



STEM Science, Technology, Engineering, Mathematics

Page Middle School **6th Grade Technology – 9 weeks**

Course Description: In this class students study technological resources through problem-solving processes and various hands-on activities. They relate the impact of technology on society, environment, and culture to future consequences and decisions. Students study the resources of all technology, including tools, energy, materials, people, time, information, and capital. They explore the six systems of technology including: biotechnology, energy, communication, transportation, manufacturing, and construction.

What is Technology?

Technology is the application of knowledge to develop tools, materials, techniques, and systems to help people meet and fulfill their needs. Technology is everything manmade around us. We are presented with problems on a daily basis that require solutions. Often our solutions are reached through the help of technology. In Technology class students will develop problem-solving skills that can be applied to all aspects of life. Students will learn how to define problems and use their minds to creatively solve those problems. Students will actively participate in hands on projects that will combine Science, Technology, Engineering and Math (STEM) skills with real world experiences.

Unit 1 Why Study Technology

- Section 1.1 Technology and You
- Section 1.2 Making Technology Happen
- Section 1.3 How Technology Changes
- Students build a HTPA, (high tech paper airplane)
- Students are introduced to coding

Unit 2 Concepts of Technology

- Section 2.1 Technology Resources
- Section 2.2 Technology Systems
- Section 2.3 Developing a System or Product
- Students design and build a product using TinkerCADD and 3D Printer.

Unit 3 Design and Problem Solving

- Section 3.1 The Design Process
- Section 3.2 Problem Solving
- Students use the engineering design process to research, design & build a water bottle rocket.

Unit 4 Technology Connections

- Section 4.1 Science and Mathematics



Section 4.2 Language Arts and Social Studies
Students create an interactive Kahoot game

Monthly Digital Project Activities:

Students will complete one in class digital project each month. Students will be given time during class to complete the project, however if not finished during class it will become homework. Most students will finish the project during class if they use their time wisely. The project is focused on showcasing the evolution of technology as well as new and developing technologies.

A	93-100
A-	90-92
B+	87-89
B	83-86
B-	80-82
C+	77-79
C	73-76
C-	70-72
D+	67 -69
D	64-66
E	63 and below

Grading :

Class Work 50%

Projects 25%

Quizzes 25%

Note: All Technology assignments are worth 100points.

Classroom Expectations:

- Come to class prompt and prepared.
- Cell phones are off, put away, and out of sight.
- Use bathroom only when necessary.
- Participate and complete all assignments on time.
- Ask questions!!!!
- Respect the right of others to learn.
- The student is responsible for obtaining make-up work.
- Use lab computers appropriately.
- Mask must be worn over your mouth and nose at all times.

Supplies:

- Writing utensil
- Earbuds or headphones
- Thumb drive (optional but suggested)



Contact:

If you have any questions please email me.
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