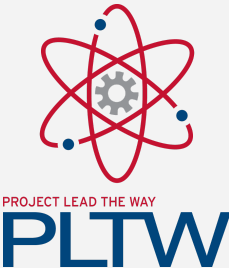



STEM - Project Lead the Way - Flight & Space

Welcome to a new exploratory class at Voss Middle School where we will investigate and experiment with the principles of flight and aerospace. I am very excited to continue working with your students this semester as we explore this PLTW Course called Flight & Space. Listed below is the entire curriculum, however, due to testing dates and other interruptions we can not guarantee that the entire module will be completed during the semester.

Curriculum Overview	
<p>Lesson 1 - Flight</p> <ul style="list-style-type: none"> • Forces of Flight • Newton's Laws of Motion • Pitch, Yaw, Roll • Straw Rockets • Drones • Flight Planning • Flight Management (Gantt charts) • Cleared for Takeoff 	
<p>Lesson 2 - Space</p> <ul style="list-style-type: none"> • Explorers of the Universe • Rocket Science • Mapping Orbits • Microgravity Meals • Fit for Space - stresses of living in outer space • Stayin' Alive - life support systems • Build a Better Rocket/Water Filter • 	
<p>Lesson 3 - Destination Mars!</p> <ul style="list-style-type: none"> • Task 1: Crews for a Cruise • Task 2: Ready for Shutdown • Task 3: A Day in the Life • Task 4: Cleared for Landing • Task 5: Mars Lander Prototype 	
	

Grading: All grading will follow Boerne ISD Grading Guidelines.

Classroom Expectations: All expectations will carry on from last semester. Students will be required to complete labs and experiments, so there is a contract on page two that needs to be read. Students will come home with a copy of this Lab Contract, so please be sure to get this signed and returned by January 12th/January 16th.

Resources: remember to sign into your Google account. All Google Classrooms will remain the same. Project Lead the Way (curriculum): my.pltw.org

Teacher Contact:

Tammy Foreman

- Tammy.Foreman@boerneisd.net
- 830-357-3573

STUDENT LAB *contract*

The student agrees to thoroughly read and understand all explorations before he or she actually begins them. The student will follow all lab safety procedures discussed in class at all times.

Lab Safety Rules:

1. Clear off your workspace of all unnecessary materials such as books and clothing before starting your work.
2. Goggles must be worn anytime a heat source or chemicals are used or there is any chance of something shattering or flying about. All lab safety equipment for the lab must be worn for the duration of the lab. Students with long hair must tie their hair back for labs.
3. No food, drink, gum or candy during a laboratory. Do not taste anything in the lab.
4. If you are instructed to smell something, do so by fanning some vapor toward your nose. Do not place your nose near the opening of the container.
5. Never look directly down into a test tube or other container of chemicals. View the contents from the side.
6. Never point the open end of a test tube or other container toward yourself or anyone.
7. All sharp (e.g. cardboard box cutter) or hot objects (e.g. hot glue gun) must be handled very carefully with appropriate safety equipment.
8. Report any injuries, spills, or broken materials (especially glass) to the teacher immediately. Do NOT clean up spills or broken glass.
9. Lab materials are to be used only for the purpose for which they are designed. No unauthorized or unsupervised labs.
10. Horseplay is never to be allowed.
11. Always return equipment, chemicals, aprons, and protective eyeglasses to their designated locations.

Safety is our top priority at Voss Middle School. Therefore, if you fail to follow any of these rules it is possible grounds for your removal from the current laboratory space and possibly any future ones. If you are removed for safety concerns, you will receive an alternate assignment that covers the same content as the lab.

Student Signature

Date



Parent/Guardian Signature Sheet

Project Lead the Way

6th grade - Flight & Space

It is my experience that our Eagles at VMS are some of the brightest, hard working, and innovative students.

In order to expose them to project based STEM learning opportunities, students may be asked to bring consumable materials from home that might be needed to create and explore these projects in the PLTW Course.

These materials will allow your student to explore STEM career pathways through highly engaging and interactive projects in the classroom but will not require additional purchase of materials. Ex: plastic grocery bags, empty water bottles and basic household items.

I have reviewed the course syllabus with my student, and I understand the class curriculum, classroom expectations, and grading policies that will be used in integrated science this year.

I have reviewed the "Student Lab Contract" with my student, and understand that if my student violates lab safety expectations they may be removed from the lab for their own safety and the safety of others. In the event my student is removed from the laboratory setting they will be given an alternate assignment.

Parent Signature

Date