

## MICHIGAN GRADE LEVEL CONTENT EXPECTATIONS FOR SOCIAL STUDIES: GRADES K-8

### G1 THE WORLD IN SPATIAL TERMS: GEOGRAPHICAL HABITS OF MIND

*Describe the relationships between people, places, and environments by using information that is in a geographic (spatial) context. Engage in mapping and analyzing the information to explain the patterns and relationships they reveal both between and among people, their cultures, and the natural environment. Identify and access information, evaluate it using criteria based on concepts and themes, and use geography in problem solving and decision making. Explain and use key conceptual devices (places and regions, spatial patterns and processes) that geographers use to organize information and inform their study of the world.*

#### G1.2 Geographical Inquiry and Analysis

*Use geographic inquiry and analysis to answer important questions about relationships between people, cultures, their environment, and relations within the larger world context.*

Geographers use information and skills to reach conclusions about significant questions regarding the relationships between people, their cultures, the environments in which they live, and the relationships within the larger world context. Students will reach their own conclusions using this information and make a reasoned judgment about the most justifiable conclusion based on the authenticity of the information, their skill at critically analyzing the information, and presenting the results of the inquiry.

6 – G1.2.5 Use information from modern technology such as Geographic Positioning System (GPS), Geographic Information System (GIS), and satellite remote sensing to locate information and process maps and data to analyze spatial patterns of the Western Hemisphere to answer geographic questions.

7 – G1.2.5 Use information from modern technology such as Geographic Positioning System (GPS), Geographic Information System (GIS), and satellite remote sensing to locate information and process maps and data to analyze spatial patterns of the Eastern Hemisphere to answer geographic questions.

### G2 PLACES AND REGIONS

*Describe the cultural groups and diversities among people that are rooted in particular places and in human constructs called regions. Analyze the physical and human characteristics of places and regions.*

#### G2.1 Physical Characteristics of Place

*Describe the physical characteristics of places.*

6 – G2.1.2 Account for topographic and human spatial patterns (where people live) associated with tectonic plates such as volcanoes, earthquakes, settlements (Ring of Fire, recent volcanic and seismic events, settlements in proximity to natural hazards in the Western Hemisphere) by using information from GIS, remote sensing, and the World Wide Web.

7 – G2.1.2 Use information from GIS, remote sensing and the World Wide Web to compare and contrast the surface features and vegetation of the continents of the Eastern Hemisphere.

## MICHIGAN HIGH SCHOOL SOCIAL STUDIES CONTENT STANDARDS AND EXPECTATIONS

Geography bridges the social and physical sciences by asking questions and seeking answers to those questions through inquiry. In doing so, students apply skills and develop habits of mind that they will be able to use in the diverse societies and workplaces of the community, nation, and the world. Maps, satellite images of Earth, Geographic Information Systems (GIS), Geographic Positioning Systems (GPS), and other resources on the World Wide Web provide valuable information about the spatial patterns on Earth. The tools of modern geography are based on modern technology. The technology is the means to explore the world and inquire about the spatial patterns and dynamic processes that shape the world in which we live.

### GEOGRAPHY FOR LIFE: NATIONAL GEOGRAPHY STANDARDS

**GEOGRAPHY STANDARD 1:** How to use maps and other geographic representations, geospatial technologies, and spatial thinking to understand and communicate information

4<sup>th</sup> GRADE the student knows and understands:

1. Properties and functions of geographic representations – such as maps, globes, graphs, diagrams, aerial and other photographs, remotely sensed images, and geographic visualizations.

Therefore, the student is able to:

B) Describe how properties of geographic representations determine the purposes they can be used for, as exemplified by being able to:

- Describe how properties of geographic representations (maps, globes, graphs, diagrams, aerial and other photographs, GPS) are used to communicate different types of information.

8<sup>th</sup> GRADE the student knows and understands:

1. The advantages and disadvantages of using different geographic representations – such as maps, globes, graphs, diagrams, aerial and other photographs, remotely sensed images, and geographic visualizations for analyzing spatial distributions and patterns.

Therefore, the student is able to:

A) Analyze and explain the properties (position and orientation, projections, symbols, scale, perspective, coordinate systems) and functions of geographic representations, as exemplified by being able to:



- Analyze geographic representations based on their properties (e.g., orientation, grid system, scale, resolution, and content) and purposes (e.g., using GIS and digital globes to explore geographic information and relationships at a range of scales).
- Explain how different geographic representations are used in a variety of settings (e.g., GIS in a computer lab, topographic map for backcountry hiking, GPS navigation for car travel).

12<sup>th</sup> GRADE: the student knows and understands:

1. The advantages of coordinating multiple geographic representations – such as maps, globes, graphs, diagrams, aerial and other photographs, remotely sensed images, and geographic visualizations to answer geographic questions.

Therefore, the student is able to:

A) Explain the advantages of using multiple geographic representations to answer geographic questions, as exemplified by being able to:

- Explain how multiple geographic representations and geospatial technologies (e.g., GIS, GPS, RS, and geographic visualization) could be used to solve geographic problems (e.g., help determine where to locate a new playground, or identify dangerous street intersections within a community).
- Describe how an analysis of urbanization can be done using different geospatial technologies (e.g., RS for land use, GIS data layers to predict areas of high/low growth, GPS and GIS for identifying transportation issues regarding growth).