# **Unit 4 Minecraft Volume Project**

Content Area: **Technology** 

Course(s):

Time Period: March
Length: 5 Days
Status: Published

#### **Unit Overview**

Students will use Minecraft to learn about calculating volumes of 3d objects. Working collaboratively, they will calculate the volumes of teacher-made objects as well as constructing volumes of their own. Along the way, they will learn basic networking topics such as server/client relationships, Internet Protocol addressing, and wifi vs ethernet communications. In addition, they will learn about the concept of communications lag and discuss reasons for lag occurring in online experiences.

#### **Standards**

CS.3-5.8.1.5.CS.3

Identify potential solutions for simple hardware and software problems using common troubleshooting strategies.

#### **Materials**

• Laptops

#### **Assessment**

#### **Formative Assessment**

- Teacher Observation
- Checks for Understanding
- Exit Tickets

#### **Summative Assessment**

• Performance Tasks & Projects

### **Accommodations & Modifications**

#### **Special Education**

- Follow IEP Plan which may contain some of the following examples...
- In class/pull out support with special ed teacher or assistant

- Preferred seating
- Directions repeated/clarified
- Extended time for completing tasks
- Vocabulary support
- Limit number of tasks

#### 504

- In class/pull out support with special ed teacher or assistant
- Preferred seating
- Directions repeated/clarified
- Extended time for completing tasks
- Vocabulary support
- Limit number of tasks

#### **ELL**

- Translation device/dictionary
- Preferred seating
- Directions repeated/clarified
- Extended time for completing tasks
- Vocabulary support
- Limit number of tasks

#### **At-risk of Failure**

- Preferred seating
- Directions repeated/clarified
- Extended time for completing tasks
- Vocabulary support
- Limit number of tasks

### Gifted & Talented

- Independent projects
- Online games
- Extension activities

## **Interdisciplinary Connections**

MA.5.MD.C.3	Recognize volume as an attribute of solid figures and understand concepts of volume measurement.
MA.5.MD.C.4	Measure volumes by counting unit cubes, using cubic cm, cubic in, cubic ft, and non-standard units.
MA.5.MD.C.5	Relate volume to the operations of multiplication and addition and solve real world and mathematical problems involving volume.

## Career Readiness, Life Literacies & Key Skills

TECH.9.4.2.TL.1	Identify the basic features of a digital tool and explain the purpose of the tool (e.g., 8.2.2.ED.1).
TECH.9.4.2.TL.6	Illustrate and communicate ideas and stories using multiple digital tools (e.g., SL.2.5.).
TECH.9.4.5.CT.3	Describe how digital tools and technology may be used to solve problems.
TECH.9.4.5.CT.4	Apply critical thinking and problem-solving strategies to different types of problems such as personal, academic, community and global (e.g., 6.1.5.CivicsCM.3).