



STANDARDS ALIGNMENT GUIDE

Texas State Standards Mathematics Grade 3

INTRODUCTION

Minecraft: Education Edition is an open-world game that promotes creativity, collaboration, and problem-solving in an immersive environment where the only limit is your imagination. As a game-based learning platform, Minecraft offers educators a transformative way to engage students and ignite their passion for learning. Teachers from around the world are using Minecraft in their classroom to successfully:

- Increase Student Engagement,
- Facilitate Classroom Collaboration
- Provide opportunities for Creative Exploration
- Connect Learning to Tangible Outcomes

This alignment guide will provide you with links to activities you can use in your classroom. These activities take full advantage of Minecraft's capabilities to complement and enhance classroom teaching. In this guide, you will find a list of applicable standards along with links and descriptions of Minecraft activities that focus on each objective.



For more information on using Minecraft in your classroom or to find additional education resources and training materials, visit us online.

education.minecraft.net

MATHEMATICAL PROCESS STANDARDS

STANDARD	DESCRIPTION	ACTIVITY
The student uses mathematical processes to acquire and demonstrate mathematical understanding. The student is expected to:		
11.5.b.1.A	Apply mathematics to problems arising in everyday life, society, and the workplace.	<p>American Flag Three-Act Math Welcome to the world of Three-Act Mathematics in Minecraft! Ask Questions, Work Collaboratively, and Build Understanding.</p> <p>Angler Arithmetic – Cool math! Gamify Math Class or use Game-Based Learning and Project-Based Learning with a healthy dose of competition to engage students of all ages with FISHING</p> <p>Crafting your Review Students learn more by teaching others, and having them create a review for content learned is a great way to get them thinking and problem-solving.</p> <p>Decimal/Fraction Garden Students will demonstrate understanding a fractional and decimal relationships using a 10 x 10 garden.</p> <p>Fraction Stories Have students discover fractions in real life settings and have them communicate their findings through fraction stories.</p> <p>Fraction World Based on a lesson plan submitted by another user, wold download available.</p> <p>How Fast Can you Go? Students will understand how challenging it was to walk for thousands of miles.</p> <p>Learning about Ratios via Minecraft In this mod, students will learn different ratio rules for a specific type of gameplay in Minecraft, and ensure that their code abides by those rules.</p> <p>Steve’s New Home Steve has just arrived in a new land and has no-where to live. All he has with him is £300 to buy resources and build a new home.</p> <p>Take it or Leave it? Discerning what to take and leave behind is an important skills for students to gain.</p>
11.5.b.1.B	Use a problem-solving model that incorporates analyzing given information, formulating a plan or strategy, determining a solution, justifying the solution, and evaluating the problem-solving process and the reasonableness of the solution.	<p>American Flag Three-Act Math Welcome to the world of Three-Act Mathematics in Minecraft! Ask Questions, Work Collaboratively, and Build Understanding.</p> <p>Angler Arithmetic – Cool math! Gamify Math Class or use Game-Based Learning and Project-Based Learning with a healthy dose of competition to engage students of all ages with FISHING</p> <p>Area and Perimeter Tasks</p>

Students will demonstrate their knowledge of area and perimeter in these performance tasks.

[Area and Volume](#)

This project aims to enhance understanding in the concepts of area and volume in Grade 5 students.

[Class Village](#)

Students will need to explore and find their way through the maze. Collecting resources that they can use when it's time to build their village.

[Craft your Future – Renovation](#)

Minecraft. In this custom-built Minecraft world, students encounter a variety of problems that reflect construction challenges in cities today.

[Craft your Future – Refurbish](#)

In this custom-built Minecraft world, students encounter a variety of problems that reflect construction challenges in cities today.

[Decimal/Fraction Garden](#)

Students will demonstrate understanding a fractional and decimal relationships using a 10 x 10 garden.

[Exploring Systems of Measurement](#)

Students will use Minecraft to reimagine system of measurement in ancient China. Can you use the materials available in Minecraft to create a system of measurement similar to those used by people living in ancient China.

[Fraction World](#)

Based on a lesson plan submitted by another user, wold download available.

[How Fast Can you Go?](#)

Students will understand how challenging it was to walk for thousands of miles.

[Learning about Ratios via Minecraft](#)

In this mod, students will learn different ratio rules for a specific type of gameplay in Minecraft, and ensure that their code abides by those rules.

[Learning Economics with Minecraft: Choices, Costs, and Benefits](#)

Benefits, Choices, Costs, Decision Making, Opportunity Cost

[Minecraft I Skolan](#)

Allt fler skolor i Sverige använder Minecraft i skolan för att träna samarbete och kreativa lösningar på utmaningar

[Patterns and Motifs](#)

Students will understand patterns in history to identify information about how people lived, their beliefs, their surroundings and culture.

[Rainbow Skies](#)

This project shows how you can create a rainbow in Minecraft using code and the mathematical equation for a circle.

[Steve's New Home](#)

