

# Science of Technology

## Where tiny makes a huge difference!

*Exponential growth in technological advancements...*



Students explore how science impacts the technology of yesterday, today, and the future. Students apply the concepts of physics, chemistry and nano-technology behind STEM activities and projects, including making ice cream, cleaning up an oil spill, creating adhesives and discovering the properties of nanomaterials. Through exploration and experimentation students are introduced to the many career paths of

chemical engineers and technicians. Students will be introduced to many facets of nanotechnology, and they will explore nanomaterials and their applications. Experimentation through physics will provide students with an understanding of machines and how they are used to create motion. This understanding will prepare students to analyze and improve the mechanisms society uses today.

### Your Keys to the Course

#### TEACHER

**Mr. Murphy**



#### WHERE & WHEN

Period       
 Room **309**

*Technology Education Department*

[www.mrteched.com](http://www.mrteched.com)

[tmurphy@smithtown.k12.ny.us](mailto:tmurphy@smithtown.k12.ny.us)

Please schedule extra help with Mr. Murphy during the following periods.



Nano-Particles

#### Lesson Summary

Lesson 1: Applied Chemistry

Lesson 2: Nanotechnology

Lesson 3: Applied Physics

WEBSITE: <http://mrteched.com>

Project Lead The Way(PLTW): <https://www.pltw.org/>

PLTW Personal Password: \_\_\_\_\_

PLTW Username: \_\_\_\_\_

Google Classroom Code: \_\_\_\_\_

↓ Cut along dotted line and return bottom to Mr. Murphy ↓

I have a complete understanding of the classroom and lab safety rules and procedures and will make every effort in making sure I abide by them while present in these rooms. I am responsible and will be held accountable for my actions.

Students Name: \_\_\_\_\_ Class Name: \_\_\_\_\_ Period #: \_\_\_\_\_

Students Signature: \_\_\_\_\_ Grade Level: \_\_\_\_\_

Parent/Guardians Signature: \_\_\_\_\_ Phone #: \_\_\_\_\_

Parent/Guardians Email: \_\_\_\_\_ Date: \_\_\_\_\_

# CLASS DETAILS

## All schoolwide rules apply!

### CLASSROOM RULES

- Students are responsible for cleaning up after themselves.
- Students are required to participate in lab cleanup and will be counted towards your grade.
- Please be environmentally conscious and don't be wasteful with materials.
- No students are allowed to enter the classroom or lab without a Technology teacher present.
- The teacher and school district will not be held liable for any personal belongings left behind.

### TECHNOLOGY LAB RULES

Students must understand and follow all classroom rules as well as lab safety rules, receive a 100 % on a lab safety quiz, and bring in the "Lab Safety Parent/Guardian Safety Signature Form" signed by both the student and the parent and/or guardian.

### Supplies Required

- 5 - #2 Pencils
- 2 – Pens
- 1 – 2 Pocket Folder
- 1 – Gallon size Ziploc baggie

### Optional Supplies:

- Earbuds
- Cordless mouse

### Preparedness:

Come to class prepared daily with the required supplies. Be prepared; body, mind, and supplies and ready to interact and learn.

- ❖ All engineering notebooks must remain in class at all times.

### Teamwork:

Teamwork is an essential skill to succeed, please take the opportunity in helping yourself to learn from your teammates and share your successes with them.

### Final Portfolio:

The Engineering Notebook, also known as the final portfolio, is the compilation of notes, design briefs, sketches, charts, and final drawings and will be counted as 11% of the final grade in Powerschool.

### Grades will be based on the following percentages:

Classwork & Activities	40%
Homework & Participation	10%
Projects	40%
Tests & Quizzes	10%

Please print in black and white to save money

# Safety First!