Physics Learning goals: Dec 7

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

NEW LESSON | OPEN LESSON | LESSON | BACKGROUNDS | SAVE | SAVE AS | PRINT

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

Weight = Mass x accel due to gravity

$W = mg$

LESSON | BACKGROUNDS

Example

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

$W = mg$

$g = 10\,m/s^2$

$= (7kg)(10\,m/s^2)$

$= 70N$

LESSON BACKGROUNDS

LESSON BACKGROUNDS

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

Physics Learning goals: Dec 7

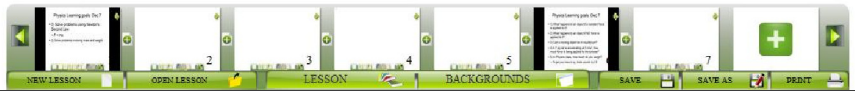
- 1) What happens to an object if a constant force is applied to it?
- 2) What happens to an object if NO force is applied to it?
- 3) Can a moving object be in equilibrium?
- 4) A 7 kg cat is accelerating at 5 m/s^2, how much force is being applied to the cat?
- 5) In Physics class, how much do you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

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

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


LESSON
BACKGROUNDS


NEW LESSON
OPEN LESSON
LESSON
BACKGROUNDS
SAVE
SAVE AS
PRINT