## Grade 3 Mathematics - Unit 4: Fractions

## Phoenixville Area School District

## Stage 1 Desired Results

PA Core Standards: CC.2.1.3.C. 1

Explore and develop an understanding of fractions as numbers.
CC.2.3.3.A. 2 Use the understanding of fractions to partition shapes into parts with equal areas and express the area of each part as a unit fraction of the whole.

## PSSA Assessment

## Anchors:

M03.A-F. 1 Develop an understanding of fractions as numbers (comparing fractions).

M03.C-G.1.1.3
Partition shapes into parts with equal areas.

Express the area of each part as a unit fraction of the whole.

## TRANSFER GOALS

Students will be able to independently use their learning to...

- Develop a sound foundation to demonstrate the value of numbers by describing their various representations, relationships, and patterns.
- Persistently apply various problem-solving strategies and organized approaches to accurately understand and solve problems.
- Interpret mathematical vocabulary and apply proper terminology to engage in meaningful oral and written expression that communicates mathematical thinking, problem-solving methods, and rationale.

| Meaning |  |
| :--- | :--- |
| UNDERSTANDINGS | ESSENTIAL QUESTIONS |
| Students will understand that... | Students will keep considering... |

- There are many ways to represent a number.
- Identifying relationships between numbers helps classify and compare them.
- Depending on the situation, problems may be solved using a variety of tools and strategies.
- Mathematical situations and structures can be represented and analyzed using symbols to advance algebraic thinking.
- Patterns exhibit relationships that can be extended, described, and generalized.

Students will keep considering...

- What are different ways to represent a number?
- What information and strategies do I use to solve this problem? What is the right tool (operation/ strategy/ technology) for the job?
- How do we use symbols to create mathematical meaning?
- What is the unknown? How do I find it?
- Where in the real-world do I find patterns?
- What does this expression/equation mean? What are the ways to represent it? Is there a best way?

| Example 1: Partition a shape into 4 parts with equal areas. <br> Example 2: Describe the area of each of 8 equal parts as $1 / 8$ of the area of the shape. | Knowledge and | kills Acquisition |
| :---: | :---: | :---: |
|  | KNOWLEDGE <br> Students will know... <br> - Fractions are equal parts of a whole <br> - Numerator and denominator describe specific parts of a fraction <br> - Models, fraction charts and number lines can be used to represent fractions <br> - Multiplication and division can be used to find equivalent fractions <br> - There is a simplest form of a fraction <br> - Fractions can be compared and ordered <br> - Fractions (with the same denominator) can be added or subtracted <br> - Fractions can be added to equal one whole <br> - Fractions can be part of a set <br> VOCABULARY <br> - Whole/equal parts <br> - Numerator <br> - Denominator <br> - Unit Fraction <br> - Equivalent fraction <br> - Simplest form | SKILLS <br> Students will be skilled at... <br> - Understanding the nature of fractions, including concepts such as part to a whole, comparison, ordering, and simplest form. <br> - Identifying that fraction are equal parts of a whole through verbal explanation, drawings, selected responses, and openended tasks. <br> - Identifying and representing the numerator and denominator of a fraction through verbal explanation, drawings, selected responses, and open-ended tasks. <br> - Recognizing equivalent fractions using models, number lines, fraction charts, or picture representation verbally, through selected responses, and open-ended tasks. <br> - Identifying those factions have a simplest form through verbal explanation and selected responses. <br> - Comparing and ordering fractions using models, number lines, fraction charts, or picture representation verbally, through selected responses, and open-ended tasks. <br> - Adding and subtracting fractions through verbal explanation and open-ended tasks. <br> - Reading, writing and identifying the fraction of a set verbally as well as through selected responses and open-ended tasks. |

## Stage 2 - Evidence

| Code A/M/T | Evaluative Criteria | Assessment Evidence |  |
| :---: | :---: | :---: | :---: |
| A/M/T <br> Acquisition <br> Meaning <br> Making <br> Transfer | What <br> criteria will <br> be used in <br> each <br> assessment <br> to evaluate <br> attainment <br> of the <br> desired <br> results? | PERFORMANCE TASK(S) NO Performance Task for this Unit | Differentiation Considerations: |
| A/M/T <br> Acquisition <br> Meaning Making Transfer | What criteria will be used in each assessment to evaluate attainment of the desired results? | OTHER EVIDENCE <br> - Math in Focus 2020 Chapter Test 7 <br> - Math in Focus 2020 Chapter 7 Performance Task <br> - Teacher Observation <br> - Teacher Created Quizzes | Differentiation Considerations: <br> Small Group reteaching <br> Enrichment/Put on Your Thinking <br> Cap, Math Journal |

