

Technology Classroom Contract



Be on Time

1. Be in your seat, quiet and ready to work when class starts.
2. Class Assignments as well as homework assignments must be turned in on time.

Be Prepared

1. Arrive for Class with your pen/pencil, and any other required materials for class.
2. Come to class with a good attitude and willingness to help others.

Be Polite

1. Raise your hand and wait to be called upon.
2. Do not write on tables, chairs, benches, or other school property.
3. Leave computer setting as is (background color, creating shortcuts, etc.)
4. Gum or candy is not allowed in the classroom.
5. Obey all safety rules.

Lab Safety

1. A technology lab is an active learning environment. Therefore, students must conduct themselves in a safe and responsible manner.
2. The technology lab must be kept clean. Students will be dismissed when the lab is returned to its original condition.
3. When using lab equipment, students must:
 - Remove or secure loose items
 - Always wear safety glasses
 - Never walk away from a machine while it's running
 - Never stop a moving part with their hand or material
 - Never distract or talk to another machine operator
4. Students may use lab equipment only after they have been given proper instruction by their teacher and passed a lab safety quiz.
5. Students must report all accidents or injuries to their teacher no matter how minor.

Grading Scale

| | |
|------------------|-----|
| Lab Work | 50% |
| Test | 20% |
| Quiz | 10% |
| Participation | 10% |
| Home/School Work | 10% |

Participation points are used to ensure that students are polite, prepared, and on time. At the beginning of each quarter, you will receive 100 points towards your participation grade. If you break a rule, points will be deducted from your grade. You may be able to raise your participation grade by completing a mutually agreed upon extra credit assignment.

- Talking out of turn
- Unreasonable noise
- Leaving garbage or materials in classroom
- Disrespectful to other students or teacher
- Misuse of room, materials, or equipment
- Unprepared
- Late to class
- Chewing gum

By signing on the line below, I agree to abide by the above rules as well as the safety rules on the front of this paper and accept the consequences if I choose to break a rule.

_____ Student's Name

_____ Student's Signature

_____ Parent/ Guardian's Signature

_____ Date

_____ Date

Course Summary

- Throughout the next twenty weeks in technology education we will become familiar with, and learn the practical application of math and science through real life working models.
- We will as well become familiar with an engineering laboratory and how to use the various tools within it.

Unit Schedule

7th Grade

Unit 1 – Technology and Society

- Safety
- Design Process
- Measuring
- Evolution Board on the changes in technology
- Tools and machine Identification
- Project Rubrics
- Tech-portfolio components
- Name plate, Belt Balancer, Key chain, Basketball Game

Unit 2 – Problem Solving Using Technology

- Intro to engineering
- Design and Drawing
- Orthographic, isometric, 3-d, CAD application
- Design and draw a wood project
- Build wood project based from their own design and drawing
- Picture frame, game puzzle, napkin holder, basketball game

Unit 3 – Resources in Technology

- Basic engineering of load bearing structures
- Construction and design
- Civil engineer

- Cost efficient building
- Bridge Building

Unit 4 – Systems and Sub Systems in Technology

- Electricity, sensors, transportation and computer systems
- Electric circuitry, and one other teachers choice
- Electric – Open loop system, feedback, closed loop systems, and sensors.
- Mr. Circuit labs 1 – 13
- How a computer works, marble transport, marble roller coaster. Straw rocket

Unit 5 – Technology’s Effects on People and the Environment

- Manufacturing and Entrepreneurship
- Assembly line
- Keychain, desk caddy, note holder, pencil holder wooden tulips, duct tape bow or wallet
- Time study, costing, market survey and brainstorm design of the product

8th grade

Unit 1- Materials testing

- Safety
- Tools
- Measurement
- design brief
- Rubrics
- tech-pholio components.
- Materials tested are:
 - Adhesives
 - Materials
 - Scratch test
 - Hardness test
 - Fasteners

- Students go around to different labs and test the qualities of different materials.

Unit 2 – Technology Now and in the Future

- Research Project on the past, present, and future of technology.
- Career search and be introduced into CTE programs in BPS.

Unit 3 – How resources are processed by Technological Systems

- Introduction to electronics
- Mr. Circuit Labs 14 - 29
- Microsoft office / Google Sketchup/ Powerpoint

Unit 4 – Controlling Technological Systems

- Robotic Design and Control
- Electrical
- Pneumatics
- Hydraulics
- Hydraulic Arm building

Unit 5 – Using Systems to Solve Problems

- Problem Solving Technology
- Design using limited materials
- Cardboard Furniture or Cardboard Boats

Unit 6 – Alternative Energies Module

- Cover different forms of alternate energies
- Wind
- Solar
- Hydro
- Biomass
- Green Dog House