## Carnegie Learning Curriculum <br> Course 3

## Module 1:Transforming Geometric Objects <br> Topic 1

Rigid Motion Transformations
August 17- September 11

| Lesson 1 | Lesson 2 | Lesson 3 | Lesson 4 | Lesson 5 |
| :---: | :---: | :---: | :---: | :---: |
| Introduction to Congruent Figures | Intro to Rigid Motions | Translations of Figures on the Coordinate Plane | Reflections of Figures on the Coordinate Plane | Rotations of Figures on the Coordinate Plane |
| 1 synchronous day | 2 synchronous days | 2 synchronous days | 2 synchronous days | 2 synchronous days |
| Standards: $\text { 8.G.1a, b, 8.G. } 2$ | Standards: $\text { 8.G.1, } 2$ | Standards: $\text { 8.G.2, 8.G. } 3$ | Standards: $\text { 8.G.2, 8.G. } 3$ | Standards: $\text { 8.G.2, 8.G. } 3$ |
| Lesson 6 <br> Combining Rigid Motions | Review | Assessment | Asynchronous Days: <br> - Complete Unfinished Work <br> - Mathia- 5 workspaces <br> - Imagine Math <br> - Assessments <br> - Other Practice |  |
| 2 synchronous days | 1 synchronous day | 1 asynchronous day |  |  |
| Standards: $\text { 8.G.2, 8.G. } 3$ |  |  |  |  |

## Topic 2

Similarity
September 14- September 18

| Lesson 2 | Lesson 3 | Asynchronous Days: |
| :---: | :---: | :---: |
| Dilating Figures on a | Mapping Similar Figures Using | - Complete Unfinished Work |
| Coordinate Plane | Transformations | - Mathia- 5 workspaces <br> - Imagine Math |
| 2 synchronous days | 1 synchronous day | - Assessments <br> - Other Practice |
| Standard: $\text { 8.G.3, } 4$ | Standard: $\text { 8.G. } 3$ |  |

## Topic 3

Line and Angle Relationships
September 21-September 30

| Lesson 1 | Lesson 2 | Lesson 3 | Review | Assessment |
| :---: | :---: | :---: | :---: | :---: |
| Triangle Sum and | Angle Relationships Formed | The Angle-Angle |  |  |
| Exterior Angle | by Lines Intersected by a | Similarity Theorem |  |  |
| Theorems | Transversal |  |  |  |
| 1 synchronous day | 2 synchronous days | 1 synchronous day |  | 1 asynchronous day |
| Standards: 8.G.3,4 | Standards: 8.G.3,4,5 | Standards: $\text { 8.G.4, } 5$ |  |  |
| Asynchronous Days: |  |  |  |  |
| - Complete Unfinished Work |  |  |  |  |
| - Mathia- 7 workspaces |  |  |  |  |
| - Imagine Math |  |  |  |  |
| - Assessments |  |  |  |  |
| - Other Practice |  |  |  |  |

## Carnegie Learning Curriculum Course 3

## Module 2: Developing Functional Foundations

Topic 1
From Proportions to Linear Relationships

| October 1- October 16 |  |  |  |
| :---: | :---: | :---: | :---: |
| Lesson 1 <br> Representations of Proportional Relationships <br> 1 synchronous day <br> Standard: <br> 8.EE. 5 | Lesson 2 <br> Using Similar Triangles to Describe the Steepness of a line <br> 2 synchronous days <br> Standards: <br> 8.EE.5, 8.EE. 6 | Lesson 3 <br> Exploring Slopes Using Similar Triangles <br> 1 synchronous day <br> Standards: <br> 8.EE. 6 | Lesson 4 <br> Transformations of Lines <br> 2 synchronous days <br> Standards: <br> 8.EE.6, 8.G. 1 |
| Review 1 synchronous day | Assessment 1 asynchronous period | Asynchronous Days: <br> - Complete Unfinished Work <br> - Mathia- 7 workspaces <br> - Imagine Math <br> - Assessments <br> - Other Practice |  |

