

TEMPLATE FOR CMAP PROJECT

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Project Title: To Build or Not to Build, That is the Question and How Safe is Where I Live
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Project Description	Student will use Arc Map to find the location of his/her home. They will turn on the hazards one at a time. If his/her home is in the hazard zone, he/she will use the FEMA site to identify activities to do before, during and after the hazard occurs. The student and his/her family will be encouraged to do the activities that are suggested to do before hand.
Community Issue or Problem Selected -How project evolved?	Getting students and their families to do preparedness activities and to think about the things they will do to mitigate the effects of the hazard should it occur? I have copies of the maps that are a few years old. I have had students do this assignment just by looking on the maps to find the homes on the maps and determine if they are in or out of the zone for the hazard. I took a GIS class and could see the application of my lab to ArcVoyager, but I didn't have access to the mapping program. Now I have the chance. The other thing I like about this is the tie in to the community. This would make students and their families more willing to actually do something with their knowledge.
Community Partner(s)	Provo Emergency Management Director, local fire stations.
Project Objectives	Help students to realize that we do have hazards of living here in Utah Valley. Help students learn that when they are buying a home, there are things they should consider because the builder may not have. Help families in our school neighborhood prepare for the emergencies that they can prepare for.
Utah Core Standards/Objectives	Standard III: Students will understand the processes of rock and fossil formation. Objective 4: Compare rapid and gradual changes to Earth's surface. a. Investigate and report possible reasons why the best engineering or ecological practices are not always followed in making decisions about building roads, dams, and other structures.
Essential Question(s) -Spatial Issue	What hazards that exist in the area could affect me and my family in our home? What can be done to midigate the effects of those hazards?
Assessments (rubrics, scoring guides)	I have a scoring guideline at school that I can use to evaluate the student projects. It has a checklist of the things that should be in the project.
Project Products	A PowerPoint presentation, or a tab book that includes a map of the location of the student's home, the hazards that could affect the student's home, from FEMA the two activities to do before, after and during the occurrence of the hazard, and a picture of what the hazard

	can do to the home and the definition. Each student will have at least two: ground shaking from an earthquake and the rock that forms the support to his/her home.
Project Timeline (include a step by step Procedures)	Together as a class, we will investigate what hazards are present that would have suggested that the home should not have been built in its location. Discuss the reasons that best engineering practices are not followed. Then have the students use ArcMap to do the investigation for where they live.
Resources Needed	ArcMap, the computer files of the base map and the overlay of the hazards, student addresses, access to computers, cooperation of the families of students in our school boundaries.
Skills Required	Using computer and ArcMap, ability to read maps, ability read lists of do's and don'ts from FEMA
Project Team Member Roles	Teacher(s): Provide activities to teach students how to use ArcMap. Do the evaluation of the home location for the present construction, which will show them how to use the maps in ArcMap. Students: Complete the map assignment. Read about the hazards that could affect their homes. Make a PowerPoint presentation that includes the activities to do before, during and after an emergency situation. Partner(s): Share with students how being prepared can save lives and property. Encourage students to encourage their families to make the preparations suggested by FEMA
Celebration/Presentation	Share the information about the families' preparation for hazards with the Daily Herald, which is the local newspaper.
Project Evaluation	Survey students and their families for how much the implemented the activities to do before the disaster happens. Not all students will have all the hazards, but all students will be affected by groundshaking from an earthquake and the poor rock material on which all of our homes are built. So everyone will have to report on two hazards at least.
Project Bibliography	"FEMA are You Ready." <u>FEMA</u> . 04 May 2006. 10 July 2008 < http://www.fema.gov/areyouready/natural_hazards.shtm >. Utah County natural hazards ordinance Utah County Hazard maps imported into ArcMap
Plans for Future CMAP Activities	Have a small group of students collect information about community's preparedness by constructing a questionnaire and collecting the data from the school community and compiling the information in an ArcMap project.