**10 Step Work Problems, and 15 Step Power World Problem**

Directions- Review the word problems and attempt them on your own. I will provide a video tutorial on Thursday, and you will need to submit your work by Friday. We will have a test on 4/24 on Force, Work, and Power. You may use your notes, but they will do you no good if you don’t practice regularly.

1. Daniel has a mass of 115kg and is carrying his 85kg. luggage down the stairs. He tripped over the dog and rolled down the stairs at 10m/s2. How much work was done moving the luggage the 5 meters down the stairs?
2. We know… 6) Continue with what you know….
3. Need to know… 7) What we need to know now…
4. Formula… 8) Formula…

1. Calculate… 9) Calculate…
2. Convert Units… 10) Convert Units…
3. Jesse remote controlled car has a mass of 1kg. It can accelerate up to 8m/s2. How much work is done moving the car 100 meters down the street?

1- We know… 6) Continue with what you know….

1. Need to know… 7) What we need to know now…
2. Formula… 8) Formula…
3. Calculate… 9) Calculate…
4. Convert Units… 10) Convert Units…
5. Erik had to run a 50 meter dash for the track team. He applied 100 Newtons of force to the event. How much work did Erik do during the race? How much Power did he use if he ran the race in 10 seconds?
6. We know… 6-

1. Need to know… 7-

1. Formula… 8-
2. Calculate… 9-
3. Convert Units… 10-

Julie bounced a ball with a mass of .625kg to the ground at 10m/s2. The distance traveled was .5 meters. How much work was used to bounce the ball, and how much power was used if she did this in .75 seconds?

1- 6- 11-

2- 7- 12-

3- 8- 13

4- 9- 14

6- 10- 15