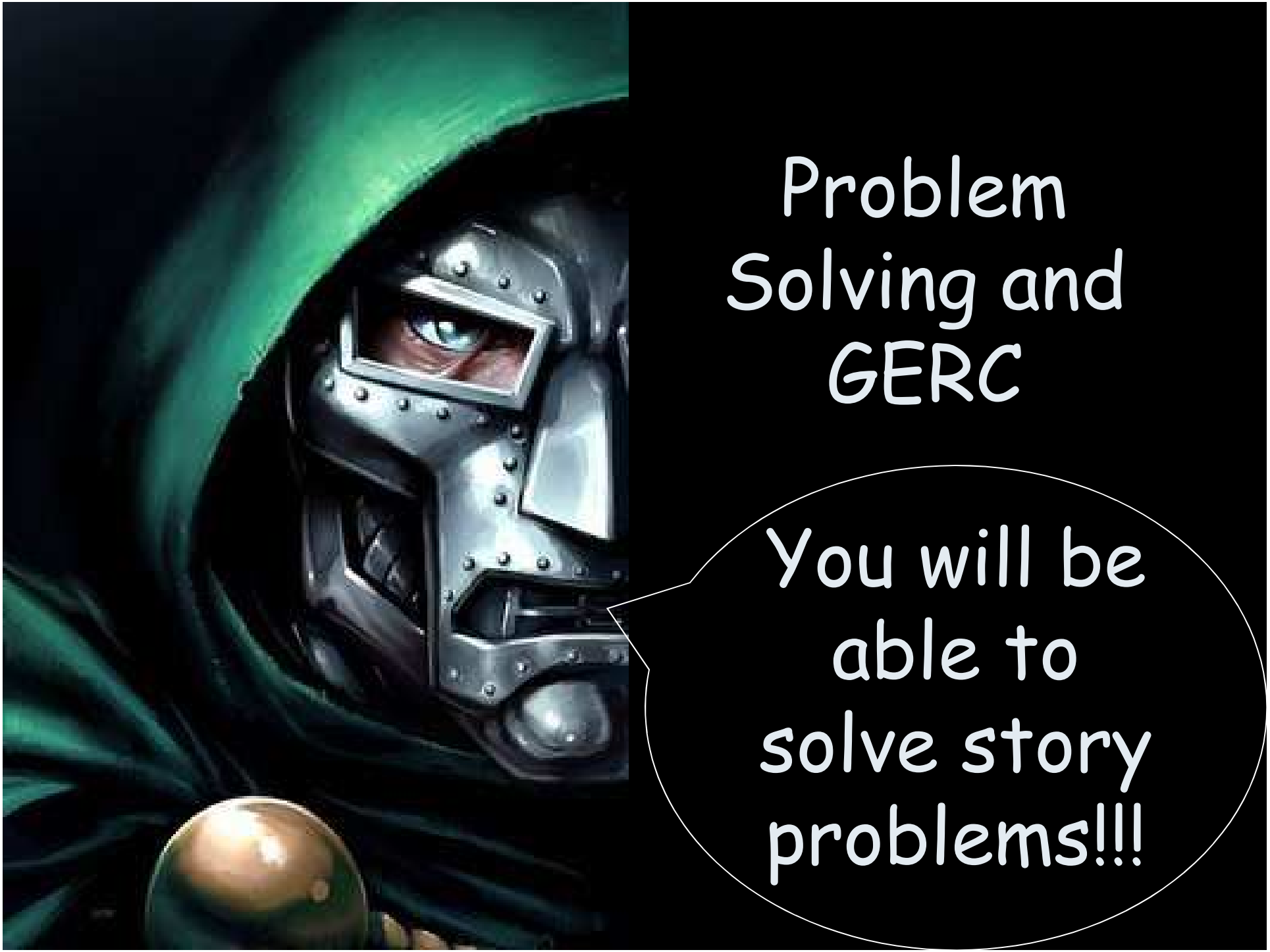

Problem Solving and GERC
You will be able to solve story problems!!!

Grade Homework

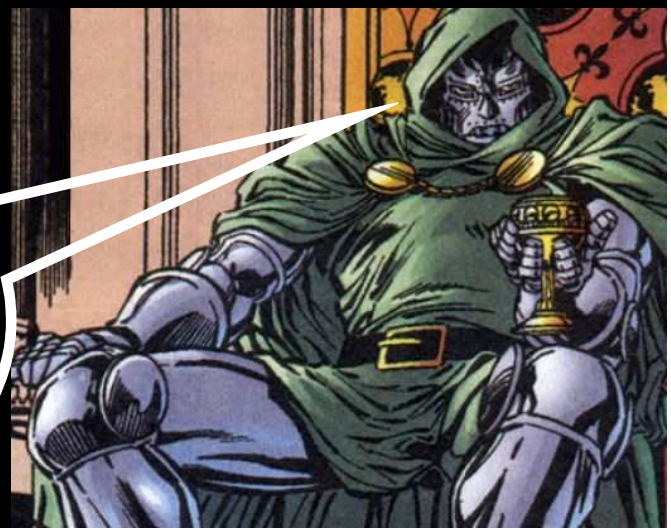
- Measuring with Metrics
  - Clear your desks
  - Grade with red pen

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

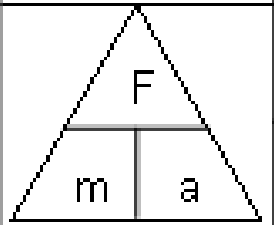
- **G**iven-list what you are given in the problem WITH variables, don't forget UNITS! (also list what you are trying to find)
  - *A spring pulls down with 30N on a 6kg cart. Find the acceleration.*
  - What variables have we been given?
    - F=
    - m=
    - a=



gERC

- **E**quation- 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*a

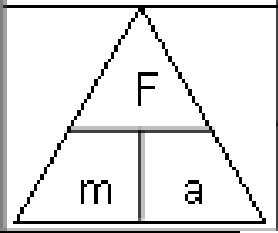
Write down t
formula you w
using, or I wil
you into atom

Force	Variable	Unit
F=m*a	Force	N
	mass	kg
	acceleration	m/s^2

GERC

- **R**earrange- 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 tim
if the formula is
already in the correc
arrangement, dog!

Force	Variable	Unit
F=m*a	Force	N
	mass	kg
	acceleration	m/s^2

GER**C**

- **C**alculate- 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.*
    - $a = \frac{30 \text{ newtons}}{6 \text{ kg}} =$ **5m/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

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

Algebra Order of Operations

P.E.M.D.A.S.
Parenthesis | Exponents | Multiplication | Division | Addition | Subtraction

1. Perform the operations inside a parenthesis first
2. Then exponents
3. Then multiplication and division, from left to right
4. Then addition and subtraction, from left to right

Solve using PEMDAS

$\frac{(7)(2)}{(7)}$

$\frac{50xg}{25g}$

$\frac{(5x)(4x)}{10}$

$\frac{7y}{7}$

Solve using PEMDAS

$3 * (5 + 8) - 2^2 / 4 + 3$

- Parenthesis first: 5 + 8 = 13
- **$3 * 13 - 2^2 / 4 + 3$**
- Exponent next: square the 2 or $2^2 = 4$
- **$3 * 13 - 4 / 4 + 3$**
- Multiplication and Division next (3 * 13) (4 / 4) left to right:
- **39 - 1 + 3**
- Addition and Subtraction next left to right:
- **39 - 1 + 3 = 41**

Class Work

- Complete the worksheet on the back of your notes
- Graded next class