

Name \_\_\_\_\_




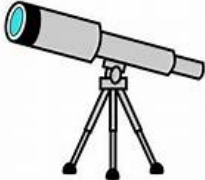


**Course Syllabus**  
**Investigations in Science 8**  
Loiederman Middle School



**OVERVIEW**

Welcome to Investigations in Science for grade 8. This curriculum is a unique problem/project based curriculum. The learning is student-centered with the teacher acting as a facilitator. Instruction is woven around one main problem within each unit of study, and students will be presented a request for proposals (RFP) at the start of each unit. Students engage in science, technology, engineering and mathematics (STEM) in order to propose solutions to identified problems. They will then use a design-portfolio throughout the quarter to research, develop, design and evaluate their proposal.

**UNITS OF STUDY**

<i>Unit</i>	<i>Title</i>	<i>Content Focus</i>
1	<i>Forces, Motion, and Interactions</i> 	Students will learn about kinetic and potential energy, describing motion, forces, and Newton's Laws. Students will apply their understanding to design and create a model rocket.
2	Earth, the Solar System, and the Universe 	Students will learn about Earth's motions, the reasons for seasons, gravity, and characteristics of the solar system, galaxy, and universe. Students will apply their understanding to evaluate the potential for life on other planets.
3	<i>Weather and Climate</i> 	Students will learn about geographical influences on climate, the water cycle, oceanic and atmospheric circulation, and climate change. Students will apply their understanding of these concepts to design and create "Green Homes" for different locations around the globe.
4	<i>Earth's Materials and Systems</i> 	Students will learn about Earth's structure, continental drift, plate tectonics, minerals, types of rocks, weathering and erosion. Students will apply their understanding of these concepts to design and create Earthquake resistant structures.

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### **GRADING & Reporting**

Students' academic grades are based on individual academic achievement. Quarterly grades will be assessed in three categories (Summative, Formative, and Learning Skills/Practice). Both individual assignments and final grades will be determined using a scale of: A: 90% - 100%, B: 80% - 89%, C: 70% - 79%, D: 60% - 69%, E: 59% - 50%. We will use a variety of assessment types to assess student learning.

<b>Category</b>	<b>Weight</b>	<b>Examples</b>
Summative Assessments	10%	End of unit tests, culminating projects, and culminating labs
Formative Assessments	80%	labs, quizzes, reading and writing assignments, journal entries, warm-ups, exit cards, quizzes, class work, homework evaluated for learning
Practice/ Prep Homework	10%	Any assignment (textbook assignments and/or worksheets) assigned for practice or preparation for instruction.

#### *Reassessment of Formative Work*

- Assessed tasks such as quizzes, non-unit tests, etc... may be retaken by students to receive a higher grade. Reassessments will be determined based on teacher discretion. When a teacher offers a reassessment, all students may be reassessed, regardless of grade on the original task/assessment, if they meet the following requirements: complete the original task or assessment, complete required assignments, and complete re-teaching/relearning activities, as determined by the teacher.
- Reteaching and reassessment opportunities are available during lunch and may be available during lunch by prior arrangement with your teacher. Students need to remember to ask for a lunch pass.
- The reassessment grade replaces the original grade even if the reassessed grade is lower.
- Assessments may be reassessed partially, entirely, or in a different format.
- Summative and/or End of Unit Assessments may not be re-taken.

#### *Late Assignments and/or Missing Work*

- A **due date** is the date students are expected to submit an assignment. Any achievement assignment turned in after the due date will be penalized one letter grade or 10%.
- A **deadline** is the last date the teacher will accept an assignment (or the date the teacher returns graded assignments). Achievement assignments turned in after the deadline date will not earn credit (0%).
- Any homework/classwork assignment that is provided for practice or preparation must be completed on time for full credit. Any late or incomplete homework assignments will not receive a grade higher than 50%.
- By the end of the unit, students cannot complete and submit late homework assignments once the summative assessment has been administered.
- All due dates and deadline dates will be announced and will most often be the same date.
- Students who have excused absences have a responsibility to make up missed assignments. Teachers will assist students in making up their assignments and set appropriate deadlines.
- There is no extra credit.

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*Learning Skills Grades:*

In addition to the academic grade, students will receive *Learning Skills Grades* each quarter as well. Learning skills grades will assess students' Participation and Assignment Completion throughout the course. Students may earn the following grades for each of the aforementioned categories:

**C:** Consistently      **O:** Often      **S:** Sometimes      **R:** Rarely      **NI:** Not Enough Information

**Communication and EDLINE**

- One of the most useful ways we have to communicate is your child's Agenda Book. Students will be required to keep track of assignments (due dates and deadlines) in their Agenda Book.
- Additionally, students and parents should visit Edline daily for posted assignments, grade updates, and progress reports (**www.edline.net**). Students are expected to know their grades, and what, if any, work is missing at all times. Other forms of communication include interims, report cards, and scheduled conferences. There should be no surprises about grades to students or parents.

**Suggested Student Organizational Tools and Supplies** (recommended supply list)



There will be no fees for this course.

- |                                                     |                   |                        |
|-----------------------------------------------------|-------------------|------------------------|
| - 3-ringed binder (Section for Science)             | - Notebook paper  | - Pens (black or blue) |
| - Calculator (inexpensive one to be kept in binder) | - Colored pencils | - Highlighter          |
| - Pencils and Erasers                               |                   |                        |

**Safety in Science Class**

- All science students will be required to follow safety procedures as designated by the MCPS safety contract. Failure to follow the safety guidelines may result in dismissal from the science laboratory for the remainder of that class period.