		<p>Steve has just arrived in a new land and has no-where to live. All he has with him is £300 to buy resources and build a new home.</p> <p>Take it or Leave it?</p> <p>Discerning what to take and leave behind is an important skills for students to gain.</p> <p>City Planning - Survival Roads</p> <p>Students will build roads that are 0.2 kilometers long and write equations to figure out how many blocks they will need.</p> <p>Crafting Fractions</p> <p>Students will observe crafting recipes, write them as fractions, and then use that knowledge to make an escape!</p> <p>Dividing Fractions Capture the Flag</p> <p>Build math models that represent dividing whole numbers with fractions. Then they will play capture the flag using the math models as obstacles.</p> <p>Fraction Capture the Flag</p> <p>Solve fraction problems, peer review math models based on solutions and use the models to play a mini-game.</p> <p>Fractions and Multiplication Video</p> <p>Observe and build math models that show patterns when multiplying numbers greater than, less than, or equal to 1. Create a video to show knowledge.</p> <p>Fraction Farm</p> <p>Explore math models of addition and subtraction problems with fractions then create a plan for a farm in Minecraft using what you've learned.</p> <p>Fractions in Minecraft</p> <p>Students will build math models that correspond to fraction operations and solve four to six problems per standard.</p> <p>Javelin Line Plots-3</p> <p>Students engage in a javelin throwing competition in Minecraft, plotting the distances and scores on line plot graphs in the game.</p> <p>Long Division in Minecraft</p> <p>Students will build long division math models in Minecraft and solve division problems on paper using the algorithm.</p> <p>Measurement Mini Game</p> <p>Students will play, examine, and create plans for a mini game that is 120 meters long and document their work.</p> <p>Minecraft Math Gladiators (MMG): Regrouping Obstacle Course</p> <p>Inside Minecraft Math Gladiators students will watch videos that will help them find strategies for regrouping.</p> <p>Minecraft Math Gladiators (MMG): Wither Battle Regrouping</p>
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		<p>Students take part in a gameshow mini game. Inside they will regroup numbers in Minecraft and work together to fight the Wither Boss.</p> <p>Multi Digit Multiplication</p> <p>Students will solve and build area models of multi digit multiplication problems.</p> <p>Decimal Dungeon – Part 1</p> <p>Decimal Dungeon – Part 2</p> <p>Decimal Dungeon – Part 3</p> <p>Decimal Dungeon – Part 4</p> <p>Decimal Dungeon – Part 5</p> <p>Explore the Decimal Dungeon in a five-part unit on Numbers & Operations in Base Ten where students observe and build math models to solve problems.</p> <p>Subtraction + Regrouping CTF</p> <p>Students will view and build math models of base 10 subtraction problems.</p> <p>Volume World</p> <p>Students will learn about volume by filling sandboxes, creating equations, and finding the total amount of block in rectangular prisms.</p>
111.5.b.1.C	<p>Select tools, including real objects, manipulatives, paper and pencil, and technology as appropriate, and techniques, including mental math, estimation, and number sense as appropriate, to solve problems.</p>	<p>American Flag Three-Act Math</p> <p>Welcome to the world of Three-Act Mathematics in Minecraft! Ask Questions, Work Collaboratively, and Build Understanding.</p> <p>Angler Arithmetic – Cool math!</p> <p>Gamify Math Class or use Game-Based Learning and Project-Based Learning with a healthy dose of competition to engage students of all ages with FISHING</p> <p>Area and Perimeter Tasks</p> <p>Students will demonstrate their knowledge of area and perimeter in these performance tasks.</p> <p>Area and Volume</p> <p>This project aims to enhance understanding in the concepts of area and volume in Grade 5 students.</p> <p>Class Village</p> <p>Students will need to explore and find their way through the maze. Collecting resources that they can use when it's time to build their village.</p> <p>Craft your Future – Renovation</p> <p>Minecraft. In this custom-built Minecraft world, students encounter a variety of problems that reflect construction challenges in cities today.</p> <p>Craft your Future – Refurbish</p> <p>In this custom-built Minecraft world, students encounter a variety of problems that reflect construction challenges in cities today.</p> <p>Decimal/Fraction Garden</p> <p>Students will demonstrate understanding a fractional and decimal relationships using a 10 x 10 garden.</p>

		<p>Exploring Systems of Measurement Students will use Minecraft to reimagine system of measurement in ancient China. Can you use the materials available in Minecraft to create a system of measurement similar to those used by people living in ancient China.</p> <p>Fraction World Based on a lesson plan submitted by another user, wold download available.</p> <p>How Fast Can you Go? Students will understand how challenging it was to walk for thousands of miles.</p> <p>Learning about Ratios via Minecraft In this mod, students will learn different ratio rules for a specific type of gameplay in Minecraft, and ensure that their code abides by those rules.</p> <p>Learning Economics with Minecraft: Choices, Costs, and Benefits Benefits, Choices, Costs, Decision Making, Opportunity Cost</p> <p>Minecraft I Skolan Allt fler skolor i Sverige använder Minecraft i skolan för att träna samarbete och kreativa lösningar på utmaningar</p> <p>Patterns and Motifs Students will understand patterns in history to identify information about how people lived, their beliefs, their surroundings and culture.</p> <p>Rainbow Skies This project shows how you can create a rainbow in Minecraft using code and the mathematical equation for a circle.</p> <p>Steve's New Home Steve has just arrived in a new land and has no-where to live. All he has with him is £300 to buy resources and build a new home.</p> <p>Take it or Leave it? Discerning what to take and leave behind is an important skills for students to gain.</p> <p>City Planning - Survival Roads Students will build roads that are 0.2 kilometers long and write equations to figure out how many blocks they will need.</p> <p>Crafting Fractions Students will observe crafting recipes, write them as fractions, and then use that knowledge to make an escape!</p> <p>Dividing Fractions Capture the Flag Build math models that represent dividing whole numbers with fractions. Then they will play capture the flag using the math models as obstacles.</p> <p>Fraction Capture the Flag</p>
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		<p>Solve fraction problems, peer review math models based on solutions and use the models to play a mini-game.</p> <p>Fractions and Multiplication Video</p> <p>Observe and build math models that show patterns when multiplying numbers greater than, less than, or equal to 1. Create a video to show knowledge.</p> <p>Fraction Farm</p> <p>Explore math models of addition and subtraction problems with fractions then create a plan for a farm in Minecraft using what you've learned.</p> <p>Fractions in Minecraft</p> <p>Students will build math models that correspond to fraction operations and solve four to six problems per standard.</p> <p>Javelin Line Plots-3</p> <p>Students engage in a javelin throwing competition in Minecraft, plotting the distances and scores on line plot graphs in the game.</p> <p>Long Division in Minecraft</p> <p>Students will build long division math models in Minecraft and solve division problems on paper using the algorithm.</p> <p>Measurement Mini Game</p> <p>Students will play, examine, and create plans for a mini game that is 120 meters long and document their work.</p> <p>Minecraft Math Gladiators (MMG): Regrouping Obstacle Course</p> <p>Inside Minecraft Math Gladiators students will watch videos that will help them find strategies for regrouping.</p> <p>Minecraft Math Gladiators (MMG): Wither Battle Regrouping</p> <p>Students take part in a gameshow mini game. Inside they will regroup numbers in Minecraft and work together to fight the Wither Boss.</p> <p>Multi Digit Multiplication</p> <p>Students will solve and build area models of multi digit multiplication problems.</p> <p>Decimal Dungeon – Part 1</p> <p>Decimal Dungeon – Part 2</p> <p>Decimal Dungeon – Part 3</p> <p>Decimal Dungeon – Part 4</p> <p>Decimal Dungeon – Part 5</p> <p>Explore the Decimal Dungeon in a five-part unit on Numbers & Operations in Base Ten where students observe and build math models to solve problems.</p> <p>Subtraction + Regrouping CTF</p> <p>Students will view and build math models of base 10 subtraction problems.</p> <p>Volume World</p>
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		<p>Students will learn about volume by filling sandboxes, creating equations, and finding the total amount of block in rectangular prisms.</p>
111.5.b.1.D	<p>Communicate mathematical ideas, reasoning, and their implications using multiple representations, including symbols, diagrams, graphs, and language as appropriate.</p>	<p>Crafting your Review Students learn more by teaching others, and having them create a review for content learned is a great way to get them thinking and problem-solving.</p> <p>Breaking Numbers Break down arrays and rebuild them in groups of equal numbers to understand how number families are the key to the multiplication and division.</p> <p>Build a Clock! Student will learn about how to read time by building a clock in Minecraft. They will do this by using command blocks with the testforblock and setblock commands. Then they will build a minecart ticker to start the clock and keep time.</p> <p>Build a Two-Step Word Problem Design and solve a two-step word problem by building it as scene in Minecraft.</p> <p>Two Step Word Problems Design and solve a two-step word problem by building it as scene in Minecraft.</p> <p>Build a Word Problem Students will use blocks in the game to solve multiplication or division word problems and then create a video to show understanding.</p> <p>Building Word Problems Build a scene in Minecraft that tells a story involving multiplication or division.</p> <p>Capture the Flag! Students will be able to build and explain Minecraft math models that show the relationship between equivalent fractions. Then add design purpose to their models by using them strategically in a mini-game.</p> <p>City Planning - Survival Roads Students will build roads that are 0.2 kilometers long and write equations to figure out how many blocks they will need.</p> <p>Classifying Quadrilaterals Define, build, and classify quadrilaterals then will peer review classmates' structures by labeling shapes with signs and documentation.</p> <p>Commutative Property Bed Wars Build Minecraft math models that represent the commutative property of multiplication and use them in a mini-game.</p> <p>Coordinate Planes in Minecraft Students will use coordinate planes to plot points and draw lines with basic functions within Minecraft.</p>

