



## The Variable Machine

On a strip of notebook paper, write the numbers 0-25, one number in each space. Wrap the strip of paper into a circle, and tape the ends together. On a second strip of notebook paper, write the letters A-Z, one letter per space. Make a circle of this one, and tape its ends together as well.

1. With A on zero, find the value of your first name. To do this, add the numerical value of each letter of your name.
2. Which name has a higher value - your first or last name?
3. Think of a famous person whose name (first & last) would have a higher value than anyone sitting at this station now.
4. Turn your top ring so that A is now worth 9. Now which of your names has a higher total value?
5. What value does A need to be so that your first name has the highest possible value?
6. If  $D = 20$ , translate these numbers into an expression:  
 $17, 2, 23, 21, 18, 8, 17$        $25, 9$        $22, 11, 4$
7. Translate any messages left behind by the previous group.
8. Leave a message for the next group to translate. Make sure to identify the value of one letter.