

AGENDA

Investigation
friction

Exit Goal

Complete
the trials and
a graph

1. Make sure your name is on your homework and put it on the table in front of you
2. Complete the preparation for your lab. You should have everything ready up to and including the data table.



Figure 1

Put your blue sheets on my desk

Learning target: I can investigate how different surfaces affect the force needed to move a wood block

Question

How does the type of surface affect the force needed to move a block?



Figure 1

Hypothesis

Predict which surface will require the most force and which will require the least force to move the block. Give a reason.

Variables**Materials**

Wood block
+3 masses

4 materials of your choice
spring Scale

Learning target: I can investigate how different surfaces affect the force needed to move a wood block

Diagram

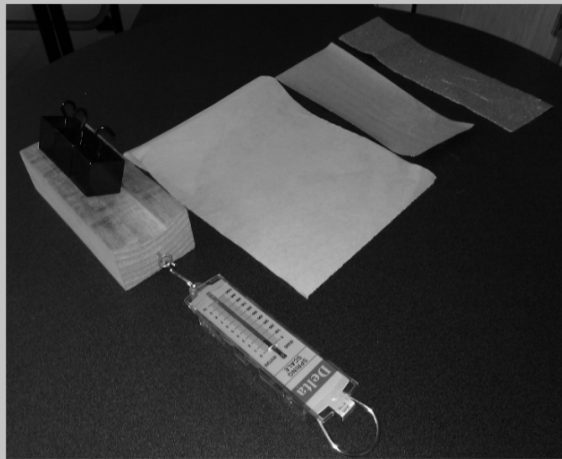


Figure 1

Learning I can investigate how different surfaces affect the force
target: needed to move a wood block



Procedures

1. Place the block on the _____ (1st condition)
2. While one person is holding the _____, the other person begin to move the block pulling carefully with the spring scale.
3. Have another person read the amount of Newtons of force need to move the block.
4. Record the force in the data table.
5. Repeat steps 1-4 for a total of 5 trials.
6. Place the block on _____ (2nd condition) and repeat steps 2-5
7. Place the block on _____ (3rd condition) and repeat steps 2-5
8. Place the block on _____ (4th condition) and repeat steps 2-5

Learning I can investigate how different surfaces affect the force
target: needed to move a wood block

Data Table



Figure 1

Force (N)	Material #1	Material #2	Material #3	Material #4
Trial 1				
Trial 2				
Trial 3				
Trial 4				
Trial 5				
Average Force (N)				

Learning I can investigate how different surfaces affect the force target: needed to move a wood block

Data Table



Figure 1

Learning I can investigate how different surfaces affect the force
target: needed to move a wood block

Graph

Make a bar graph to show your results

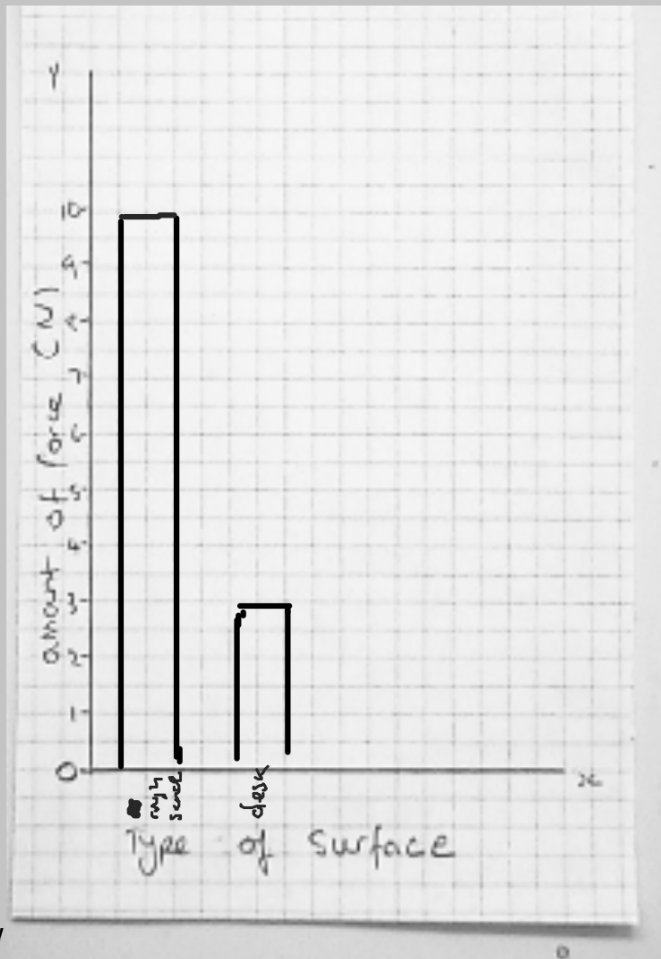


Figure 1

Learning target: I can investigate how much force is needed to move a wood block

Graph Make a bar graph to show your results.

Conclusion/Results



Figure 1

A Answer the investigation question and say if your hypothesis was correct/incorrect.

P Provide supporting high data

P provide supporting low data

S say how this data supports your conclusion. (the block needed _____N more force to move on the _____ than the _____)

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