[Crafting Fractions](#)

Students will observe crafting recipes, write them as fractions, and then use that knowledge to make an escape!

[Dividing Fractions Capture the Flag](#)

Build math models that represent dividing whole numbers with fractions. Then they will play capture the flag using the math models as obstacles.

[Finding the Unknown](#)

Students construct math models in Minecraft to determine missing variables.

[Fraction Capture the Flag](#)

Solve fraction problems, peer review math models based on solutions and use the models to play a mini-game.

[Fractions and Multiplication Video](#)

Observe and build math models that show patterns when multiplying numbers greater than, less than, or equal to 1. Create a video to show knowledge.

[Fraction Farm](#)

Explore math models of addition and subtraction problems with fractions then create a plan for a farm in Minecraft using what you've learned.

[Javelin Line Plots-3](#)

Students engage in a javelin throwing competition in Minecraft, plotting the distances and scores on line plot graphs in the game.

[Lines, Angles, and Architecture](#)

Students study lines and angles and use them to design a facade of a building.

[Liquid Measurements](#)

Students will use the fill command to fill up a liter measuring cup. Then they will design an aquarium that is 1000 blocks or 1,000,000 liters. They will build the aquarium with the fill command and make a coral reef.

[Long Division in Minecraft](#)

Students will build long division math models in Minecraft and solve division problems on paper using the algorithm.

[Math Bed Wars 2!](#)

Students build and explain Minecraft math models that show the inverse relationship between multiplication and division and add design purpose to their models by using them strategically in a mini-game.

[Measurement Mini Game](#)

Students will play, examine, and create plans for a mini game that is 120 meters long and document their work.

[Measuring Angles and Building Bridges](#)

Students will explore parallel lines, perpendicular lines, acute angles, and obtuse angles and use this knowledge to design facades for buildings.

[Minecraft Math Gladiators \(MMG\): Base Ten Puzzles](#)

		<p>Students take part in a game show mini game. Inside they will learn how to solve problems using base-ten numerals.</p> <p>Minecraft Math Gladiators (MMG): Elytra Flight Rounding</p> <p>Solve Base 10 rounding math problems by playing the Minecraft Math Gladiators: Elytra Flight and Rounding mini-game.</p> <p>Minecraft Math Gladiators (MMG): Regrouping Obstacle Course</p> <p>Inside Minecraft Math Gladiators students will watch videos that will help them find strategies for regrouping.</p> <p>Minecraft Math Gladiators (MMG): Wither Battle Regrouping</p> <p>Students take part in a gameshow mini game. Inside they will regroup numbers in Minecraft and work together to fight the Wither Boss.</p> <p>Multi Digit Multiplication</p> <p>Students will solve and build area models of multi digit multiplication problems.</p> <p>Number Pattern Architecture</p> <p>Students explore math models to learn about arithmetic patterns and create towers in architectural designs.</p> <p>Number Patterns Algebra Architecture</p> <p>Students complete and document problems in Minecraft to find growth patterns and missing numbers then use a number pattern to build an architectural structure.</p> <p>Points, Lines, Rays, Segments, and Droppers</p> <p>Students will learn about 2D geometric figures by creating dropper games in Minecraft.</p> <p>Regrouping Video</p> <p>Students will be able to produce a video of them solving a three-digit addition and subtraction problem.</p> <p>Repeated Addition with Parkour</p> <p>Students analyze math models and build their own parkour course in Minecraft to demonstrate understanding.</p> <p>Decimal Dungeon – Part 1</p> <p>Decimal Dungeon – Part 2</p> <p>Decimal Dungeon – Part 3</p> <p>Decimal Dungeon – Part 4</p> <p>Decimal Dungeon – Part 5</p> <p>Explore the Decimal Dungeon in a five-part unit on Numbers & Operations in Base Ten where students observe and build math models to solve problems.</p> <p>Round Number Video</p> <p>Students demonstrate rounding by breaking and placing blocks in Minecraft. They then set up their own problem, creating a video to explain their rounding.</p> <p>Subtraction + Regrouping CTF</p>
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		<p>Students will view and build math models of base 10 subtraction problems.</p> <p>Survival City Making homes Part 1 Survival City Making homes Part 2 Survival City Making homes Part 3</p> <p>Design a prototype of a home and find the area and perimeter.</p> <p>Survival City Making Roads</p> <p>Students will design a prototype of a home. Then they use their knowledge of area and perimeter to find out how much and what kind of materials they will need to build it in survival.</p> <p>Survival City Part 2 Survival City Part 3</p> <p>Students will design a prototype of a home. Then they use their knowledge of area and perimeter to find out how much and what kind of materials they will need to build it in survival.</p> <p>Survival Olympics</p> <p>Students will fish, mine ores, and fight monsters. Then they will make and compare their activities to create bar graphs.</p> <p>Symmetry in Pixel Art</p> <p>Study and use lines of symmetry in pixel art. Design your own pixel art with a partner.</p> <p>Volume World</p> <p>Students will learn about volume by filling sandboxes, creating equations, and finding the total amount of block in rectangular prisms.</p>
111.5.b.1.E	Create and use representations to organize, record, and communicate mathematical ideas.	<p>Crafting your Review</p> <p>Students learn more by teaching others, and having them create a review for content learned is a great way to get them thinking and problem-solving.</p> <p>Breaking Numbers</p> <p>Break down arrays and rebuild them in groups of equal numbers to understand how number families are the key to the multiplication and division.</p> <p>Build a Clock!</p> <p>Student will learn about how to read time by building a clock in Minecraft. They will do this by using command blocks with the testforblock and setblock commands. Then they will build a minecart ticker to start the clock and keep time.</p> <p>Build a Two-Step Word Problem</p> <p>Design and solve a two-step word problem by building it as scene in Minecraft.</p> <p>Two Step Word Problems</p> <p>Design and solve a two-step word problem by building it as scene in Minecraft.</p> <p>Build a Word Problem</p>

