## **GRADE 2– Unit 5 - Shapes and Arrays (Partitioning and Tiling Shapes, Arrays, Evens and Odds)**

#### **Mission Statement**

The primary goal of the Swedesboro-Woolwich School District is to prepare each student with the real life skills needed to compete in a highly competitive global economy. This will be achieved by providing a comprehensive curriculum, the integration of technology, and the professional services of a competent and dedicated faculty, administration, and support staff.

Guiding this mission will be Federal mandates, including No Child Left Behind, the New Jersey Core Curriculum Content Standards, and local initiatives addressing the individual needs of our students as determined by the Board of Education. The diverse resources of the school district, which includes a caring PTO and active adult community, contribute to a quality school system. They serve an integral role in supporting positive learning experiences that motivate, challenge and inspire children to learn.

# **Unit/Module Overview**

In unit 5, students will learn to:

- Recognize and draw different shapes.
- Break up a rectangle into squares.
- Divide shapes into equal parts.
- Find the total number of squares used to tile a rectangle by counting them.
- Use addition to find the total number of objects in an array.
- Find even and odd numbers

# Standards Covered in Current Unit/Module

Related Standards and Learning Goals

# 2.G.A Reason with shapes and their attributes

| Learning Targets  | Essential Questions  |
|---|--|
| <ul> <li>I can describe the shares using words halves, thirds, half of, a third of, etc.</li> <li>I can describe the whole as two halves, three thirds, four fourths.</li> <li>I can determine whether a group of objects (up to 20) has an odd or even number of members.</li> <li>I can identify triangles, quadrilaterals, pentagons, hexagons, and cubes.</li> <li>I can partition a rectangle into rows and columns of same size squares and count to find the total number of them.</li> <li>I can partition circles and rectangles into two, three, or four equal shares.</li> <li>I can recognize and draw shapes having specified attributes, such as a given number of angles or a given number of equal faces.</li> <li>I can recognize that equal shares of identical wholes need not have the same shape.</li> <li>I can use addition to find the total number of objects arranged in rectangular arrays with up to 5 rows and up to 5 columns.</li> <li>I can write an equation to express an even number as a sum of two equal addends.</li> <li>I can write an equation to express the total sum of equal addends.</li> </ul> | <ul> <li>How can knowing the number of sides and angles a shape has help me identify the shape?</li> <li>How can I use what I know about dividing a shape into equal parts to show halves, thirds, and fourths?</li> <li>How can I make arrays using rows and columns?</li> <li>How can I use what I know about addition and skip-counting to find the number of objects in an array?</li> </ul> |

| Unit/Module Weekly Learning Activities and Pacing Guide |  |   |   |
|---|--|---|---|
| Topic & #<br>Days                                       | NJ Standards                                   | Critical Knowledge & Skills   | Possible Resources & Activities   |
| 5 Days  | 2.G.A. Reason with shapes and their attributes | Obj. We are learning to: I can recognize and draw shapes having specified attributes, such as a given number of angles or a given number of equal faces. I can identify triangles, quadrilaterals, pentagons, | <ul> <li>Texts</li> <li>Ready Math - Lesson 28</li> <li>Materials</li> <li>I-Ready Math Program</li> <li>Additional Math Journal</li> </ul>   |
|   |  | hexagons, and cubes.  Suggested Formative Assessment(s):  My Learning Path weekly progress  Lesson Quizzes  Mid-Unit Assessment  Unit Assessment  | <ul> <li>Student Judy Clocks</li> <li>Telling Time Math Games</li> <li>Digital Clock Template</li> <li>Non-standard units of measurement</li> <li>Data Math Games</li> <li>Geoboards</li> <li>Base-10 blocks</li> </ul> |
| 5 Days  | 2.G.A. Reason with shapes and their attributes | Obj. We are learning to: I can partition circles and rectangles into two, three, or four equal shares. I can describe the shares using words halves, thirds, half of, a third of, etc.                        | <ul> <li>Texts</li> <li>Ready Math - Lesson 29</li> <li>Materials</li> <li>I-Ready Math Program</li> <li>Additional Math Journal</li> <li>Student Judy Clocks</li> </ul>  |
|   |  | I can describe the whole as two halves, three thirds, four fourths.  I can recognize that equal shares of identical wholes need not have the same shape.  | <ul> <li>Telling Time Math Games</li> <li>Digital Clock Template</li> <li>Non-standard units of measurement</li> <li>Data Math Games</li> <li>Geoboards</li> </ul>  |

