Step 1.  Give each student a sticky note and a pair of scissors.

Step 2.  Ask students to fold the sticky note in half (do not unfold) then fold in half again. This is sometimes referred to as a hotdog and then a hamburger fold.

Step 3.  Instruct the students to identify where all four edges meet and cut at a diagonal across the corners.  When unfolded this should create a diamond in the middle of the sticky note. **[You will repeat this step three times]**

Step 4. Ask students to fold the sticky note in half (do not unfold).  At the fold, cut a semi-circle this should create a circle in the middle of the sticky note.

Step 5. Give students a sticky note and ask them to create their own design that can be cut out from the center.  Ask them to write down the instructions for the process.

Step 6. Next have students to group the sticky notes based on the patterns. [**If using science notebooks place there**]

Step 7. Ask students to explain how they decided upon their groupings.

Step 8. Have students exchange their notebook with their neighbor.  Tell students to read the directions their partner created and then **replicate** the design their neighbor created in Step 5. Place a summary of results in the science notebook.

Step 9. Using the word web (see Bubble Map.pdf), place “repetition” in the middle and have students brainstorm synonyms for the word “repetition”.

Step 10. Using the word web (see Bubble Map.pdf), place “replication” in the middle and have students brainstorm synonyms for the word replication.

Step 11. Give students the definition of repetition and replication you may use your text book for this purpose. (Repetition is an investigation where multiple trials have been completed. Replication occurs when the investigation is replicated or “copied” by others.)

Step 12. Returning to the sticky notes, instruct students to label the group that represents repetition. **[This should be the 3 diamonds]** Beneath or next to the grouping have students write a brief explanation why this is a representation of repetition. **[Possible student answer: This is a representation of repetition because I repeated the same process more than once.]**

Step 13. Label the sticky note which represents replication. **[This should be the design they copied]** Beneath or next to the grouping have students write a brief explanation why this is a representation of replication. **[Possible student answer: This is a representation of replication because I copied or replicated the design of my classmate.]**