

Ballistic Pendulum Worksheet******* Use a pencil! *******

Name: _____

Partner: _____

1. Pay attention to the units required in this table! Besides recording values in this table, you might need to convert many of these into other units before using them in your calculations.

Quantity	Units	Value	Uncertainty
D_{ball}	cm		
m_{ball}	g		
t_{ave}	s		
m_{total}	g		
v_{ball}	cm/s		
R	cm		
θ_{max}	°		
KE_{init}	$\text{g}\cdot\text{cm}^2/\text{s}^2$		
PE_{final}	$\text{g}\cdot\text{cm}^2/\text{s}^2$		
$f_{\Delta E}$	-		
p_{init}	$\text{g}\cdot\text{cm}/\text{s}$		
P_{final}	$\text{g}\cdot\text{cm}/\text{s}$		
Δp	$\text{g}\cdot\text{cm}/\text{s}$		

2. What do you think is the main cause of the decrease in mechanical energy you noted above?

3. To what degree was momentum p conserved? What do you think is the main cause of uncertainty in Δp ?