This project is producing, field-testing, revising and disseminating a new College Algebra course designed to meet the academic goals and stimulate the interest of students in Advanced Technological Education (ATE) programs. Their goal is to increase student achievement for this student population by creating a course that builds a sound foundation for work and for future technical quantitative study. This course employs technology and an applied/modeling approach to cover essential topics in College Algebra in order to reflect and conform to placement testing and articulation structures at most colleges and universities. The course consists of a textbook, including traditional topics but with a significant amount of additional material delivered via the Internet. The web portal for this course features web assignments that allow students to see videos of technicians at work and explore problems using JAVA simulations from one of four areas of technical education: (a) Biotechnology and Environmental Technology; (b) Telecommunications and Semiconductor Technology; (c) Information Technology; and (d) Mechanical and Manufacturing Technology. Faculty members are able to use this site to customize both in-class and homework assignments for students enrolled in programs in these ATE areas. The content, pedagogy and format of these materials are being designed with substantial input from the College Algebra working group of the MAA Committee on Curriculum Reform and the First Two Years (CRAFTY) and representatives from both technical client disciplines and industry organizations, such as the Information Technology Association of America (ITAA). It is building on COMAP’s other ATE projects where they are researching technical work environments and helping faculty create and integrate authentic applications derived from advanced technological areas into their courses.
Every cell is covered by a membrane that controls what can enter and leave the cell. Inside the cell is a concentrated mixture of thousands of different molecules which form a variety of specialized structures that carry out such cell functions as energy production, transport of molecules, waste disposal, synthesis of new molecules, and the storage of genetic material.
Descr | Rocks are the most common material on earth. We will learn about the parts that make up the rocks and sort rocks based upon color, hardness, texture, layering, and particle size. Lets review: What do you already know about rocks? Please write down your thoughts on a piece of paper. Now, click on the link below to find out what the definition of a rock is. *Intro to Rocks Please answer the questions below in complete sentences on your paper. 1. Rocks are made up of several particles... | same but should fix typos

Subject | Science | same

Audience | Audience: Learner
Audience: General Public
Audience: Educator | same with NSDL vocab indication

Ed level | Ed Level (No Vocab): Grade 5
Ed Level (No Vocab): Grade 4
Ed Level (No Vocab): Upper Elementary
Ed Level (No Vocab): Elementary School | same because using the NSDL vocab

Res. Type | Benchmark
Standards or Frameworks
(Dublin Core Vocab): InteractiveResource
(Dublin Core Vocab): Text
(NSDL Vocab): Reference Material
(NSDL Vocab): Educational Standard | (NSDL Vocab): Educational Standard
(Dublin Core Vocab): InteractiveResource
(NSDL Vocab): Interactive Simulation
(NSDL Vocab): Instructional Material
(Dublin Core Vocab): Text

Publisher | Instructional Architect | same

Creator | Whitney Frankovic | same

Lang | NSDL wants content
| text/html

Rights | NSDL wants content
| NSDL wants content

Access Rts | (NSDL Vocab): Free Access | same because using NSDL vocab

Source | | |

Dates | 2009-09-28, Created: 2009-09-28, Modified: 2009-12-14 | same
Precipitation is often spread over a large area as in a rainstorm. Rather than describe the total volume of water in a rainstorm in terms of how many gallons fell, the equivalent depth is typically used. This is the average depth of the rain over the area where the rain fell. Area inches are used on TV and in the newspaper to describe a rain. Snow is also described with area depth units "as there was a 6 inch snow last night" or "there was a 1 and 1/2 foot snowstorm over the weekend". Cubic volume units, such as gallons, cubic feet and acre-feet are computed from the depth units by multiplying them by the area over which the rain (or snow) occurred. (When snow is melted, there is roughly 1 inch of water for each 10-inches depth of snow.) The volume of water in a rainstorm as well as the water stored in a lake or reservoir can be in millions and millions of gallons. Similarly the volume of water that flows past a point on a large riverbank in a day is very large. Larger units are needed to simplify the description of large volumes of water. One unit that has been used to do this is the acre-foot.”
## Field | Raw Metadata | Normalized Metadata
---|---|---
Title | Cloud Watch | same
Descr | The purpose of this activity is to explore the connections between cloud type, cloud cover, and weather and stimulate student interest in taking cloud type observations. Students observe cloud type and coverage and weather conditions over a five-day period and correlate these observations. Students make and test predictions using these observations. The intended outcome is that students learn to draw inferences from observations and use them to make and test predictions. | same
Subject | Atmospheric science  
Environmental science  
Human geography  
Science  
Earth science  
Physical sciences  
Meteorology  
Geography  
Astronomy  
Space sciences | Atmospheric science  
Environmental science  
Human geography  
Geoscience  
Social Sciences  
Space Science  
Science  
Earth science  
Physical sciences  
Meteorology  
Geography  
Astronomy  
Space sciences (terms were added)
Audience | NSDL wants content
Ed level | (NSDL Vocab): Elementary School  
(NSDL Vocab): Middle School  
(NSDL Vocab): High School | same because using the NSDL vocab
Res. Type | (Dublin Core Vocab): InteractiveResource  
(NSDL Vocab): Instructional Material  
(NSDL Vocab): Activity  
(NSDL Vocab): Instructional Material  
(NSDL Vocab): Instructor Guide/Manual | same because using the NSDL vocab
Creator | The GLOBE Program, UCAR (University Corporation for Atmospheric Research) | same
Lang | en | English
Format | Application, application/pdf, Netscape, Adobe Acrobat reader | application, application/pdf
Rights | For science/educational use consistent with the methodologies of the GLOBE Program | same
Access Rts | NSDL wants content
Dates | 2003-08-01 | same