		<p>Students will use blocks in the game to solve multiplication or division word problems and then create a video to show understanding.</p> <p>Building Word Problems</p> <p>Build a scene in Minecraft that tells a story involving multiplication or division.</p> <p>Capture the Flag!</p> <p>Students will be able to build and explain Minecraft math models that show the relationship between equivalent fractions. Then add design purpose to their models by using them strategically in a mini-game.</p> <p>City Planning - Survival Roads</p> <p>Students will build roads that are 0.2 kilometers long and write equations to figure out how many blocks they will need.</p> <p>Classifying Quadrilaterals</p> <p>Define, build, and classify quadrilaterals then will peer review classmates' structures by labeling shapes with signs and documentation.</p> <p>Commutative Property Bed Wars</p> <p>Build Minecraft math models that represent the commutative property of multiplication and use them in a mini-game.</p> <p>Coordinate Planes in Minecraft</p> <p>Students will use coordinate planes to plot points and draw lines with basic functions within Minecraft.</p> <p>Crafting Fractions</p> <p>Students will observe crafting recipes, write them as fractions, and then use that knowledge to make an escape!</p> <p>Dividing Fractions Capture the Flag</p> <p>Build math models that represent dividing whole numbers with fractions. Then they will play capture the flag using the math models as obstacles.</p> <p>Finding the Unknown</p> <p>Students construct math models in Minecraft to determine missing variables.</p> <p>Fraction Capture the Flag</p> <p>Solve fraction problems, peer review math models based on solutions and use the models to play a mini-game.</p> <p>Fractions and Multiplication Video</p> <p>Observe and build math models that show patterns when multiplying numbers greater than, less than, or equal to 1. Create a video to show knowledge.</p> <p>Fraction Farm</p> <p>Explore math models of addition and subtraction problems with fractions then create a plan for a farm in Minecraft using what you've learned.</p> <p>Javelin Line Plots-3</p>
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Students engage in a javelin throwing competition in Minecraft, plotting the distances and scores on line plot graphs in the game.

[Lines, Angles, and Architecture](#)

Students study lines and angles and use them to design a facade of a building.

[Liquid Measurements](#)

Students will use the fill command to fill up a liter measuring cup. Then they will design an aquarium that is 1000 blocks or 1,000,000 liters. They will build the aquarium with the fill command and make a coral reef.

[Long Division in Minecraft](#)

Students will build long division math models in Minecraft and solve division problems on paper using the algorithm.

[Math Bed Wars 2!](#)

Students build and explain Minecraft math models that show the inverse relationship between multiplication and division and add design purpose to their models by using them strategically in a mini-game.

[Measurement Mini Game](#)

Students will play, examine, and create plans for a mini game that is 120 meters long and document their work.

[Measuring Angles and Building Bridges](#)

Students will explore parallel lines, perpendicular lines, acute angles, and obtuse angles and use this knowledge to design facades for buildings.

[Minecraft Math Gladiators \(MMG\): Base Ten Puzzles](#)

Students take part in a game show mini game. Inside they will learn how to solve problems using base-ten numerals.

[Minecraft Math Gladiators \(MMG\): Elytra Flight Rounding](#)

Solve Base 10 rounding math problems by playing the Minecraft Math Gladiators: Elytra Flight and Rounding mini-game.

[Minecraft Math Gladiators \(MMG\): Regrouping Obstacle Course](#)

Inside Minecraft Math Gladiators students will watch videos that will help them find strategies for regrouping.

[Minecraft Math Gladiators \(MMG\): Wither Battle Regrouping](#)

Students take part in a gameshow mini game. Inside they will regroup numbers in Minecraft and work together to fight the Wither Boss.

[Multi Digit Multiplication](#)

Students will solve and build area models of multi digit multiplication problems.

[Number Pattern Architecture](#)

Students explore math models to learn about arithmetic patterns and create towers in architectural designs.

