Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Hour \_\_\_\_\_\_\_\_\_\_\_\_\_

 **Tablecloth Challenge**

**Focus Question:** How can a tablecloth be pulled off a set table without breaking anything?

**Objective:** Develop a model to show what happens when variables are changed in an investigation.

**Demo:** After watching the initial table cloth demonstration. Draw what happened below. What forces may have been taking place to cause the action?

|  |
| --- |
|  |

 **Student Task**

**Materials**

-Tablecloth -flat table -plastic tableware

-heavy objects (fruits and veggies)

**Directions:**

1. Set your table
2. Record your setup
3. Pull your table cloth and record.
4. Change one variable before each new trial

|  |  |  |
| --- | --- | --- |
| **Trials/Variables** | **Labeled Diagram of setup** | **Observations of items motion or lack of motion** |
| 1. |  |  |
| 2. |  |  |
| 3. |  |  |

**Comprehension Questions Day 1**

1. Why did some objects behave the way they did and how does that relate to friction?

     2. What is friction? Are there different kinds of friction?

**Day 2**

1. Using our visual tools to draw force, please draw a summary of what happened yesterday during the tablecloth challenge.

|  |
| --- |
|  |

2. Watch the Skateboard Jump video. Compare and contrast the skateboard jump to the tablecloth challenge. How are they similar and different?

3. What phenomena is occurring?

4. How did the tablecloth challenge help me understand this phenomenon?

5. How did the Skateboard Jump help me to understand this phenomenon?