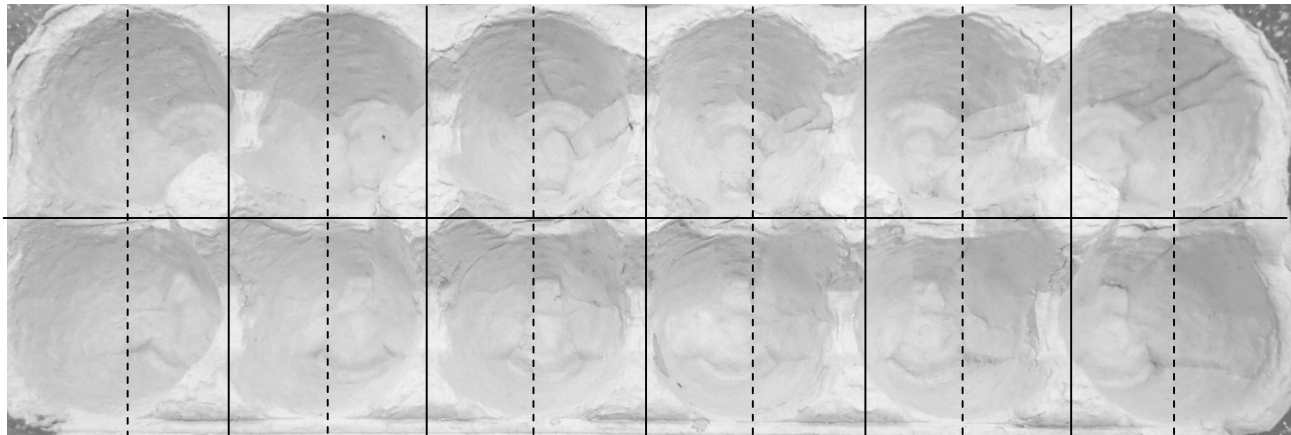


Name: \_\_\_\_\_ Date: \_\_\_\_\_ Period: \_\_\_\_\_

*This activity simulates a genetic predisposition for getting type 2 diabetes. A high number indicates an increased risk, a neutral number indicates no change, and a low or negative number indicates the possibility of a protective effect.*

**Directions:**

1. One person selects two beans from the bag and places them in the first egg carton slot.
2. Continue drawing two beans until each egg carton slot has two beans, for a total of 24 beans.
3. Record your bean combinations in the space below using the following symbols:
  - An orange bean is represented by a **+**. This indicates a risk factor.
  - A green bean is represented by a **-**. This indicates a protective factor.
  - A blue bean is represented by a **0**. This indicates a neutral factor.
4. Put the beans back into the bag and let your partner draw beans and record his or her combinations.



5. Tally your genetic risk score by adding 1 for each **+** and subtracting 1 for each **-**. Make no adjustments for each 0.
6. Record your simulated genetic risk score: \_\_\_\_\_
7. No model is 100% accurate.
  - a. What are some strengths of this model?
  
  - b. What are some limitations?