Name:

Marble Physics

Setup: 1. Place one end of the track on two reading books. 2. Place one side of the other end of the track on a pencil so that the track slants in one direction. Fill out the following table using your observations. Remember observations are what you hear, see, taste, feel, and smell. In this case, we only want to document what you see happening in each scenario. A synonym for stationary is sitting still.

| | 1. What happened to the stationary marble? |
|---|---|
| Place a marble in the middle of the track. Roll another marble into it. | 2. What did the marble you roll do? |
| | 3. What happened to the two stationary marbles? |
| Place 2 marbles in the middle of the track. Roll one marble into the other two. | 4. What happened to the marble you rolled? |
| | 5. What happened to the 5 stationary marbles? |
| Place 5 marbles in the middle of the track. Roll one marble into those 5. | 6. What happened to the marble you rolled? |
| | 7. What happened to the stationary boulder? |
| Place 1 boulder into the middle of the track. Roll one marble into the boulder. | 8. What happened to the marble you rolled? |

| | 9. What happened to the stationary boulder? |
|---|---|
| Place one boulder into the middle of the track. Roll another boulder into it. | 10. What happened to the boulder you rolled? |
| | 11. What happened to the stationary boulders? |
| Place 2 boulders into the middle of the track. Roll one marble into the 2 stationary marbles. | 12. What happened to the marble you rolled? |
| | 13. What happened to the stationary marble? |
| Place one marble in the middle of the track. Roll one boulder into the stationary marble. | 14. What happened to the marble you rolled? |
| | 15. What happened to the stationary marbles? |
| Place 5 marbles in the middle of the track. Roll one boulder into the 5 marbles. | 16. What happened to the boulder you rolled? |

17. How does this experiment relate size to sports, cars, or skateboards?