Unit 4: Where in the World Are We?

Content Area: **Technology**
Course(s): **Technology**
Time Period: **Week 30**
Length: **3 Weeks**
Status: **Published**

Unit Overview

In this unit of study, students will use Google maps and Mapquest to orient themselves within the world. They will compare and contrast the features of Google maps, Mapquest, globes, and paper maps. Students will explore the Nasa website as well as exploring outerspace.

Standards

TEC.K-2.8.1.2.A.5	Demonstrate the ability to navigate in developmentally appropriate virtual environments.
TEC.K-2.8.1.2.F.1	Use mapping tools to plan and choose alternate routes to and from various locations.

Essential Questions

- What technology tools are available for directions and maps?
- How does one determine whether a map or a website should be used to get directions?
- Where is Earth in the solar system and why are there cycles on Earth?

Application of Knowledge and Skills...

Students will know that...

- Engineers have an impact on the world they live in and their daily lives.
- In space you have to think outside the box to solve problems
- Space travel is not as simple as it seems.
- Three-fourths of Earth's surface is covered by water.
- web-based topographical maps use common colors and notations to denote map features (e.g., blue is for water)
- websites exist that can give directions from one location to another.

Students will be skilled at...

- accessing maps via Google and Mapquest.
- communicating using digital media
- reading different features on maps according to colors and commonly used notations.
- using tools found on map websites, such as the zoom control and the grabber tool

Assessments

- Google Maps Activity Sheet Formative: Other written assessments Students will use information found on their map websites to answer questions on a written assessment.
- Comparison of Tools Summative: Sample Assessment Item Students will get directions from their school to the Bridgewater Mall using a website and a map. They will then answer the questions about which tools were most effective.
- Map Features Diagnostic: Other oral assessments Students will point to map features such as water, land, roads, and cities on paper maps and on web-based map sites.

Activities

- Students will start each class by navigating to Google Classroom and responding to a writing prompt. In responding to the writing prompt, students will be collaboratively conversing with each other and their teacher digitally, using their schema of keyboarding and mouse skills.
- Engineer of the Week: Each week, a new engineer will be briefly introduced to the class, highlighting their impact on their current world.
- Students will compare a globe, wall maps, and road maps.
- Students will learn how to access Google Maps and will complete an accompanying activity sheet.
- Students will compare Google and Mapquest.
- Students will explore the kids section of the NASA website
- Students will use Google Earth to explore the moon and Mars

Activities to Differentiate Instruction

- Globes, maps, and GPS provide tactile tools.
- Tiers 1 and 2 may work collaboratively.
- Questions/activities may be reduced or expanded for each tier.

Integrated/Cross-Disciplinary Instruction

Social Studies: Globe and map skills

Engineering: Space travel

Resources

- Globes
- wall maps of world and USA
- Hagstrom or other printed road maps
- maps.google.com
- iPads
- www.mapquest.com
- Geocaching
- https://www.nasa.gov/audience/foreducators/k-4/index.html