

Name: _____

Class: _____

Understanding Basketball

GRADES 6-8

Part 1

Bounce Height	Trial 1	Trial 2	Trial 3
Indoor basketball: Cool Environment			
Indoor basketball: Warm Environment			
Outdoor basketball: Cool Environment			
Outdoor basketball: Warm Environment			

- How does temperature affect the bounce height? Write a hypothesis that supports why this may happen.

- Did you notice a larger or smaller difference in bounce height based on the ball type? Why would the ball

Part 2

Record detailed observations about the ball materials. Include both qualitative and quantitative observations.

Ball type	Observations (cut sample)	Observations after heating (cut sample)	Observations after heating (basketball)
Indoor			
Outdoor			

Ball type	Observations (cut sample)	Observations after cooling (cut sample)	Observations after cooling (basketball)
Indoor			
Outdoor			

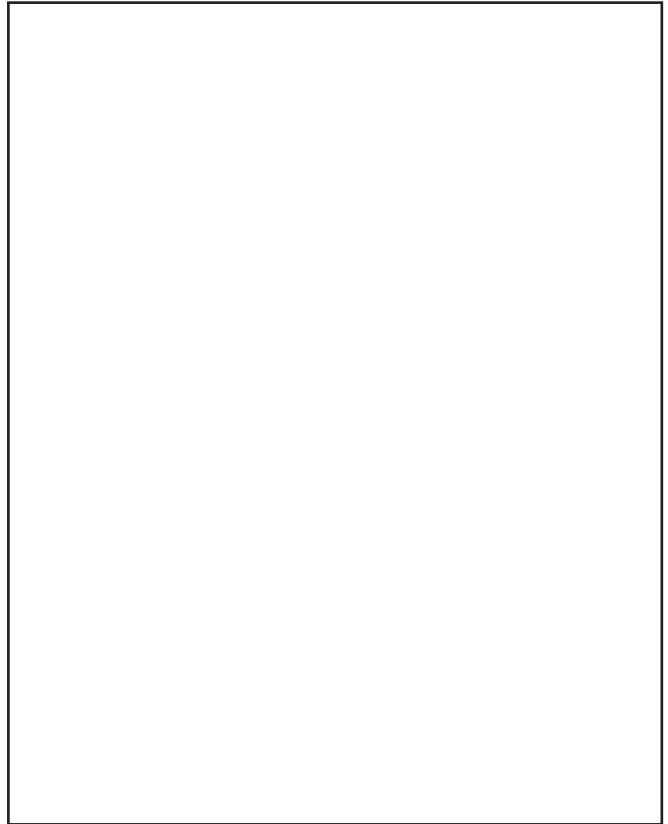
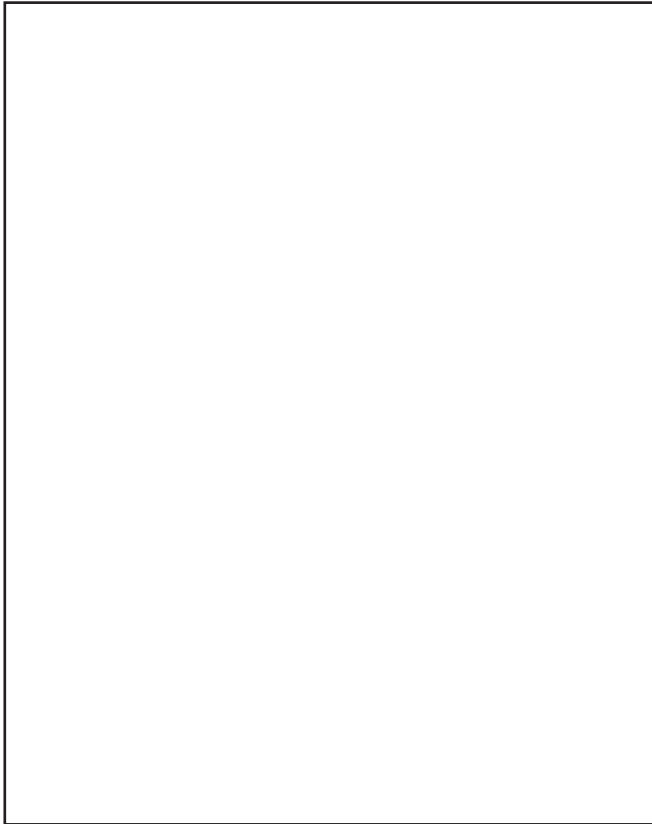
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3. Draw a diagram at a molecular level of what would happen to the ball if they played on a winter day outside.



4. Based on your data from part one and your observations from part two: Predict which ball (indoor v. outdoor) will have the greatest change in behavior based on the difference in material. Support your answer with evidence.