

7th Grade Science Lab Report: Deflate Gate

Name	Class	Date
Questions Does the air temperature of the environment affect the air pressure of a football? Does the air pressure of the football affect the accuracy of a throw or a kick?		
Background information: Read and take notes on any of the following web pages to learn more about this situation. Write notes in the next section. Try these websites before you go searching in Google! <ol style="list-style-type: none">1. NPR.ORG (News): http://www.npr.org/blogs/thetwo-way/2015/01/20/378581349/scientists-say-the-nfls-deflate-gate-isnt-all-hot-air2. National Physical Laboratory: http://www.npl.co.uk/upload/pdf/pressure-measurement-in-sport.pdf3. NFL.com (beginners guide to football): http://www.nfl.com/rulebook/beginnersguidetofootball4. Football 101: http://football.about.com/od/football101/5. How the physics of football works: http://entertainment.howstuffworks.com/physics-of-football.htm6. Fact Monster (ball air pressure): http://www.factmonster.com/cig/science-fair-projects/matter-much-air-basketball.html7. Air Pressure: http://kids.earth.nasa.gov/archive/air_pressure/8. Temperature and Air Pressure: http://www.physlink.com/Education/AskExperts/ae469.cfm		
Research: (Attach notebook paper as needed)		

Hypothesis (If, then format) Use what you have learned to make an educated guess!

Materials (list in bullet format)

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Procedure (list in numbered format)

- 1.

Organized presentation of data (table) Add graph paper to last page)

Observations of football:

	INSIDE	OUTSIDE
What does it look like?		
What does it feel like?		

Temperature of Air:

Inside:	Outside:
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Mass of ball:

Inside:	Outside:
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Air Pressure of ball:

Inside:	Outside:
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Conclusion(s) (What is your answer to your question?)

Summary statement: _____

RESULTS (use data to explain) _____

I predicted that _____ and the test results were _____.

My hypothesis was (supported/not supported) by the test.

After conducting your tests on the football, do you think that the Patriots claim that the balls were inflated to 13 psi inside and lost 2 lbs of pressure because it was cold outside is true? EXPLAIN.

