

Name \_\_\_\_\_ Date \_\_\_\_\_ Hour \_\_\_\_\_

### Temperature & Kinetic Energy

A group of students wanted to know if temperature will affect the kinetic energy of a tennis ball. They needed to conduct an experiment and figure out how to get evidence to support their hypothesis.

In your notebook write or draw your ideas of how to conduct an experiment allowing you to answer this question.

Control Group- what stays the same in the experiment.

Independent Variable- what is being tested being tested in the experiment.

Dependent Variable- what is measured in the experiment in the experiment.

How did temperature affect the kinetic energy of the tennis ball? Which ball bounced the highest?

Hypothesis:

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1. What was one controlled variable in the experiment?
2. What was the independent variable in the experiment?
3. What was the dependent variable in the experiment?
4. What is your conclusion based on the evidence found in your data?

## Classroom Norms Self Reflection Chart

	1	2	3	4
R – I provide my classmates with support and encouragement				
R – I share our time to talk. I do this by giving others time to think and share.				
R – I critique the ideas we are working with but not the people we are working with.				
E – I monitor the time I spend talking				
E – I encourage other voices who I have not heard from yet				
E – I recognize and value that people think, share and represent their ideas in different ways.				
C – I come prepared to work toward a common goal.				
C – I share my own thinking to help the entire class to learn.				
C – I listen carefully and ask questions to help me understand everyone's ideas				
C – I speak clearly and loud enough so everyone can hear.				
M – I use and build on other's ideas				
M – I use evidence to support my ideas, ask for evidence from others, and suggest ways to get additional evidence				
M – I am open to changing my mind				
M – I challenge myself to think in new ways				

1 = Never

2 = Sometimes

3 = Always

4 = Reminds other students to do this

**R = Respectful** – Our classroom is a safe space to share  
**E = Equitable** – Everyone's participation and ideas are valuable  
**C = Committed to our community** – We learn together  
**M = Moving our science thinking forward** – We work to figure things out