## Topic 2

Linear Relationships
October 19- November 20

| Lesson 1 | Lesson 2 | Lesson 3 | Lesson 4 | Lesson 5 |
| :---: | :---: | :---: | :---: | :---: |
| Using Tables, Graphs, and Equations | Linear Relationships in Tables | Linear Relationships in Contexts | Slope-Intercept Form of a Line | Point-Slope Form |
| 2 synchronous days | 2 synchronous days | 2 synchronous day | 2 synchronous days | 2 synchronous days |
| Standard: <br> 8.F. 4 | Standard: <br> 8.F. 4 | Standard: <br> 8.F. 4 | Standard: $\text { 8.F. } 4$ | Standard: $\text { 8.F. } 4$ |
| Lesson 6 <br> Using Linear Equations <br> 2 synchronous days <br> Standard: <br> 8.F. 4 | Review <br> 1 synchronous day | Assessment <br> 1 asynchronous day | Asynchronous Days: <br> - Complete Unfinis <br> - Mathia- 14 works <br> - Imagine Math <br> - Assessments <br> - Other Practice | ed Work aces |

## Topic 3

Introduction to Functions
November 30- December 18

| Lesson 1 | Lesson 2 | Lesson 3 | Lesson 4 | Lesson 5 |
| :---: | :---: | :---: | :---: | :---: |
| Analyzing Sequences as Rules | Analyzing the Characteristics of Graphs of Relationships | Defining Functional Relationships | Describing Functions | Comparing Functions using Different Representations |
| 1 synchronous day | 2 synchronous days | 2 synchronous days | 1 synchronous day | 1 synchronous day |
| Standard: $\text { 8.F. } 1$ | Standard: <br> 8.F. 5 | Standard: <br> 8.F. 1 | Standards: $\text { 8.F.3, 4, } 5$ | Standard: $\text { 8.F. } 2$ |
| Review <br> 1 synchronous day | Assessment <br> 1 asynchronous day | Asynchronous Days: <br> - Complete Unfinished Work <br> - Mathia- 5 workspaces <br> - Imagine Math <br> - Assessments <br> - Other Practice |  |  |

## Topic 4

## Patterns in Bivariate Data

January 11- February 2

| Lesson 1 <br> Analyzing Patterns in Scatter Plots <br> 2 synchronous days <br> Standard: <br> 8.SP. 1 | Lesson 2 <br> Drawing Lines of Best Fit <br> 1 synchronous day <br> Standard: <br> 8.SP.2, 3 | Lesson 3 <br> Analyzing Lines of Best Fit <br> 2 synchronous days <br> Standard: <br> 8.SP.2,3 | Lesson 5 Two Way Tables <br> 2 synchronous day <br> Standard: <br> 8.SP. 4 | Review <br> 1 synchronous day |
| :---: | :---: | :---: | :---: | :---: |
| Assessment <br> 1 asynchronous day | Asynchronous Days: <br> - Complete Unfinished Work <br> - Mathia- 6 workspaces <br> - Imagine Math <br> - Assessments <br> - Other Practice |  |  |  |

## Carnegie Learning Curriculum Course 3

## Module 3: Modeling Linear Equations

Topic 1
Solving Linear Equations
February 3- February 16

| Lesson 1 | Lesson 2 | Lesson 3 | Review | Assessment |
| :--- | :--- | :--- | :--- | :--- |
| Equations with | Analyzing and Solving | Creating Linear |  |  |
| Variables on Both Sides | Linear Equations | Equations |  |  |
| 2 synchronous days | 2 synchronous days | 1 synchronous day | 1 synchronous day | 1 asynchronous day |
| Standard: | Standard: | Standard: |  |  |
| 8.EE.7b | $8 . E E .7 \mathrm{a}$ | $8 . E E .7 \mathrm{a}, \mathrm{b}$ |  |  |

Asynchronous Days:

- Complete Unfinished Work
- Mathia- 15 workspaces
- Imagine Math
- Assessments
- Other Practice