		<p>Number Patterns Algebra Architecture Students complete and document problems in Minecraft to find growth patterns and missing numbers then use a number pattern to build an architectural structure.</p> <p>Points, Lines, Rays, Segments, and Droppers Students will learn about 2D geometric figures by creating dropper games in Minecraft.</p> <p>Regrouping Video Students will be able to produce a video of them solving a three-digit addition and subtraction problem.</p> <p>Repeated Addition with Parkour Students analyze math models and build their own parkour course in Minecraft to demonstrate understanding.</p> <p>Decimal Dungeon – Part 1 Decimal Dungeon – Part 2 Decimal Dungeon – Part 3 Decimal Dungeon – Part 4 Decimal Dungeon – Part 5 Explore the Decimal Dungeon in a five-part unit on Numbers & Operations in Base Ten where students observe and build math models to solve problems.</p> <p>Round Number Video Students demonstrate rounding by breaking and placing blocks in Minecraft. They then set up their own problem, creating a video to explain their rounding.</p> <p>Subtraction + Regrouping CTF Students will view and build math models of base 10 subtraction problems.</p> <p>Survival City Making homes Part 1 Survival City Making homes Part 2 Survival City Making homes Part 3 Design a prototype of a home and find the area and perimeter.</p> <p>Survival City Making Roads Students will design a prototype of a home. Then they use their knowledge of area and perimeter to find out how much and what kind of materials they will need to build it in survival.</p> <p>Survival City Part 2 Survival City Part 3 Students will design a prototype of a home. Then they use their knowledge of area and perimeter to find out how much and what kind of materials they will need to build it in survival.</p> <p>Survival Olympics Students will fish, mine ores, and fight monsters. Then they will make and compare their activities to create bar graphs.</p> <p>Symmetry in Pixel Art</p>
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		<p>Study and use lines of symmetry in pixel art. Design your own pixel art with a partner.</p> <p>Volume World</p> <p>Students will learn about volume by filling sandboxes, creating equations, and finding the total amount of block in rectangular prisms.</p>
111.5.b.1.F	Analyze mathematical relationships to connect and communicate mathematical ideas.	<p>Build a Two-Step Word Problem</p> <p>Design and solve a two-step word problem by building it as scene in Minecraft.</p> <p>Two Step Word Problems</p> <p>Design and solve a two-step word problem by building it as scene in Minecraft.</p> <p>Build a Word Problem</p> <p>Students will use blocks in the game to solve multiplication or division word problems and then create a video to show understanding.</p> <p>Capture the Flag!</p> <p>Students will be able to build and explain Minecraft math models that show the relationship between equivalent fractions. Then add design purpose to their models by using them strategically in a mini-game.</p> <p>Commutative Property Bed Wars</p> <p>Build Minecraft math models that represent the commutative property of multiplication and use them in a mini-game.</p> <p>Fraction Pixel Art</p> <p>Using a pixel art editor (or graph paper) students design an artwork, then break down the colors into fractions, discuss number patterns and unit fractions, then build their designs in Minecraft.</p> <p>Fractions Steeplechase</p> <p>Students will build and explain Minecraft math models that show fractions, improper fractions, and mixed numbers on number lines, then use number lines to create jumps for a horse race.</p> <p>Long Division in Minecraft</p> <p>Students will build long division math models in Minecraft and solve division problems on paper using the algorithm.</p> <p>Math Bed Wars 2!</p> <p>Students build and explain Minecraft math models that show the inverse relationship between multiplication and division and add design purpose to their models by using them strategically in a mini-game.</p> <p>Minecraft Math Gladiators (MMG): Regrouping Obstacle Course</p> <p>Inside Minecraft Math Gladiators students will watch videos that will help them find strategies for regrouping.</p> <p>Repeated Addition with Parkour</p>

		<p>Students analyze math models and build their own parkour course in Minecraft to demonstrate understanding.</p> <p>Decimal Dungeon – Part 2</p> <p>Explore the Decimal Dungeon in a five-part unit on Numbers & Operations in Base Ten where students observe and build math models to solve problems.</p> <p>Survival City Making homes Part 2</p> <p>Survival City Making homes Part 3</p> <p>Design a prototype of a home and find the area and perimeter.</p> <p>Survival Olympics</p> <p>Students will fish, mine ores, and fight monsters. Then they will make and compare their activities to create bar graphs.</p>
111.5.b.1.G	Display, explain, and justify mathematical ideas and arguments using precise mathematical language in written or oral communication.	<p>Breaking Numbers</p> <p>Break down arrays and rebuild them in groups of equal numbers to understand how number families are the key to the multiplication and division.</p> <p>Building Word Problems</p> <p>Build a scene in Minecraft that tells a story involving multiplication or division.</p> <p>Crafting Fractions</p> <p>Students will observe crafting recipes, write them as fractions, and then use that knowledge to make an escape!</p> <p>Dividing Fractions Capture the Flag</p> <p>Build math models that represent dividing whole numbers with fractions. Then they will play capture the flag using the math models as obstacles.</p> <p>Finding the Unknown</p> <p>Students construct math models in Minecraft to determine missing variables.</p> <p>Fraction Capture the Flag</p> <p>Solve fraction problems, peer review math models based on solutions and use the models to play a mini-game.</p> <p>Fractions and Multiplication Video</p> <p>Observe and build math models that show patterns when multiplying numbers greater than, less than, or equal to 1. Create a video to show knowledge.</p> <p>Regrouping Video</p> <p>Students will be able to produce a video of them solving a three-digit addition and subtraction problem.</p> <p>Round Number Video</p> <p>Students demonstrate rounding by breaking and placing blocks in Minecraft. They then set up their own problem, creating a video to explain their rounding.</p>

NUMBERS AND OPERATIONS

STANDARD	DESCRIPTION	ACTIVITY
The student applies mathematical process standards to represent and compare whole numbers and understand relationships related to place value. The student is expected to:		
111.5.b.2.A	Compose and decompose numbers up to 100,000 as a sum of so many ten thousands, so many thousands, so many hundreds, so many tens, and so many ones using objects, pictorial models, and numbers, including expanded notation as appropriate.	Minecraft Math Gladiators (MMG): Base Ten Puzzles Students take part in a game show mini game. Inside they will learn how to solve problems using base-ten numerals.
111.5.b.2.B	Describe the mathematical relationships found in the base-10 place value system through the hundred thousands place.	Minecraft Math Gladiators (MMG): Elytra Flight Rounding Solve Base 10 rounding math problems by playing the Minecraft Math Gladiators: Elytra Flight and Rounding mini-game.
111.5.b.2.C	Represent a number on a number line as being between two consecutive multiples of 10; 100; 1,000; or 10,000 and use words to describe relative size of numbers in order to round whole numbers.	Minecraft Math Gladiators (MMG): Elytra Flight Rounding Solve Base 10 rounding math problems by playing the Minecraft Math Gladiators: Elytra Flight and Rounding mini-game.
111.5.b.2.D	Compare and order whole numbers up to 100,000 and represent comparisons using the symbols $>$, $<$, or $=$.	Minecraft Math Gladiators (MMG): Base Ten Puzzles Students take part in a game show mini game. Inside they will learn how to solve problems using base-ten numerals.
The student applies mathematical process standards to represent and explain fractional units. The student is expected to:		
111.5.b.3.A	Represent fractions greater than zero and less than or equal to one with denominators of 2, 3, 4, 6, and 8 using concrete objects and pictorial models, including strip diagrams and number lines.	American Flag Three-Act Math Welcome to the world of Three-Act Mathematics in Minecraft! Ask Questions, Work Collaboratively, and Build Understanding. Decimal/Fraction Garden Students will demonstrate understanding a fractional and decimal relationships using a 10 x 10 garden. Fraction Stories Have students discover fractions in real life settings and have them communicate their findings through fraction stories. Fraction World Based on a lesson plan submitted by another user, wold download available. Fractions Steeplechase Students will build and explain Minecraft math models that show fractions, improper fractions, and mixed numbers on number lines, then use number lines to create jumps for a horse race. Javelin Line Plots Students will throw 10 tridents and track their distance on a line plot graph. Shapes From Shapes Enter the Math Model Exhibition World, examine math models, and find the fraction for each piece. Next they will be asked to make a shape made out of smaller equal

