## Rational Name Card and Number Line.

- 1. Place your paper landscape and fold it horizontally into three equal parts.
- 2. The paper should now be in the shape of a triangular prism. One side is the base, one faces away from the student and the other faces the student.
- 3. Write your first name and family name as a ratio or fraction on the side (middle third) facing away from the student. Your first name is the Numerator and your surname or family name is the Denominator. Make the letters large enough so they can be read from a distance.
- 4. Count the number of letters in your first name and the number of letters in your family name. Write the first name number as the Numerator and the last name number as the Denominator. Make a model to represent the fraction next to your name.
- 5. Simplify the ratio or fraction to its simplest form. Write the equivalent fractions so they are equal to each other. Eg  $\frac{10}{4} = \frac{5}{2}$
- 6. Draw a Number Line using a ruler on the side facing the student. Put arrows going to positive and negative infinity at each end of the line.
- 7. Mark zero near the negative end of the Number Line.
- 8. Mark the integers One and Two on the Number Line so that one is equidistant from zero and two. Include more Integers if needed for your name.
- 9. Mark the benchmark fractions  $\frac{1}{4}$ ,  $\frac{1}{2}$  and  $\frac{3}{4}$  on the Number Line.
- 10. Use the denominator of your name and a ruler to mark the fractions between the integers or between zero and one that are appropriate to your name.
- 11. Use the numerator of your name to identify the exact location of the ratio of your first and last names on the Number Line.
- 12. Convert the ratio or fraction of your first and last names to a decimal and percent. Write the equivalent ratios on the remaining face.
- 13. Decorate and personalize your name card with drawing and colors that represent you interests, hobbies, back-ground, languages you or your family members speak.
- 14. You will be scored on Creativity, Attention to precision, Use of appropriate tools strategically, and Perseverance.