|        |  |  | ○ Base-10 blocks  |
|--------|--|--|---|
|        |  | Suggested Formative Assessment(s):  • My Learning Path weekly progress  • Lesson Quizzes  • Mid-Unit Assessment  • Unit Assessment   |   |
| 5 Days | 2.G.A. Reason with shapes and their attributes | Obj. We are learning to: I can partition a rectangle into rows and columns of same size squares and count to find the total number of them.                                    | <ul> <li>Texts</li> <li>Ready Math - Lesson 30</li> <li>Materials</li> <li>I-Ready Math Program</li> <li>Additional Math Journal</li> </ul>   |
|        |  | <ul> <li>Suggested Formative Assessment(s):</li> <li>My Learning Path weekly progress</li> <li>Lesson Quizzes</li> <li>Mid-Unit Assessment</li> <li>Unit Assessment</li> </ul> | <ul> <li>Student Judy Clocks</li> <li>Telling Time Math Games</li> <li>Digital Clock Template</li> <li>Non-standard units of measurement</li> <li>Data Math Games</li> <li>Geoboards</li> <li>Base-10 blocks</li> </ul> |
| 5 Days | 2.G.A. Reason with shapes and their attributes | Obj. We are learning to: I can use addition to find the total number of objects arranged in rectangular arrays with up to 5 rows and up to 5 columns.                          | <ul> <li>Texts</li> <li>Ready Math - Lesson 31</li> <li>Materials</li> <li>I-Ready Math Program</li> </ul>  |
|        |  | I can write an equation to express the total sum of equal addends.  Suggested Formative Assessment(s):  My Learning Path weekly progress                                       | <ul> <li>Additional Math Journal</li> <li>Student Judy Clocks</li> <li>Telling Time Math Games</li> <li>Digital Clock Template</li> <li>Non-standard units of measurement</li> </ul>                                    |
|        |  | Lesson Quizzes   | Data Math Games   |

|        |  | <ul><li>Mid-Unit Assessment</li><li>Unit Assessment</li></ul>  | <ul><li>Geoboards</li><li>Base-10 blocks</li></ul>  |
|--------|--|--|---|
| 5 Days | 2.G.A. Reason with shapes and their attributes | Obj. We are learning to: I can determine whether a group of objects (up to 20) has an odd or even number of members.   | <ul><li>Texts</li><li>Ready Math - Lesson 32</li><li>Materials</li></ul>  |
|        |  | I can write an equation to express an even number as a sum of two equal addends.   | <ul> <li>I-Ready Math Program</li> <li>Additional Math Journal</li> <li>Student Judy Clocks</li> <li>Telling Time Math Games</li> </ul>                   |
|        |  | <ul> <li>Suggested Formative Assessment(s):</li> <li>My Learning Path weekly progress</li> <li>Lesson Quizzes</li> <li>Mid-Unit Assessment</li> <li>Unit Assessment</li> </ul> | <ul> <li>Digital Clock Template</li> <li>Non-standard units of measurement</li> <li>Data Math Games</li> <li>Geoboards</li> <li>Base-10 blocks</li> </ul> |

| Technology Integration   | 21st Century Skills   |
|--|---|
| www.brainden.com Math playground www.adaptedmind.com Brain Den www.youtube.com Fun brain www.mathgametime.com Reflex Math www.reflexmath.com | <ul> <li>CRP1. Act as a responsible and contributing citizen and employee.</li> <li>CRP2. Apply appropriate academic and technical skills.</li> <li>CRP4. Communicate clearly and effectively and with reason.</li> <li>CRP6. Demonstrate creativity and innovation.</li> <li>CRP8. Utilize critical thinking to make sense of problems and persevere in solving them.</li> </ul> |
| • 8.1.2.A.4 Demonstrate developmentally appropriate navigation skills in virtual environments (i.e. games, museums).                         | <ul> <li>CRP10. Plan education and career paths aligned to personal goals.</li> <li>CRP11. Use technology to enhance productivity.</li> </ul>   |

| • . 8.1.2.A.1 Identify the basic features of a digital device and explain its purpose | WRK.9.1.2.CAP.1 Make a list of different types of jobs and describe the skills associated with each job.   |
|---|--|
|   | TECH.9.4.2.CT.3 Use a variety of types of thinking to solve problems (e.g., inductive, deductive).   |
|   | TECH.9.4.2.TL.3 Enter information into a spreadsheet and sort the information.   |
|   | TECH.9.4.2.IML.1 Identify a simple search term to find information in a search engine or digital resource.   |
|   | TECH.9.4.2.IML.2 Represent data in a visual format to tell a story about the data (e.g., 2.MD.D.10).   |
|   | TECH.9.4.2.IML.4 Compare and contrast the way information is shared in a variety of contexts (e.g., social, academic, athletic) (e.g., 2.2.2.MSC.5, RL.2.9). |

Link to Additional Components including Cross Curricular Connections, Accommodations, Assessments, Etc

**ELA Enduring Understanding Statements**