## Topic 2

Systems of Linear Equations

## February 17- March 5

| Lesson 1 <br> Point of Intersection of Linear Graphs <br> 2 synchronous days <br> Standard: <br> 8.EE.8a | Lesson 2 <br> Systems of Linear Equations <br> 2 synchronous days <br> Standard: <br> 8.EE.8b | Lesson 3 <br> Using Substitution to Solve a Linear System <br> 1 synchronous day <br> Standard: <br> 8.EE.8a, b, c | Lesson 4 <br> Choosing a Method to Solve a Linear System <br> 2 synchronous days <br> Standard: <br> 8.EE.8a, b, c | Review <br> 1 synchronous day |
| :---: | :---: | :---: | :---: | :---: |
| Assessment <br> 1 asynchronous day | Asynchronous Days: <br> - Complete Unfinished Work <br> - Mathia- 4 workspaces <br> - Imagine Math <br> - Assessments <br> - Other Practice |  |  |  |

## Carnegie Learning Curriculum Course 3

Module 4: Expanding Number Systems

Topic 1<br>The Real Number System<br>March 8- March 17

| Lesson 1 | Lesson 2 | Lesson 3 | Quiz | Asynchronous Days: |
| :---: | :---: | :---: | :---: | :---: |
| Number Sort | Rational and Irrational Numbers | The Real Numbers |  | - Complete Unfinished Work |
| 1 synchronous day | 2 synchronous day | 1 synchronous days | 1 asynchronous day | - Mathia- <br> 4 workspaces <br> - Imagine Math |
| Standards: <br> 8.NS. 1 | Standards: <br> 8.NS. 1 | Standards: <br> 8.NS.2, 8.EE. 3 |  | - Assessments <br> - Other Practice |

## Topic 2 <br> Pythagorean Theorem

March 18- April 16

| Lesson 1 <br> The Pythagorean <br> Theorem <br> 2 synchronous days <br> Standards: <br> 8.EE.2, 8.G.6, 7 | Lesson 2 <br> The Converse of the Pythagorean Theorem <br> 2 synchronous days <br> Standards: <br> 8.EE.2, 8.G.6, 7 | Lesson 3 <br> Distances <br> In a Coordinate System <br> 1 synchronous day <br> Standards: <br> 8.EE.2, 8.G. 8 | Lesson 4 <br> Side Lengths in Two and Three Dimensions <br> 2 synchronous days <br> Standards: <br> 8.EE.2, 8.G. 7 | Review <br> 1 synchronous day |
| :---: | :---: | :---: | :---: | :---: |
| Assessment <br> 1 asynchronous day | Asynchronous Days: <br> - Complete Unfini <br> - Mathia- 4 works <br> - Imagine Math <br> - Assessments <br> - Other Practice | ed Work ces |  |  |

## Carnegie Learning Curriculum Course 3 <br> Module 5: Applying Powers

## Topic 1 <br> Exponents and Scientific Notation

April 19- April 30

| Lesson 1 | Lesson 2 | Lesson 3 | Lesson 4 | Review |
| :---: | :---: | :---: | :---: | :---: |
| Properties of Powers with Integer Exponents | Analyzing Properties of Powers | Scientific Notation | Operations with Scientific Notation |  |
| 2 synchronous days | 1 synchronous day | 2 synchronous days | 2 synchronous days | 1 synchronous day |
| Standards: <br> 8.EE. 1 | Standards: <br> 8.EE. 1 | Standards: <br> 8.EE.3, 4 | Standards: <br> 8.EE.3, 4 |  |
| Assessment <br> 1 asynchronous day | Asynchronous Days: <br> - Complete Unfinished Work <br> - Mathia- 8 workspaces <br> - Imagine Math <br> - Assessments <br> - Other Practice |  |  |  |

Topic 3
Volume of Curved Figures

|  |  | May 3-May 28 |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Lesson 1 Volume of a Cylinder <br> 2 synchronous day <br> Standard: <br> 8.G. 9 | Lesson 2 <br> Volume of a Cone <br> 2 synchronous day <br> Standard: <br> 8.G. 9 | Lesson 3 <br> Volume of a Sphere <br> 2 synchronous day <br> Standard: <br> 8.G. 9 | Lesson 4 <br> Volume Problems with Cylinders, Cones, and Spheres <br> 2 synchronous day <br> Standard: <br> 8.G. 9 | Review <br> 1 synchronous day |
| Assessment <br> 1 asynchronous day | Asynchronous Days: <br> - Complete Unfinished Work <br> - Mathia- 7 workspaces <br> - Imagine Math <br> - Assessments <br> - Other Practice |  |  |  |

