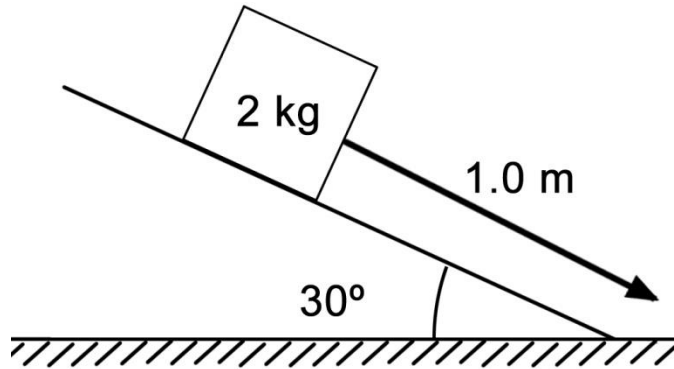Name: Period:

Inclined Planes

A wooden plank is raised at one end until an angle of 30 degrees is achieved. A 2.0 kg box is placed on the plane 1.0 m from the lower end. The coefficient of friction is 0.20.

1. Draw all of your force vectors

2. What is the normal force acting on the block? (Force of support of the plane)

3. What is the weight force acting on the block?

4. What is the forward or downward force acting on the block? What force acts against it?

5. What is the net force down the plane?