		size pieces. Last they will recreate their partners work using different size pieces.
111.5.b.3.B	Determine the corresponding fraction greater than zero and less than or equal to one with denominators of 2, 3, 4, 6, and 8 given a specified point on a number line.	Fractions Steeplechase Students will build and explain Minecraft math models that show fractions, improper fractions, and mixed numbers on number lines, then use number lines to create jumps for a horse race. Javelin Line Plots Students will throw 10 tridents and track their distance on a line plot graph.
111.5.b.3.C	Explain that the unit fraction $1/b$ represents the quantity formed by one part of a whole that has been partitioned into b equal parts where b is a non-zero whole number.	American Flag Three-Act Math Welcome to the world of Three-Act Mathematics in Minecraft! Ask Questions, Work Collaboratively, and Build Understanding. Decimal/Fraction Garden Students will demonstrate understanding a fractional and decimal relationships using a 10 x 10 garden. Fraction Stories Have students discover fractions in real life settings and have them communicate their findings through fraction stories. Fraction World Based on a lesson plan submitted by another user, wold download available. Shapes From Shapes Enter the Math Model Exhibition World, examine math models, and find the fraction for each piece. Next they will be asked to make a shape made out of smaller equal size pieces. Last they will recreate their partners work using different size pieces. Symmetry in Pixel Art Study and use lines of symmetry in pixel art. Design your own pixel art with a partner.
111.5.b.3.D	Compose and decompose a fraction a/b with a numerator greater than zero and less than or equal to b as a sum of parts $1/b$.	N/A
111.5.b.3.E	Solve problems involving partitioning an object or a set of objects among two or more recipients using pictorial representations of fractions with denominators of 2, 3, 4, 6, and 8.	Breaking Numbers Break down arrays and rebuild them in groups of equal numbers to understand how number families are the key to the multiplication and division. Finding the Unknown Students construct math models in Minecraft to determine missing variables.
111.5.b.3.F	Represent equivalent fractions with denominators of 2, 3, 4, 6, and 8 using a variety of objects and pictorial models, including number lines.	Decimal/Fraction Garden Students will demonstrate understanding a fractional and decimal relationships using a 10 x 10 garden. Capture the Flag! Students will be able to build and explain Minecraft math models that show the relationship between equivalent

		<p>fractions. Then add design purpose to their models by using them strategically in a mini-game.</p> <p>Fractions in Minecraft</p> <p>Students will build math models that correspond to fraction operations and solve four to six problems per standard.</p> <p>Fractions Steeplechase</p> <p>Students will build and explain Minecraft math models that show fractions, improper fractions, and mixed numbers on number lines, then use number lines to create jumps for a horse race.</p> <p>Measuring Landforms</p> <p>Students will choose and name their own length of measurement. Then they will get into a world and measure different kinds land features.</p>
111.5.b.3.G	<p>Explain that two fractions are equivalent if and only if they are both represented by the same point on the number line or represent the same portion of a same size whole for an area model.</p>	<p>Decimal/Fraction Garden</p> <p>Students will demonstrate understanding a fractional and decimal relationships using a 10 x 10 garden.</p> <p>Capture the Flag!</p> <p>Students will be able to build and explain Minecraft math models that show the relationship between equivalent fractions. Then add design purpose to their models by using them strategically in a mini-game.</p> <p>Fractions in Minecraft</p> <p>Students will build math models that correspond to fraction operations and solve four to six problems per standard.</p> <p>Fractions Steeplechase</p> <p>Students will build and explain Minecraft math models that show fractions, improper fractions, and mixed numbers on number lines, then use number lines to create jumps for a horse race.</p> <p>Measuring Landforms</p> <p>Students will choose and name their own length of measurement. Then they will get into a world and measure different kinds land features.</p>
111.5.b.3.H	<p>Compare two fractions having the same numerator or denominator in problems by reasoning about their sizes and justifying the conclusion using symbols, words, objects, and pictorial models.</p>	<p>Fraction Stories</p> <p>Have students discover fractions in real life settings and have them communicate their findings through fraction stories.</p> <p>Capture the Flag!</p> <p>Students will be able to build and explain Minecraft math models that show the relationship between equivalent fractions. Then add design purpose to their models by using them strategically in a mini-game.</p> <p>Fractions in Minecraft</p> <p>Students will build math models that correspond to fraction operations and solve four to six problems per standard.</p> <p>Fraction Pixel Art</p>

		<p>Using a pixel art editor (or graph paper) students design an artwork, then break down the colors into fractions, discuss number patterns and unit fractions, then build their designs in Minecraft.</p> <p>Fractions Steeplechase</p> <p>Students will build and explain Minecraft math models that show fractions, improper fractions, and mixed numbers on number lines, then use number lines to create jumps for a horse race.</p> <p>Javelin Line Plots</p> <p>Students will throw 10 tridents and track their distance on a line plot graph.</p>
<p>The student applies mathematical process standards to develop and use strategies and methods for whole number computations in order to solve problems with efficiency and accuracy. The student is expected to:</p>		
111.5.b.4.A	Solve with fluency one-step and two-step problems involving addition and subtraction within 1,000 using strategies based on place value, properties of operations, and the relationship between addition and subtraction.	<p>Angler Arithmetic – Cool math!</p> <p>Gamify Math Class or use Game-Based Learning and Project-Based Learning with a healthy dose of competition to engage students of all ages with FISHING</p> <p>Steve’s New Home</p> <p>Steve has just arrived in a new land and has no-where to live. All he has with him is £300 to buy resources and build a new home.</p>
111.5.b.4.B	Round to the nearest 10 or 100 or use compatible numbers to estimate solutions to addition and subtraction problems.	<p>Minecraft Math Gladiators (MMG): Elytra Flight Rounding</p> <p>Solve Base 10 rounding math problems by playing the Minecraft Math Gladiators: Elytra Flight and Rounding mini-game.</p> <p>Round Number Video</p> <p>Students demonstrate rounding by breaking and placing blocks in Minecraft. They then set up their own problem, creating a video to explain their rounding.</p>
111.5.b.4.C	Determine the value of a collection of coins and bills.	<p>Steve’s New Home</p> <p>Steve has just arrived in a new land and has no-where to live. All he has with him is £300 to buy resources and build a new home.</p>
111.5.b.4.D	Determine the total number of objects when equally-sized groups of objects are combined or arranged in arrays up to 10 by 10	<p>Decimal/Fraction Garden</p> <p>Students will demonstrate understanding a fractional and decimal relationships using a 10 x 10 garden.</p> <p>Multi Digit Multiplication</p> <p>Students will solve and build area models of multi digit multiplication problems.</p> <p>Decimal Dungeon – Part 3</p> <p>Explore the Decimal Dungeon in a five-part unit on Numbers & Operations in Base Ten where students observe and build math models to solve problems.</p> <p>Survival City Part 2</p> <p>Survival City Part 3</p> <p>Students will design a prototype of a home. Then they use their knowledge of area and perimeter to find out how much and what kind of materials they will need to build it in survival.</p>

