

NAME: \_\_\_\_\_ PERIOD: \_\_\_\_\_

**ACTIVITY #10 – FRICTION IN A FORCE SYSTEM**

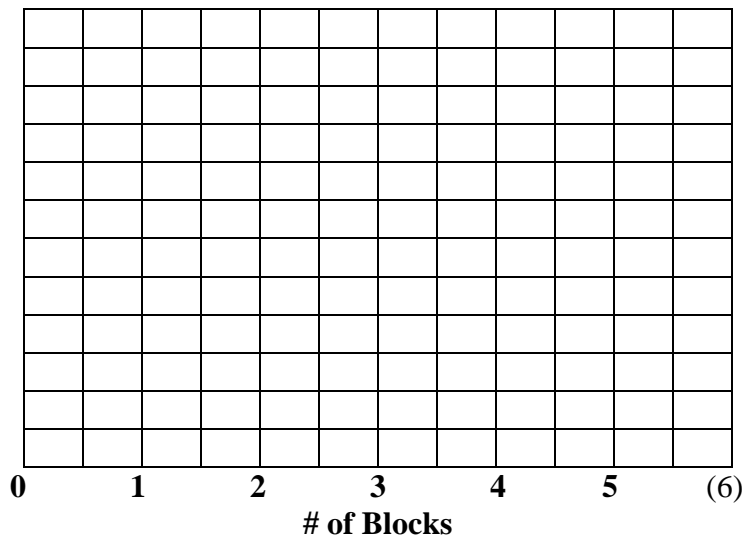
**PURPOSE:**

**OBSERVATIONS:**

# OF BLOCKS	FORCE TABLE	FORCE GLASS	FORCE SANDPAPER	FORCE ROLLERS	FORCE RUBBER
1					
2					
3					
4					
5					

**REPORT:**

- 1) Graph your data. X = # of Blocks, Y = Force. (1 graph, 5 separate lines)



- 2) **How does the amount of force needed to move the blocks change as the number of blocks increases?**
- 3) **Extrapolate how much force would be needed to move 6 blocks across the surface. Show your answer on the graph.**
- 4) **How can you explain the difference between the force required to pull the wood over sandpaper and the force required to pull the wood over glass.**
- 5) **How can this difference in force be related to the structure of matter?**
- 6) **Is the amount of friction between objects related to the area of the surface in contact, when the total weight remains the same?**
- 7) **How does the type of surface affect the amount of friction produced?**
- 8) **What factors affect the amount of friction produced?**

**CONCLUSION:**