

CREATE THE PROBLEM: NEWTON'S SECOND LAW

Instructions

You will design a real-world problem that can be solved using the equation $F = ma$. Then, solve it and justify why it demonstrates Newton's Second Law. After completing your work, you will trade problems with a partner and solve each other's scenario. Finally, turn in your completed handout for review.

Step 1: Given Solution

The solution you will use is:

$F = \underline{\hspace{2cm}} \text{ N}$

Step 2: My Problem

Write a real-world scenario that would require $F = ma$ to solve and result in the given solution. Include:

- Object's mass
- Acceleration (or force)
- Context (cart, bike, ball, etc.)

My Problem:

Step 3: My Solution

Solve your problem to confirm it matches the given solution. Show your calculations.

Work:

Answer:

Step 4: Justification

Explain why your problem demonstrates Newton's Second Law. Connect force, mass, and acceleration.

Justification:

Step 5: Partner Problem

Trade problems with a partner and solve theirs below.

Partner's Problem:

Work:

Answer: