**Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Period: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**Pre-lab for Ramp: Forces And Motion**

1. Jose is pushing a crate up an ice covered ramp as shown in the picture below:



In **words**, name the forces acting on the crate

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2. In the diagram below, **draw arrows** to represent the forces on the crate, and **label** each arrow

3. How would each force change if Jose were the crate up a ***steeper ramp***? For each force say if it would get bigger, smaller, or not change.

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4. How would each force change if Jose were pushing on a ***much heavier object***? For each force say if it would get bigger, smaller, or not change.

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5. How does the ***motion*** of the object with more mass compare with the crate if Jose pushes the crate and the heavier object with the ***same force***?

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