

**Wilson Area School District
Planned Course Guide**

Title of planned course: Technology Education – Grade 8

Subject Area: Technology Education Grade Level: 8th

Course Description: Additional power tools are demonstrated to enhance student awareness about technology education and industrial procedures. Students are required to master standard measurement, as well as design and analyze their projects. This will be accomplished through project-based, problem-based, and activities-based learning to complete projects. A safety quiz for each machine is required to be taken by every student prior to use following instructors lecture and demonstration.

Time/Credit for this Course: 30 days

Curriculum Writing Committee: George M. Banas

**Wilson Area School District
Planned Course Materials**

Course Title: Technology Education

Textbook: _____None_____ (title)
 _____ (publisher)
 _____ (copyright date)
 _____ (web address)

Supplemental Books: Wood magazine, This Old House magazine, Popular Wood Working magazine and Wood Workers Journal

Teacher Resources: Magazines, Internet sites, and other school districts

Curriculum Map

Week 1: - Safety (2 days)
- Measurement (2 days)
- Clock Project

Week 2: - Clock Project

Week 3: - Clock Project

Week 4: - Clock Project (2 days)
- CO₂ Car Project (3 days)

Week 5: - CO₂ Car Project

Week 6: - CO₂ Car Project

Scope & Sequence

Planned Course: Technology Education

Unit: Safety

Time frame: 2 Days

State Standards 3.7.7.A

Anchor(s) or adopted anchor:

Essential content/objectives: At end of the unit, students will be able to:
Explain and demonstrate correct use of tools, materials and procedures needed in the shop setting.

Core Activities: Students will complete/participate in the following:

1. Lecture
2. Demonstrate
3. Quiz
4. Application

Extensions: N/A

Remediation: Teacher Assistance

Instructional Methods:

1. Lecture
2. Demonstrate
3. Guided Practice
4. Independent Practice

Materials & Resources:

- | | | | |
|------------------|--------------------|---------------|-----------------|
| 1. Class roster | 3. Permission slip | 5. Posters | 7. Quiz |
| 2. Seating chart | 4. Job board | 6. Worksheets | 8. Project bins |

Assessments:

1. Worksheet
2. Poster
3. Quiz
4. Observation

Scope & Sequence

Planned Course: Technology Education

Unit: Measurement

Time frame: 2 Days

State Standards 3.7.7.B

Anchor(s) or adopted anchor:

Essential content/objectives: Select and use appropriate instruments to measure objects in standard form to the nearest sixteenth of an inch.

Core Activities: Students will complete/participate in the following:

1. Lecture
2. Demonstrate
3. Worksheets
4. Quiz
5. Application

Extensions:

Remediation: Teacher Assistance

Instructional Methods:

5. Lecture
6. Demonstrate
7. Guided Practice
8. Independent Practice

Materials & Resources:

- | | | |
|----------------|---------------|-----------------|
| 1. Ruler Board | 3. Worksheets | 5. Tape measure |
| 2. Rulers | 4. Quiz | |

Assessments:

1. Worksheets
2. Quiz
3. Oral Questioning
4. Observations
5. Projects

Scope & Sequence

Planned Course: Technology Education

Unit: Clock Project

Time frame: 12 Days

State Standards 3.6.7.A, 3.6.7.B, 3.7.7.A

Anchor(s) or adopted anchor:

Essential content/objectives: At end of the unit, students will be able to: Design their own clock and see the process through from design to completion. S.W.B.A.T. calculate materials needed, create templates, measure proper depths and use correct tools safely.

Core Activities: Students will complete/participate in the following:

1. Design
2. Measure
3. Cut
4. File
5. Sand
6. Drill
7. Counter sink
8. Finish (stain or paint)
9. Assemble

Extensions:

Remediation: Teacher Assistance

Instructional Methods:

1. Lecture
2. Demonstrate
3. Guided Practice
4. Independent Practice

Materials & Resources:

- | | | | |
|------------|---------------|-------------------|--|
| 1. Oak tag | 3. Scroll saw | 5. Sandpaper | 8. Paint/stain |
| 2. Stock | (jig saw) | 6. Drill | 9. Other media |
| | 4. Files | 7. Clock assembly | to put on clock as described on materials needed sheet (ex: plastic) |

Assessments:

1. Design Template
2. Materials sheet
3. Observations
4. Project

Scope & Sequence

Planned Course: Technology Education

Unit: CO₂ Cars

Time frame: 13 Days

State Standards 3.2.7.A, 3.2.7.B, 3.6.7.A, 3.6.7.B, 3.6.7.C, 3.7.7.A, 3.8.7.B, 3.8.7.C

Anchor(s) or adopted anchor:

Essential content/objectives: At end of the unit, students will be able to: Design, re-design and compete with their own car. S.W.B.A.T. understand forces on a car and create a design to counteract those forces. S.W.B.A.T. use correct tools safely while making such cars.

Core Activities: Students will complete/participate in the following:

1. Research
2. Design
3. Cut
4. File
5. Sand
6. Assemble
7. Customize

Extensions:

Remediation: Teacher Assistance

Instructional Methods:

1. Lecture
2. Research
3. Demonstrate
4. Questioning
5. Guided Practice
6. Independent Practice

Materials & Resources:

1. Graph paper
2. CO₂ Car Kit
3. Files
4. Sandpaper
5. Track
6. etc.

Assessments:

1. Design sheet
2. Observations
3. Oral Questioning
4. Project