



Problem Solving and GERC

You will be
able to
solve story
problems!!

Grade Homework

- Measuring with Metrics
 - Clear your desks
 - Grade with red pen

Solving Problems Using the GERC Format

- This will be the format that we will use in our Physical Science Class
- In order to get any credit on any problem solving question, you must use this format
- Your work will not be graded without this format
- If you forget the correct units, you will receive half credit for your work

GERC

- Given-list what you are given in the problem WITH variables, don't forget UNITS! (also list what you are trying to find)
 - *A spring pulls down with 30N on a 6kg cart. Find the acceleration.*
 - What variables have we been given?

- $F =$

- $m =$

- $a =$

Read the question and use what is there, you foolish whelps!

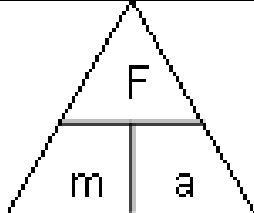


GERC

- Equation- show the equation you will use BEFORE you plug any numbers in
 - *A spring pulls down with 30N on a 6kg cart. Find the acceleration.*
- $F = m \cdot a$



Write down the formula you will be using, or I will turn you into atoms.

Force	Variable	Unit
$F = m \cdot a$	Force	N
	mass	kg
	acceleration	m/s^2

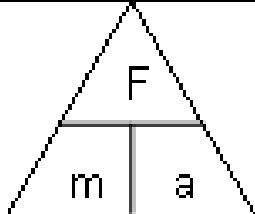
GERC

- Rearrange- solve the equation for the variable you are missing or need to calculate
 - *A spring pulls down with 30N on a 6kg cart. Find the acceleration.*

- $a = F/m$

Do not waste my time if the formula is already in the correct arrangement, dog!



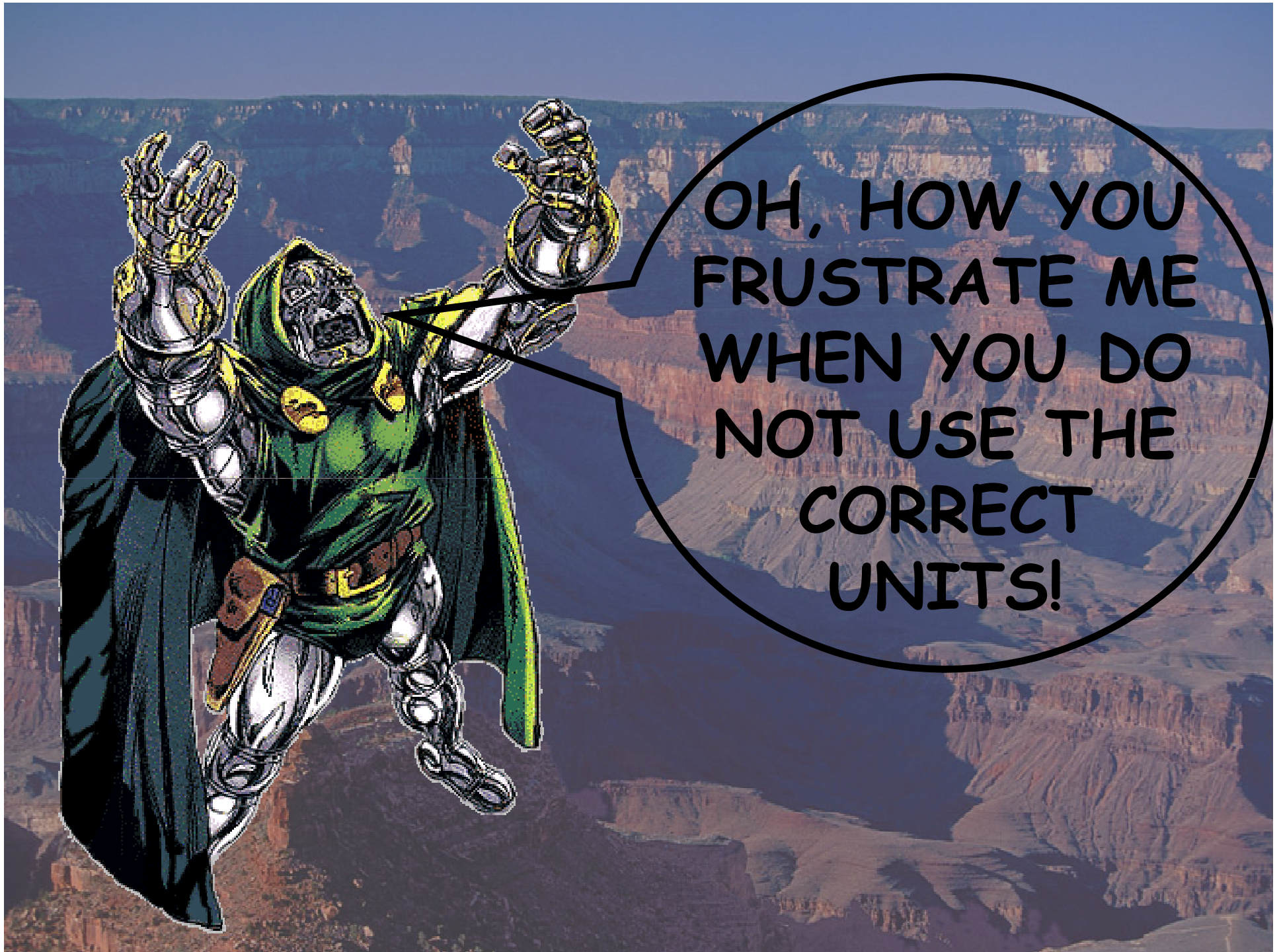
Force	Variable	Unit
$F = m \cdot a$	Force	N
	mass	kg
	acceleration	m/s^2

GERC

- Calculate- putting given values into the equation from above, don't forget UNITS! Show your final calculation with UNITS. Put a box or circle around your final answer and UNITS!

- *A spring pulls down with 30N on a 6kg cart. Find the acceleration.*

- $a = \frac{30 \text{ newtons}}{6 \text{ kg}} = \boxed{5 \text{ m/s}}$



OH, HOW YOU
FRUSTRATE ME
WHEN YOU DO
NOT USE THE
CORRECT
UNITS!

Practice

- Nascar driver, Jeff Gordon, has a car that is one of the fastest on the circuit. If it travels 600 miles in 4 hours, what is his cruising speed?

G-

E-

R-

C-

Equation for Speed

$$s = \frac{d}{t}$$

Practice

- Liz sets the cruise control at 65 miles per hour. She has to drive to Tucson which is 275 miles away - How long will it take her to get there?

G-

E-

R-

C-

Equation for Speed

$$s = \frac{d}{t}$$

Homework

- Create a poster that could be posted on our class walls demonstrating how to properly solve Science Problems
- Complete the worksheet on the back of your notes
- Graded next class