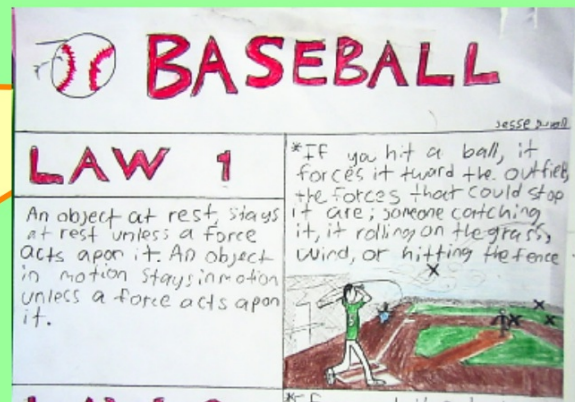


Choose a sport or activity. For **each** law:

1. Write out the law.
2. Illustrate the law from your sport.
3. Explain your illustration showing your understanding of the law in relation to your sport.

You have 10/15
mins to finish
before we
share!!



I can apply Newton's laws of motion to my favorite sport or activity

In your journal explain what you understand about friction.



Figure 1

2 objects pushing or pulling on each other.

You can draw diagrams and give examples in your explanation.

2 objects sliding together.

2 objects rub against each other.

Creates heat

Causes things to stop moving

2 objects make contact - reaction

Car braking - brakes hit wheels.



friction creates electricity - light

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

Variables

Materials

Wood block
+3 masses

4 surfaces of your choice
spring Scale



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

Diagram



Figure 1



I can investigate how different surfaces affect the force 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



I can investigate how different surfaces affect the force 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) | | | | |



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

