

Anoka-Hennepin Secondary Curriculum Unit Plan

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| Department: | Technology Education | Course: | Creative Innovations | Unit Title: | Energy and Transportation | Grade Level(s): | 8 |
| Assessed Trimester: | Tri 2 | Pacing: | | Date Created: | 2/27/2013 | Last Revision Date: | 2/27/2013 |

- Course Understandings:** *Students will understand that:*
- A technologically literate person understands the significance of technology in everyday life
 - The use of technology has impacts and consequences both desirable and undesirable
 - Inventions and innovations from various times in history effect technological development in society and history
 - Manufacturing requires safe and responsible use of technology

DESIRED RESULTS (Stage 1) - WHAT WE WANT STUDENT TO KNOW AND BE ABLE TO DO?

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| Established Goals | |
| Standard and Benchmark Mastery <ul style="list-style-type: none">• Standard STL #19 Students will develop an understanding of and be able to select and use manufacturing technologies.<ul style="list-style-type: none">19-f Students will understand that manufacturing systems and processes change the form of materials. (F)19-g Students will understand that manufactured goods may be classified as durable and non-durable (G)19- h Students will understand that manufacturing will include the designing, developing, and producing products and systems. (H)• Standard STL #12 Students will develop the abilities to use and maintain technological products and systems.<ul style="list-style-type: none">12-H Students will understand that information is provided in manuals or experienced individuals to understand how things work.12-I Students will understand that tools, materials, and machines are to be used safely.12-J Students will understand that computers and calculators are used in numerous applications. | |
| Transfer | |
| Students will be able to independently use their learning to: (product, high order reasoning) <ul style="list-style-type: none">• 19-T, P Create a product using manufacturing processes• 19-P, P Produce a product or system through design, developing and manufacturing• 12- P Produce a project using hand tools and machines | |
| Meaning | |
| Unit Understanding(s): Students will understand that: <ul style="list-style-type: none">• Material for projects can vary from project to project or design to design• There are different processes involved in producing material• That varying designs require different materials to produce | Essential Question(s): Students will keep considering: <ul style="list-style-type: none">• I can select proper materials for my project• I can choose and explain different processes• I can build a quality product design |
| Acquisition | |
| Knowledge - Students will: <ul style="list-style-type: none">• 19-P Understand that manufacturing systems and processes change the form of materials• 19-P Understand that manufactured goods may be classified as durable and non-durable | Skills - Students will: <ul style="list-style-type: none">• 19-P Carry out manufacturing through designing, developing and producing products and systems• 19-P Explore goods as durable and non-durable |

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| <ul style="list-style-type: none">● 19-P Understand that manufacturing will include design, developing and producing products and systems Reasoning - Students will: <ul style="list-style-type: none">● 19-P Organize manufacturing through design, developing and producing products and systems● 19-P Organize goods as durable and non-durable● 19-P Evaluate manufacturing systems and processes | |
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| Common Misunderstandings <ul style="list-style-type: none">● | Essential new vocabulary <ul style="list-style-type: none">● |
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