## Pressure and Molecular Motion

 GRADES 6-8Collect data on the bounce back height when the ball is dropped from 2 meters. [A properly inflated ball will bounce back 115-165 centimeters.]

|  | Flat | 3 PSI | 6 PSI | 9 PSI | 12 PSI | 15 PSI |
| :---: | :--- | :--- | :--- | :--- | :--- | :--- |
| Futsal <br> Ball | answer here | answer here | answer here | answer here | answer here | answer here |
| Soccer <br> Ball | answer here | answer here | answer here | answer here | answer here | answer here |

Based on the data above, answer the following questions:

1. What are some disadvantages of an under-inflated ball?
answer here
2. What are some disadvantages of an over-inflated ball?
answer here

# Pressure and Molecular Motion 

GRADES 6-8
3. Predict what will happen to the bounce of the ball if you continue to increase the pressure past 15 PSI. Use evidence to support your answer.
answer here
4. Draw a molecular diagram of the ball at 3 PSI vs 15 PSI .

| add diagram | add diagram |
| :--- | :--- |
|  |  |

