

Physics Learning goals: Dec 7

- 1) Solve problems using Newton's Second Law
 - $F = ma$
- 2) Solve problems involving mass and weight.



Weight & mass

mass - how much matter is in an object
units: kg

Weight - measure of the force of gravity
on an object due to a planet or moon
units: N

$$\text{Weight} = \text{Mass} \times \text{accel due to gravity}$$
$$W = mg$$

Example

Brandon's dog has a mass of 7 kg.
How much does it weigh on earth?

$$W = mg$$

$$g = 10 \frac{\text{m}}{\text{s}^2}$$

$$= (7 \text{ kg}) (10 \frac{\text{m}}{\text{s}^2})$$

$$= 70 \text{ N}$$



LESSON

BACKGROUNDS



LESSON

BACKGROUNDS

Dec 7 2011 Learning Goals.odp - OpenOffice.org Impress

File Edit View Insert Format Tools Slide Show Window Help

Arial 32 B U L

Slides

1 Physics Learning goals: Dec 7
• 1) Solve problems using Newton's 2nd Law
• 2) Solve problems involving mass and weight.

Slide 1

2 Physics Learning goals: Dec 7

Slide 2

3 Honors Learning Goals: Dec 7
• 1) Solve problems using Newton's 2nd Law
• 2) Solve problems involving mass and weight.

Slide 3

4 AP Learning Goals: Dec 7
• 1) Solve problems using Newton's 2nd Law
• 2) Solve problems involving mass and weight.

Slide 4

Normal Outline Notes Handout Slide Sorter

Physics Learning goals: Dec 7

- 1) What happens to an object if a constant force is applied to it?
- 2) What happens to an object if NO force is applied to it?
- 3) Can a moving object be in equilibrium?
- 4) A 7 kg cat is accelerating at 5 m/s^2 , how much force is being applied to the cat?
- 5) In Physics class, how much do you weigh?
 - To get your mass in kg, divide pounds by 2.2

Tasks

Master Pages

Layouts

Table Design

Custom Animation

Slide Transition

TextEdit: Paragraph 4, Row 7, Column 39 0.55 / 1.93 9.92 x 5.42 Slide 2 / 5 Default 79%

8:20 AM 12/7/2011

Dec 7 2011 Learning Goals.odp - OpenOffice.org Impress

File Edit View Insert Format Tools Slide Show Window Help

Arial 32 B U L

Slides

1 Physics Learning goals: Dec 7
• 1) Solve problems using Newton's 2nd Law
• 2) Solve problems involving mass and weight.

Slide 1

2 Physics Learning goals: Dec 7

Slide 2

3 Honors Learning Goals: Dec 7
• 1) Solve problems using Newton's 2nd Law
• 2) Solve problems involving mass and weight.

Slide 3

4 AP Learning Goals: Dec 7
• 1) Solve problems using Newton's 2nd Law
• 2) Solve problems involving mass and weight.

Slide 4

Normal Outline Notes Handout Slide Sorter

Physics Learning goals: Dec 7

- 1) What happens to an object if a constant force is applied to it?
- 2) What happens to an object if NO force is applied to it?
- 3) Can a moving object be in equilibrium?
- 4) A 7 kg cat is accelerating at 5 m/s^2 , how much force is being applied to the cat?
- 5) In Physics class, how much do you weigh?
 - To get your mass in kg, divide pounds by 2.2

Tasks

Master Pages

Layouts

Table Design

Custom Animation

Slide Transition

TextEdit: Paragraph 4, Row 7, Column 39 0.55 / 1.93 9.92 x 5.42 Slide 2 / 5 Default 79%

8:20 AM 12/7/2011

