5th Grade Science Units of Study

We will begin the school year investigating structures and properties of matter. The four key ideas will be (1) matter is made up of particles too small to be seen. (2) The total weight of matter is conserved when heating, cooling, or mixing substances. (3) Identification of materials based on their properties. (4) Determining whether the mixing of two substances results in new substances. We will also incorporate food chemistry into this unit.



The remainder of the year will be divided amongst the Earth’s systems. In our biosphere unit, students will learn more about food webs, food chains, and the impacts of humans on the environment. Students will be building and studying miniature ecosystems in the classroom.

During the hydrosphere unit, students will come to understand the limited amount of fresh water in the world compared to salt water. They will engineer solutions to clean an oil spill. Students will also study aquatic ecosystems and consider how the world would be different if there were no fish.

Our final unit of study will be the atmosphere. Students will investigate gravitational pull, brightness of stars, shadows, and seasonal appearance of stars. Students will also investigate what it would be like to live outside of earth.

Integrated Programs

Pilot Light

A program that helps children make healthier choices by connecting the lessons they learn in their classrooms to the foods they eat on their lunch trays, at home and in their communities. We will be tying Pilot Light lessons into our science lessons on a regular basis.

Mighty Acorns

An environmental education program that connects students to multiple, meaningful and sustained interactions with their local ecosystems. This program is brought to us by the Chicago Park District and The Field Museum. Students will be participate in pre- and post-field activities in the classroom, as well as a field study activity.

FUSE

A STEAM exploration program which facilitates learning through ‘making,’ develops 21st-century skills, and builds collaborative, youth-centered learning communities. FUSE challenges are designed to introduce STEAM concepts and skills in an engaging and enjoyable way. Students choose the challenges they want to work on and progress at their own pace, working alone or with others. Challenges are based in STEAM topics like 3D design and printing, robotics, architecture, music mixing, animation and more.

Expectations

Students are expected to give their best effort in everything that they do. A lot of the things that they do and learn in science class this year will be new to them. I want all of my students to be able to persevere when faced with challenges. Attendance is important as we typically do not finish an activity in one day. It is difficult to make up hands-on lab activities and replacing a lab with a reading does not have the same impact on learning.

We will be using a lot of materials and technology in science class. It is important that students handle everything with care and take responsibility for these items.

Students will have weekly homework. Homework is given on Thursdays and is due the following Thursday. Much of the assigned work is done in electronic form. If students do not have internet at home, students are allowed to use the Chromebooks in the classroom during their lunch, recess time to complete any necessary work.

To stay updated throughout the year, please check the blog regularly.  I will post homework, project information, and important upcoming events daily.  The address is <http://vldrewa.weebly.com>.  Also, be sure to check parent and student portal on a regular basis to stay up to date on grades.

Contact Information:

Email (preferred) [vldrewa@cps.edu](mailto:vldrewa@cps.edu)

Class Dojo – letters will be sent home with students with parent codes.

About Me:

My name is Ms. Drewa, and I will be the fifth and sixth grade science teacher.  I have been teaching for 18 years, and this will be my sixth year at Ray. I earned a Bachelor’s Degree in Arts from the University of Wisconsin Oshkosh and a Masters of Arts in Teaching from National-Louis University. I have a middle school endorsement in Language Arts, Science, and Social Studies.

I am looking forward to the exciting learning opportunities that are planned for the students this year.

Ray Elementary School



5th and 6th Grade Science