

TEMPLATE FOR CMap PROJECT

Project Title: Forest Fires in Iron County the past 10 years/causes, and effects.

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Class: UEN 2009

Project Description	To map out all of the forest fires in Iron county that have occurred in the last 10 years. Also to find the causes/effects of all the fires so the land can be better prepared for fire prevention, and be evaluated for future reference. If needed the Canyon View High School woodworking/Skills USA students and I will plant trees, and clean up parts of the land that has been previously burned in the forest fires.
Community Issue or Problem Selected -How project evolved?	Forest fires can be somewhat prevented if we know where they have been, if the land is better evaluated/prepared, and if there is a need, making sure that the land is cleaned up, and vegetation is growing back. If the land does need to be cleaned up, or trees/plants need to be planted we have a better idea of where this needs to take place, and also can assist with this process as part of the project. This will help lower the cause to a forest fires happening again in the same area, or even other areas that have not yet been burned. In knowing this information, it will help with forest fire prevention, and assist fire fighters, the forest service, and the BLM in dealing with forest fires if there are some forest fires that break out in the future.
Community Partner(s)	Iron County Forest Service. Iron County BLM. Iron County Fire Department.
Project Objectives	<p>To map out areas of Iron county where forest fires have been in the past 10 years.</p> <p>To estimate approximately how much land has been burned in the past 10 years.</p> <p>To evaluate the burned areas to see if vegetation is growing back, why or why not, and if not go in and plant some vegetation to help out the environment, and also to assist in cleaning up burned areas.</p> <p>To create a map of all the burned areas in the past 10 years to aid in evaluating the burned areas, and to better prepare these areas so they are not burned again. If forest fires break out in already burned areas this will also assist everyone in being better prepared for handling forest fires.</p> <p>To evaluate the severity of past forest fires in Iron county in the past 10 years, and how big, or small each forest fire was.</p>
Utah Core Standards/Objectives	<p>Standard 480703-30 The student will understand the need for career planning.</p>

Objective 480703-3001

Define your future occupation.

Objective 480703-3002

Survey employment opportunities.

Objective 480703-3003

Report on a trade journal article.

Objective 480703-3004

Explore opportunities for advanced training.

Objective 480703-3005

Conduct a worker interview.

Objective 480703-3006

Contact a professional association.

Objective 480703-3007

Explore entrepreneurship opportunities.

Objective 480703-3008

Give a talk about your career.

Objective 480703-3009

Review career goals.

Standard 480703-31

The student will understand the importance of employability and work habits.

Standard 480703-29

The student will understand the need for leadership skills.

Objective 480703-2901

Serve on a committee.

Objective 480703-2902

Prepare an agenda.

Objective 480703-2903

Assist in planning a meeting.

Objective 480703-2904

Review basic parliamentary procedure.

- Make a main motion.

Objective 480703-2905

Participate in a school project.

Objective 480703-2906

Attend a community meeting.

Objective 480703-2907

Practice effective speaking.

Objective 480703-2908

Present a three- to five-minute talk.

Objective 480703-2909

Implement a leadership project.

Standard 480703-19

Students will be able to understand wood components and characteristics.

Objective 480703-1901

Describe the anatomy of a tree and the significance that it has in cabinet construction.

- Describe and know how to deal with natural and manmade defects.

Objective 480703-1902

Demonstrate a knowledge of the seasoning and drying of lumber.

Objective 480703-1903

Distinguish between softwoods and hardwoods.

Objective 480703-1904

Identify the various manmade sheet goods and describe the use of each.

Objective 480703-1905

Identify wood species and list the species most suited for cabinet construction.

Standard 480703-20

Students will be able to understand and demonstrate basic math and measuring concepts.

Standard 480703-07

Students will be able to understand wood components and characteristics.

Objective 480703-0701

Distinguish between softwoods and hardwoods.

- Softwoods – pine, red cedar
- Hardwoods – cherry, oak, alder, walnut, maple

Objective 480703-0702

Distinguish between solid woods and man-made goods.

Standard 480703-01

Students will be able to understand the cabinetmaking industry.

Objective 480703-0102

Identify career opportunities in related millwork industries.

Objective 480703-0103

Describe the integration of cabinetmaking into construction schedules.

Standard 480703-02

Students will be able to understand the design, planning and estimation process.

Objective 480703-0201

Identify elements and principles of design as they apply to cabinetmaking/millwork manufacturing.

Objective 480703-0202

Read and use a blue print to create a project.