111.5.b.4.E	Represent multiplication facts by using a variety of approaches such as repeated addition, equal-sized groups, arrays, area models, equal jumps on a number line, and skip counting.	Decimal/Fraction Garden Students will demonstrate understanding a fractional and decimal relationships using a 10 x 10 garden. Multi Digit Multiplication Students will solve and build area models of multi digit multiplication problems. Decimal Dungeon – Part 3 Explore the Decimal Dungeon in a five-part unit on Numbers & Operations in Base Ten where students observe and build math models to solve problems. Survival City Making Roads Students will design a prototype of a home. Then they use their knowledge of area and perimeter to find out how much and what kind of materials they will need to build it in survival. Survival City Part 2 Survival City Part 3 Students will design a prototype of a home. Then they use their knowledge of area and perimeter to find out how much and what kind of materials they will need to build it in survival.
111.5.b.4.F	Recall facts to multiply up to 10 by 10 with automaticity and recall the corresponding division facts.	N/A
111.5.b.4.G	Use strategies and algorithms, including the standard algorithm, to multiply a two-digit number by a one-digit number. Strategies may include mental math, partial products, and the commutative, associative, and distributive properties.	Math Bed Wars 2! Students build and explain Minecraft math models that show the inverse relationship between multiplication and division and add design purpose to their models by using them strategically in a mini-game.
111.5.b.4.H	Determine the number of objects in each group when a set of objects is partitioned into equal shares or a set of objects is shared equally.	Breaking Numbers Break down arrays and rebuild them in groups of equal numbers to understand how number families are the key to the multiplication and division. Finding the Unknown Students construct math models in Minecraft to determine missing variables.
111.5.b.4.I	Determine if a number is even or odd using divisibility rules.	N/A
111.5.b.4.J	Determine a quotient using the relationship between multiplication and division	Build a Word Problem Students will use blocks in the game to solve multiplication or division world problems and then create a video to show understanding. Finding the Unknown Students construct math models in Minecraft to determine missing variables.
111.5.b.4.K	Solve one-step and two-step problems involving multiplication and division within 100 using strategies based on objects; pictorial models,	Breaking Numbers Break down arrays and rebuild them in groups of equal numbers to understand how number families are the key to the multiplication and division.

	including arrays, area models, and equal groups; properties of operations; or recall of facts.	Finding the Unknown Students construct math models in Minecraft to determine missing variables. Multi Digit Multiplication Students will solve and build area models of multi digit multiplication problems. Survival City Making Roads Students will design a prototype of a home. Then they use their knowledge of area and perimeter to find out how much and what kind of materials they will need to build it in survival.
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ALGEBRAIC REASONING

STANDARD	DESCRIPTION	ACTIVITY
The student applies mathematical process standards to analyze and create patterns and relationships. The student is expected to		
111.5.b.5.A	Represent one- and two-step problems involving addition and subtraction of whole numbers to 1,000 using pictorial models, number lines, and equations.	N/A
111.5.b.5.B	Represent and solve one- and two-step multiplication and division problems within 100 using arrays, strip diagrams, and equations.	N/A
111.5.b.5.C	Describe a multiplication expression as a comparison such as 3×24 represents 3 times as much as 24.	Build a Two-Step Word Problem Design and solve a two-step word problem by building it as scene in Minecraft. Two Step Word Problems Design and solve a two-step word problem by building it as scene in Minecraft. Build a Word Problem Students will use blocks in the game to solve multiplication or division word problems and then create a video to show understanding. Building Word Problems Build a scene in Minecraft that tells a story involving multiplication or division. Commutative Property Bed Wars Build Minecraft math models that represent the commutative property of multiplication and use them in a mini-game. Math Bed Wars 2! Students build and explain Minecraft math models that show the inverse relationship between multiplication and division and add design purpose to their models by using them strategically in a mini-game. Number Patterns Algebra Architecture

		Students complete and document problems in Minecraft to find growth patterns and missing numbers then use a number pattern to build an architectural structure. Repeated Addition with Parkour Students analyze math models and build their own parkour course in Minecraft to demonstrate understanding.
111.5.b.5.D	Determine the unknown whole number in a multiplication or division equation relating three whole numbers when the unknown is either a missing factor or product.	Finding the Unknown Students construct math models in Minecraft to determine missing variables.
111.5.b.5.E	Represent real-world relationships using number pairs in a table and verbal descriptions.	N/A

GEOMETRY AND MEASUREMENT

STANDARD	DESCRIPTION	ACTIVITY
The student applies mathematical process standards to analyze attributes of two-dimensional geometric figures to develop generalizations about their properties. The student is expected to:		
111.5.b.6.A	Classify and sort two- and three-dimensional figures, including cones, cylinders, spheres, triangular and rectangular prisms, and cubes, based on attributes using formal geometric language.	Area Functions In this lesson, you will be challenged to write code to make quadrilaterals that you have made by hand in Minecraft. Cubic Units In this lesson, students will create shapes using code and then determine the number of cubic units that combined shapes would make. Patterns and Motifs Students will understand patterns in history to identify information about how people lived, their beliefs, their surroundings and culture. Capture the Flag (Quadrilateral Capture the Flag) Compare, contrast and define different quadrilaterals. Build them on the map to play the capture the flag mini-game. Classifying Quadrilaterals Define, build, and classify quadrilaterals then will peer review classmates' structures by labeling shapes with signs and documentation.
111.5.b.6.B	Use attributes to recognize rhombuses, parallelograms, trapezoids, rectangles, and squares as examples of quadrilaterals and draw examples of quadrilaterals that do not belong to any of these subcategories.	Capture the Flag (Quadrilateral Capture the Flag) Compare, contrast and define different quadrilaterals. Build them on the map to play the capture the flag mini-game. Classifying Quadrilaterals Define, build, and classify quadrilaterals then will peer review classmates' structures by labeling shapes with signs and documentation. Lines, Angles, and Architecture

