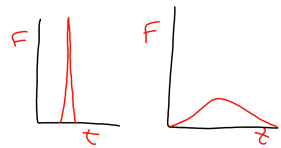


Wk 29 Impulse & Collisions

Impulse = (Force)(time)

name: _____



In each situation, sketch which Force vs Time graph it would have.



1. I bend my knees when I jump down off of a chair.



2. I caught a fast ball without a glove.



3. The front ends of old cars when crashing.



4. The front ends of new cars when crashing.



5. An experienced stunt person takes a fall.



6. Someone faints and falls down.

7. Why do you bend your knees when landing from a jump? The average person on the street will say something like, "Your knees absorb the force" or "You give with it." What is the real explanation?

8. a) Write the equation for Impulse.

b) What happens to the force if the time of impact is tripled?

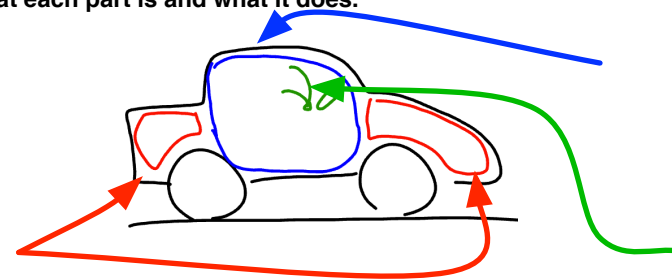
Wk 29 Impulse & Collisions

Safe Vehicle Design

name: _____

1. Car Safety Systems:

Label what each part is and what it does.



2. List three dangers of driving older cars.

3. a) In what way is a smart car safe?

b) In what way is a smart car not safe?

WOW option: Go to <http://www.iihs.org/iihs/ratings/> and search the vehicle you own or would like to own.

a) List its ratings.

b) How do you feel about the safety of this vehicle?