	<p>Objective 480703-0203 Use a material list</p> <p>Objective 480703-0204 Use a procedure list.</p> <p>Standard 480703-03 Students will be able to understand and demonstrate safe practices.</p>
<p>Essential Question(s) -Spatial Issue</p>	<p>What are the causes of all these forest fires? What are the effects on the land from all these forest fires? Why have some areas been burned more than others? Why are some parts of Iron county more subject to fires than others? Why have some parts of the county never been burned? In some of the burned areas why doesn't the vegetation grow back? In some of the burned areas why does the vegetation grow back? What is the main cause of most of the forest fires? How long did all the forest fires burn for? How many of these forest fires could have been prevented? What is the prediction of forest fires in Iron county over the next 10 years? Will there be more, or less? Why, or why not? What effects have the forest fires in Iron county had on the wildlife in the area? How long does it take for the burned areas to make a complete recovery from the forest fires? What were the dates of all the forest fires?</p>
<p>Assessments (rubrics, scoring guides)</p>	<p>Teacher assessments, performance/hands on tests during field work, teacher observations, partner observations, teacher grading rubric evaluations about student performance, etc. Data performance tests, information tests, and assignments, hands on learning, gathering data, presentations, etc.</p>
<p>Project Products</p>	<p>In doing this project we will create a map for the forest service that has all the information of all the forest fires in Iron county for the past 10 years. The map will contain information on fire location, how severe the forest fires were, what lands are growing back with vegetation, vs what land are not, an evaluation of the burned areas, how they are recovering, etc. and the effects the forest fires had on the local wildlife in the area. In doing service projects we will keep the</p>

	map updated on where we will plant trees, and cleanup the burned areas.
Project Timeline (include a step by step Procedures)	<ol style="list-style-type: none"> 1. Day 1 Talk to partners, and acquire needs/ideas /information for project. 2. Day 2 Introduce mapping project to students, and explain the project in detail. 3. Day 3 Educate students with the skills they will need to assist in the project, such as teaching them how to use a GPS, or read a topo map, etc. 4. Day 4 Divide students into groups, and assign them a part of the project, make expectations clear. Also introduce them to the community partners. 5. Day 4,5,6 Go out and do the field work in the forests, with the community partners. 6. Day 4,5,6 Gather data, record the data with the help of the community partners. 7. Day 7 Organize the data, and create the map based on the data, and the resources we use. 8. Day 8 Have our celebration/presentations with the partners, and the students. 9. Day 9 Have our evaluations, and evaluate the mapping project, and share experiences. 10. Day 10 Think, and plan for other mapping activities.
Resources Needed	<p>GPS Units/Compasses Soil Testing Units Moisture Content Testing Units Mapping Software, ArcMap, DNR Garmin, etc. General Information from BLM/Forest Service/Fire Dept. GIS Maps of Iron County. Graphs, Charts, Paper, writing Instruments to record data. Iron County Fire Dept. Forest Service, and BLM.</p>
Skills Required	<p>To know how to use, and operate a GPS unit. To know how to use/operate mapping software. To know how to record data. To know how to read a map. To be familiar with Iron county. To know how to do moisture content samples. To know how to take soil content samples. To know how to use a compass.</p>

Project Team Member Roles	<p>Teacher(s): To teach/prepare students so they can participate in carrying out the mapping project. Also to coordinate with partnership in project to see that it gets done. To assist with students/partners in getting the project done.</p> <p>Students: To assist in the collecting data, and work with the teacher(s), and partners in getting the project done.</p> <p>Partner(s): To assist the teacher(s), and students in providing them with information, and resources about the project, and also to assist them in getting the project done. Also to provide suggestions about the project, give feedback, and provide information about what exactly needs to be done for the project.</p>
Celebration/Presentation	<p>All students or groups of students will present on their experiences they had while working on the mapping project. They will also present on what they learned, and present to the rest of the class, the teacher, and the partners the part of the map, and the areas they took part in about gathering the data, mapping out the area, and the part of the map they assisted to create. All students will also do a self evaluation of themselves, and of others to come up with ideas of what they think they could have done better at, or more of. We will then have a barbeque involving all the students, the teacher(s), and the partners to celebrate the success achieved on this project in working together to complete the project.</p>
Project Evaluation	<p>Taking photographs of burned landscape, doing soil tests, taking moisture content tests, researching weather patterns, researching the effects of wildlife, etc.</p> <p>Also ask did this project provide the information we needed it to provide? Did this project serve the purpose it was supposed to. Was this project effective, why or why not? We would also have the partners, and students evaluate their experiences in assisting with the project to get feedback. We might ask ourselves what we could have done different, or better, etc.</p>
Project Bibliography	<p>Iron County Forest Service Iron County Fire Dept. Iron County BLM Cedar City Library ArcMap/DNR Garmin Topo Maps Maps of Iron County Any information about Dixie National Forest in Iron County. Internet Weather Patterns from The Weather Channel.</p>

	Mapping Project Books Any GPS Information Iron County Chamber of Commerce
Plans for Future CMAP Activities	Bark Beetle infestation in the trees of the forest. Logged parts of the forest. Kinds of trees that grow in/around the forest. Snowfall/Avalanche mapping in Iron county. Campground/Recreation area mapping. Tree Mapping. Landslide mapping. Mapping out accident locations.

Optional:

- Lesson Plans
- Student Artifacts
- Publicity