7th Grade Life Science



2016 - 2017

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Expectations

Preparation: Come to class on time and with all necessary materials for the class. Repeated tardies will result in detentions.

Behavior & Participation: Give our full attention to the teacher. Follow instructions and lab safety rules.

Homework: Turn in homework on time. Do it right the first time (DIRTFT). Repeated late homework will result in academic detention. You must turn in ALL homework and projects.



Units of Study

Structure, Function, and Information Processing "How do the structures of organisms contribute to life's functions?" Students plan and carry out investigations to develop evidence that all living organisms are made of cells and use information from their environment.

Growth, Development, and Reproduction of Organisms "How do organisms grow, develop and reproduce." Students understand how the environment and genetic factors determine the growth of an individual organism, ways humans select for specific traits, the role of technology, genetic modification and the ethical responsibilities.

Matter and Energy in Organisms and Ecosystems "How do organisms obtain and use matter and energy as it moves through an ecosystem?" Students will explain the transfer of energy and cycling of matter and that it requires substantial matter and energy from the ecosystem to live and grow.

Interdependent Relationships in Ecosystems "How do organisms in the environment obtain matter and energy?" Students construct explanations for the interactions in ecosystems organisms and the interactions of organisms to obtain matter and energy and limits of resources that influence growth of populations and organisms.

Natural Selection and Adaptations "How does genetic variation among organisms in a species affect survival and reproduction?" and "How does the environment influence genetic traits in populations over multiple generations?" Students will analyze fossil records and describe the history of life on Earth as they develop an understanding of the role of variation in natural selection and how it leads to speciation.



Extra Help

You may not always understand all material being covered, but you are expected to put forth your best effort. I am willing to help you if you work hard, both in class and at home. If you need extra help, please talk to me and we will set up a time during academic skills. I will also be available after school until 4:00 pm. If you have questions in the evening about homework you may chat or text before 8 pm.

Science Notebooks and Labs

Learners will be communicating understandings and solutions through science notebook writing, which offers a powerful strategy to help learners in their work as scientists and engineers. Research teaches us that science notebook writing is a way for learners to strengthen their language skills as they develop an understanding of the world around them.

Science notebooks will allow me to assess learners' understanding and provide the feedback they need for improving their performance. The lessons and notes cover the Next Generation Science Standards.

Right Side - (Input) Notes and Diagrams

Each lesson focuses on a "Question of the Day" (QOD) represented in red in the top margin of each Input page.

Left side – (Output) Student's Work

Students create foldables or assignments to show understanding of concept focus. Students give the answer to the QOD in red on the Output page.

Science is a hands-on laboratory class. However, science activities may have potential hazards. We will use some chemicals, equipment and specimens that may be dangerous if not handled properly. Safety in the science classroom is an important part of the scientific process. To ensure a safe classroom, a list of rules has been developed and is called the Science Safety Contract. These rules must be followed at all times. Additional safety instructions will be given for each activity.

No science student will be allowed to participate in science activities until both the student and a parent or guardian has signed the lab safety contract

What to bring to class;

- Pencils and pens
- Highlighter
- Yellow Notebook
- Chromebook
- Yellow pocket folder

Grading

You will be graded on the following each 9 week period:

- Class participation (individual and group)
- Daily work and homework
- Science notebook
- Labs and projects
- Quizzes and tests