Preliminary Planning Sheet
Grade 1 – Friends and Pizza

Domain(s)

Geometry

Standard(s)

1.G.A.3

Mathematical Practices

MP.1   MP.3   MP.4   MP.5   MP.6

Major Underlying Mathematical Concepts

- Partition rectangles into four equal shares
- Describe the shares using the words fourths or quarters
- Describe the whole as four of the shares

Problem Solving Strategies

- Model (manipulatives)
- Diagram/Key
- Number line
- Table

Formal Mathematical Language and Symbolic Notation

- Model
- Diagram/Key
- Table
- Number line
- Shape
- Rectangle
- Polygon
- Quadrilateral
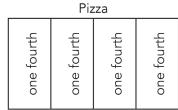- More than (>)/Greater than (>)/Less than (<)

- Equivalent/Equal to
- Fourth(s), fourth of, quarter(s), quarter of
- Halves, half of
- Fraction
- Whole
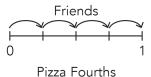- Equal shares
- Side
- Per
- Vertex

Possible Solution(s)

Any correct rectangle showing equal fourths.

Pizza

one fourth	one fourth
one fourth	one fourth

Pizza

one fourth
one fourth
one fourth
one fourth

Friend	Pizza
1	1 fourth
2	1 fourth
3	1 fourth
4	1 fourth

4 fourths = 1 whole

Pizza

one fourth	one fourth	one fourth	one fourth

one fourth + one fourth + one fourth + one fourth = four fourths

four fourths = one whole

Friends

0   1

Pizza Fourths

Possible Connections

Below are some examples of mathematical connections. Your students may discover some that are not on this list.

- Rectangles are shown with different orientations of fourths.
- Two-fourths equals one-half.
- Two-fourths is less than 1 whole.
- A rectangle has 4 sides and 4 vertices.
- 1/4 represents one-fourth.
- You can count fourths: one-fourth, two-fourths, three-fourths, four-fourths.
- Another way to count fourths is: 1/4, 2/4, 3/4, 4/4.
- Relate to a similar task and state a math link.
- Solve more than one way to verify the answer.
- If there are only 2 friends, they can eat half of the pizza.
- If there are only 3 friends, there is a fourth remaining.
- The task is recreated using halves or some other fractional part.