**Name\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Period\_\_\_\_ Date\_\_\_\_\_\_\_\_\_\_**

**The Checks and Balances of Science.**

**Procedure**

1. Make sure that you have 16 checks
2. Without peeking, each person remove one check from the envelope and place it on the lab table.
3. Observe the checks and as a group try to make a “**tentative hypothesis**” based on the information on the four checks. Record this as your original hypothesis.
4. Remove another 4 checks from the envelope and use this new information to make a second **“tentative hypothesis**” that explains the storyline. Record this as hypothesis 2.
5. Remove **only 2 more** checks from the envelope and use this information to make a **“3rd tentative hypothesis”.** Do not remove any more checks.
6. You will have 3 minutes to meet with the group closest to you and compare data. Once you have looked at their data return to your group and formulate a **final hypothesis**.

**Original Hypothesis #1:**

**Tentative Hypothesis # 2:**

**Tentative Hypothesis # 3:**

**Final Hypothesis:**

**Questions:**

1. What bits of information on the checks were ***valuable*** to your group in formulating a hypothesis?
2. What information was ***useless***?
3. List any ***misleading*** information that was presented.
4. Why do we say that a hypothesis in science is "***tentative***?
5. What happens to your hypothesis when you get ***additional information***?
6. What is the difference between a ***hypothesis*** and a ***theory?***
7. How could your ***hypothesis*** become a ***theory***?
8. What is the importance of the checks you ***did not receive***?
9. Is your final hypothesis "***Correct***"? Why or Why not?
10. Discuss as a group and come up with ***3 more things that you learned about science in general*** from this activity.
11. Science is built on evidence that can be observed from your surroundings