

Name \_\_\_\_\_

## CH 17: AIR PRESSURE BASEBALL SIMULATION

### Pre Simulation Questions

- At what altitude is the atmospheric pressure about 200 millibars?  
\_\_\_\_\_
- At what altitude is the atmospheric pressure about 0 millibars?  
\_\_\_\_\_
- What is the relationship between atmospheric pressure and altitude?  
\_\_\_\_\_

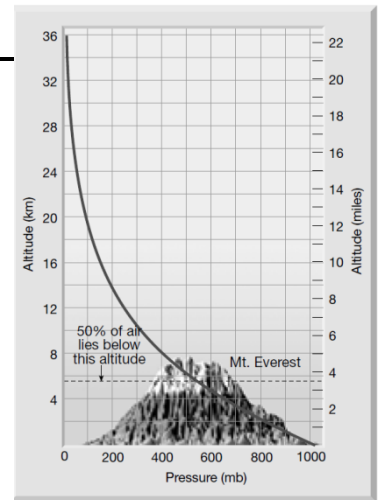


Figure 1

### Website Simulation Activity

- Type in this site > <http://itg1.meteor.wisc.edu/wxwise/AckermanKnox/index.html>
- Once at this site, scroll down to Chapter 6 atmospheric forces and winds.
- Click "play ball" and read the instructions below.

### Question

Why do baseball pitchers specifically hate to pitch in Coors Field in Denver, Colorado?

### Instructions

Use the simulation to determine how far fly balls go in relation to sea level, fill out the following table.

\*\*\*Set the angle at which the ball leaves the bat to 45.

Off-the-bat velocity of the ball (mph)	Distance traveled in Name: <b>Denver, CO</b> Altitude: _____ (ft)	Distance traveled in Name: _____ Altitude: _____ (ft)	Choose another site: Name: _____ Altitude: _____ (ft)	Choose another site: Name: _____ Altitude: _____ (ft)
60				
80				
100				
120				
135				

### Post Questions

- In which location did the ball travel farther? \_\_\_\_\_
- Which of the cities in the simulation had the highest air pressure? \_\_\_\_\_
  - Why? \_\_\_\_\_
- Read the paragraphs above the simulation. Why do the balls travel farther in higher altitude? Explain in complete sentences.  
\_\_\_\_\_
- Why do baseball pitchers specifically hate to pitch in Coors Field in Denver, Colorado?  
\_\_\_\_\_

