

Name _____ Date _____

Hockey Slap Shot

Purpose: To calculate the force on a hockey puck during a slap shot.

Procedure:

Start a computer and open the Physics 9 folder, then the Videos folder, then Unit 3. Start the movie “**hockey puck**”. Watch the whole video at least once.

Use the video to collect data. Note that the hockey puck will have almost zero acceleration (we will consider it to be zero) after it leaves the hockey stick. Why?

What is velocity of the puck before it is hit by the stick? (This is not a trick question.)

Figure out a way to determine the velocity of the puck after it is done being hit by the stick (remember that $a=0$ for this part – why?) Hint – consider how we found time in previous videos.

Use the mass of the puck given in the video to determine the force on the puck.

Data:

Calculations:

Summary:

1. What is Newton's 2nd Law (both math and word form)?
2. How did you find the acceleration?
3. How did you find the velocity to find the acceleration?
4. How did you find the net force on the puck?
5. What are the source and sizes of error?