		Students study lines and angles and use them to design a facade of a building.
111.5.b.6.C	Determine the area of rectangles with whole number side lengths in problems using multiplication related to the number of rows times the number of unit squares in each row.	<p>Area and Perimeter Tasks</p> <p>Students will demonstrate their knowledge of area and perimeter in these performance tasks.</p> <p>Area and Volume</p> <p>This project aims to enhance understanding in the concepts of area and volume in Grade 5 students.</p> <p>Area Functions</p> <p>In this lesson, you will be challenged to write code to make quadrilaterals that you have made by hand in Minecraft.</p> <p>Class Village</p> <p>Students will need to explore and find their way through the maze. Collecting resources that they can use when it's time to build their village.</p> <p>Survival City Making homes Part 1</p> <p>Survival City Making homes Part 2</p> <p>Survival City Making homes Part 3</p> <p>Design a prototype of a home and find the area and perimeter.</p> <p>Survival City Part 2</p> <p>Survival City Part 3</p> <p>Students will design a prototype of a home. Then they use their knowledge of area and perimeter to find out how much and what kind of materials they will need to build it in survival.</p>
111.5.b.6.D	Decompose composite figures formed by rectangles into non-overlapping rectangles to determine the area of the original figure using the additive property of area.	N/A
111.5.b.6.E	Decompose two congruent two-dimensional figures into parts with equal areas and express the area of each part as a unit fraction of the whole and recognize that equal shares of identical wholes need not have the same shape.	N/A
The student applies mathematical process standards to select appropriate units, strategies, and tools to solve problems involving customary and metric measurement. The student is expected to:		
111.5.b.7.A	Represent fractions of halves, fourths, and eighths as distances from zero on a number line.	<p>Fractions Steeplechase</p> <p>Students will build and explain Minecraft math models that show fractions, improper fractions, and mixed numbers on number lines, then use number lines to create jumps for a horse race.</p> <p>Javelin Line Plots</p> <p>Students will throw 10 tridents and track their distance on a line plot graph.</p>
111.5.b.7.B	Determine the perimeter of a polygon or a missing length when given perimeter and remaining side lengths in problems.	<p>Area and Perimeter Tasks</p> <p>Students will demonstrate their knowledge of area and perimeter in these performance tasks.</p> <p>Area and Volume</p>

		<p>This project aims to enhance understanding in the concepts of area and volume in Grade 5 students.</p> <p>Area Functions</p> <p>In this lesson, you will be challenged to write code to make quadrilaterals that you have made by hand in Minecraft.</p> <p>Class Village</p> <p>Students will need to explore and find their way through the maze. Collecting resources that they can use when it's time to build their village.</p> <p>Survival City Making homes Part 1</p> <p>Survival City Making homes Part 2</p> <p>Survival City Making homes Part 3</p> <p>Design a prototype of a home and find the area and perimeter.</p> <p>Survival City Part 2</p> <p>Survival City Part 3</p> <p>Students will design a prototype of a home. Then they use their knowledge of area and perimeter to find out how much and what kind of materials they will need to build it in survival.</p>
111.5.b.7.C	Determine the solutions to problems involving addition and subtraction of time intervals in minutes using pictorial models or tools such as a 15-minute event plus a 30-minute event equals 45 minutes.	<p>Exploring Systems of Measurement</p> <p>Students will use Minecraft to reimagine system of measurement in ancient China. Can you use the materials available in Minecraft to create a system of measurement similar to those used by people living in ancient China.</p> <p>How Fast Can you Go?</p> <p>Students will understand how challenging it was to walk for thousands of miles.</p> <p>Build a Clock!</p> <p>Student will learn about how to read time by building a clock in Minecraft. They will do this by using command blocks with the testforblock and setblock commands. Then they will build a minecart ticker to start the clock and keep time.</p>
111.5.b.7.D	Determine when it is appropriate to use measurements of liquid volume (capacity) or weight.	<p>Take it or Leave it?</p> <p>Discerning what to take and leave behind is an important skills for students to gain.</p>
111.5.b.7.E	Determine liquid volume (capacity) or weight using appropriate units and tools.	<p>Take it or Leave it?</p> <p>Discerning what to take and leave behind is an important skills for students to gain.</p> <p>Liquid Measurements</p> <p>Students will use the fill command to fill up a liter measuring cup. Then they will design an aquarium that is 1000 blocks or 1,000,000 liters. They will build the aquarium with the fill command and make a coral reef.</p>

DATA ANALYSIS

STANDARD	DESCRIPTION	ACTIVITY
The student applies mathematical process standards to solve problems by collecting, organizing, displaying, and interpreting data. The student is expected to:		
111.5.b.8.A	Summarize a data set with multiple categories using a frequency table, dot plot, pictograph, or bar graph with scaled intervals.	Javelin Line Plots Students will throw 10 tridents and track their distance on a line plot graph. Javelin Line Plots-3 Students engage in a javelin throwing competition in Minecraft, plotting the distances and scores on line plot graphs in the game. Survival Olympics Students will fish, mine ores, and fight monsters. Then they will make and compare their activities to create bar graphs.
111.5.b.8.B	Solve one- and two-step problems using categorical data represented with a frequency table, dot plot, pictograph, or bar graph with scaled intervals.	Javelin Line Plots Students will throw 10 tridents and track their distance on a line plot graph. Javelin Line Plots-3 Students engage in a javelin throwing competition in Minecraft, plotting the distances and scores on line plot graphs in the game. Survival Olympics Students will fish, mine ores, and fight monsters. Then they will make and compare their activities to create bar graphs.

PERSONAL FINANCIAL LITERACY

STANDARD	DESCRIPTION	ACTIVITY
The student applies mathematical process standards to manage one's financial resources effectively for lifetime financial security. The student is expected to:		
111.5.b.9.A	Explain the connection between human capital/labor and income.	N/A
111.5.b.9.B	Describe the relationship between the availability or scarcity of resources and how that impacts cost.	N/A
111.5.b.9.C	Identify the costs and benefits of planned and unplanned spending decisions.	Steve's New Home Steve has just arrived in a new land and has no-where to live. All he has with him is £300 to buy resources and build a new home.
111.5.b.9.D	Explain that credit is used when wants or needs exceed the ability to pay and that it is the borrower's responsibility to pay it back to the lender, usually with interest.	N/A
111.5.b.9.E	List reasons to save and explain the benefit of a savings plan, including for college.	N/A
111.5.b.9.F	Identify decisions involving income, spending, saving, credit, and charitable giving.	N/A

