	I can practice the engineering design process to identify and solve problems.	I can utilize the scientific community including peers, professionals, articles and data and graphs to present my research.	
Unit 1 Intro to Science and Chemistry: Matter and Interactions			August - October
What role do elements play in everyday life?	How do substances interact to make new substances?	How do we explain and characterize the structure and properties of matter?	How does energy move and get stored within matter?
Unit 2 Heredity: From Cells to Biodiversity			November - February
How do we use genetic tools and models to analyze heredity?	How does genetic variation among organisms affect survival and reproduction?	How does the environment influence populations of organisms over multiple generations?	
Unit 3 Physics: Forces and Motion			February - May
How do we predict an object's continued motion, changes in motion or stability?	How does energy move and get stored within objects?	How can we utilize the laws of physics for practical applications?	

Emily Gray Science Team

Jennifer Maxwell (7/8 Challenge Science) jmaxwell@tanq.org Lara Huetter (8 General Science) lhuetter@tanq.org
Jerry Frey (7 General Science) jfrey@tanq.org Ted Dawson (7/8 Science Co-Teacher) tdawson@tanq.org

We have read and discussed the science syllabus

Class: _____ Teacher: _____

Student Printed Name: _____

Student Signature: _____

Parent/Guardian Signature: _____ Teacher Initials _____

Note:

Challenge students will be incorporating additional book studies and projects to enhance these topic areas. Science Fair is mandatory for all Challenge Science students and highly encouraged for General Science. The students are encouraged to design and produce the project themselves and will be provided mentoring and support by the classroom teachers. Parent involvement at this level should be limited to encouragement and support where appropriate for safety.

7th Grade Course Outline

The year will be broken down into four units. Each unit will have 3 big idea questions that are listed in the course outline table below. These big idea questions serve to help us focus on the key concepts we want to continually return to in the unit. You will be writing summaries and relating back to these big idea questions throughout the unit. These questions and your summaries will also form the basis for the thesis you will be writing at the end of the unit.

Crosscutting Concepts / Science and Engineering Practices		Intro Unit and All Year
How can the scientific process help to form valid claims?	How can the engineering design process help to identify and solve problems?	What is a scientific community and how is it useful?
Unit 1 Ecosystems: Energy & Dynamics		September - October
How do matter and energy move through an ecosystem?	Why do ecosystems change over time?	How do interactions affect an ecosystem?
Unit 2 Astronomy: Earth's Place in the Universe		November - December
Where is Earth in the Universe?	What are the predictable patterns caused by Earth's movement in the solar system?	How do scientists study phenomena in outer space?
Unit 3 Geology: Rocks, Minerals		January - March
How do Earth's processes affect rock and mineral formation?	How do scientists classify rocks and minerals?	How do humans interact with geological resources?
Unit 4 Planet Earth: Structure, Processes and Systems		March - May
How do people reconstruct and date events in Earth's planetary history?	How and why is Earth constantly changing?	How do scientists study, predict and prepare for Earth's sudden geological changes?

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We have read and discussed the science syllabus

Class: _____ Teacher: _____

Student Printed Name: _____

Student Signature: _____

Parent/Guardian Signature: _____ Teacher Initials _____

Note:

Challenge students will be incorporating additional book studies and projects to enhance these topic areas. Science Fair is mandatory for all Challenge Science students and highly encouraged for General Science. The students are encouraged to design and produce the project themselves and will be provided mentoring and support by the classroom teachers. Parent involvement at this level should be limited to encouragement and support where appropriate for safety.