

Figure 5

Content Standards and Benchmarks Addressed in “Exploring and Influencing the Environment” Unit

Core Curriculum Areas: (from State Curriculum Framework (Michigan Dept. of Education, 1998))

Language Arts

Meaning and Communication

1. Read with developing fluency a variety of texts, such as short stories, novels, poetry, plays, textbooks, manuals, and periodicals.
2. Employ multiple strategies to construct meaning, such as generating questions, studying vocabulary, analyzing mood and tone, recognizing how authors use information, generalizing ideas, matching form to content, and developing reference skills.
3. Write fluently for multiple purposes to produce compositions, such as personal narratives, persuasive essays, lab reports, and poetry.
4. Focus on meaning and communication as you listen, speak, view, read, and write in personal, social, occupational, and civic contexts.

Depth of Understanding

1. Develop a thesis using key concepts, supporting evidence, and logical argument.

Inquiry and Research

1. Define and investigate important issues and problems using a variety of resources, including technology, to explore and create texts.

Social Studies Geographic Perspective

1. Describe and compare characteristics of major world cultures including language, religion, belief systems, gender roles, and traditions.
2. Explain why people live and work as they do in different regions.
3. Explain how humans modify the environment and describe some of the possible consequences of those modifications.
4. Describe the consequences of human/environment interactions in several different types of environment.
5. Describe the geographic aspects of events taking place in different world regions.
6. Explain how elements of the physical geography, culture, and history of the region may be influencing current events.
7. Pose a social science question about a culture, world, region, or international problem.

Science

Construct New Scientific and Personal Knowledge

1. Generate scientific questions about the world based on observation.
2. Design and conduct simple investigations.

Reflecting on the Nature, Adequacy, and Connections Across Scientific Knowledge

1. Describe the advantages and risks of new technologies.
2. Recognize the contributions made in science by cultures and individuals of diverse backgrounds.

Using Scientific Knowledge from the Physical Sciences in Real-World Contexts

1. Explain how light helps us see.
2. Explain how objects or media reflect, refract, transmit, or absorb light.

Mathematics

Geometry and Measurement

1. Distinguish among shapes and differentiate between examples and non-examples of shapes based on their properties; generalize about shapes of graphs and graph distributions.

Data Analysis and Statistics

1. Organize data using tables, charts, graphs, spreadsheets, and databases.
2. Critically read data from tables, charts, or graphs and explain the source of the data and what the data represent.
3. Formulate questions and problems and gather and interpret data to answer those questions

Arts Curriculum Areas: (from National Standards for Arts Education (Consortium of National Arts Education Associations, 1994))

Creative Movement

1. Understand dance as a way to create and communicate meaning.
2. Make connections between dance and other disciplines.

Visual Arts

1. Understand and apply media techniques and processes.
2. Understand the visual arts in relation to history and cultures.
3. Choose and evaluate a range of subject matter, symbols, and ideas.
4. Reflect upon and assess the characteristics and merits of their work and the work of others.
5. Make connections between visual arts and other disciplines.

Music

1. Evaluate music and music performances.
2. Understand music in relation to history and culture.
3. Listen to, analyze, and describe music.

Drama

1. Do script writing by the creation of improvisations and scripted scenes based on personal experience, heritage, imagination, literature, and history.
2. Act by developing basic acting skills to portray characters who interact in improvised and scripted scenes.