

Learning Objectives – “Students can...”

1. Analyze and respond to our weekly Science Article: Lotto Odds / Variable & Chance (BW)
2. Go over Quiz 2-1 Graphing Responses & Introduction to Lab 2-1 “The Infinite Variables Table”

Assessment

In-class completion of the notebook/bell work (f)
Lab 2-1 Infinite Variables Table / Introduction & Hypothesis

Homework

1. Complete Lab 2-1 / Hypothesis & Variables ID – 9/5
2. Complete Quiz 2-1 Corrections / Explanations (Optional) – 9/5

Reminders / DO NOT COPY

Collect box material for gravity coaster lab 3-1

Turn in \$15.00 lab supplies fee

Bell work

Using good-practice reading techniques, read this week’s science article. When you finish reading, complete the article questions below.

1. **Based on the article you’ve just read – How do your odds of winning the lottery compare with being hit by a meteorite?**
2. **True or False: The more possible outcomes the less likely you are to have the same outcome.**
3. **Why would it be better to try and marry a millionaire than play the lottery?**
4. **Could we use science to win the lottery? Explain.**

Linked Documents and Class Resource

[Teacher’s NB 9/4](#)

[Article: Lotto Odds](#)

[Infinite Variables Lab 2-1](#)

Quiz 2-1*

District Content Descriptor:

Construct, use, and present oral and written arguments supported by empirical evidence and scientific reasoning to support or refute an explanation or a model for a phenomenon. (07-PS3-5)

Connections to Nature of Science

Scientific Knowledge is Based on Empirical Evidence

Science knowledge is based upon logical and conceptual connections between evidence and explanations (07-PS3-4),(07-PS3-5)

Fayette County

2018-19

District Content Map

Learning Objectives – “Students can...”

1. Use critical thinking to solve a problem. (BW)
2. Lab 2-1 “The Infinite Variables Table” / Experimental Design

Assessment

In-class completion of the notebook/bell work (f)
 Lab 2-1 The Infinite Variables Table / Experimental Design

Homework

1. Complete Lab 2-1 / Experimental Design – 9/6
2. Quiz 3-1: Lab 2-1 & Notebook Concepts – 9/7

Reminders / DO NOT COPY

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Bell work

Complete today’s challenge question in the notebook. When you finish, **record your answer on a small piece of paper and place it in the solutions chest at the front of the room.**



Simple Calculations

A farmer must cross a river, and bring with him his sheep and cabbage. He has only one small boat and can carry only one item across at a time. To make things worse, a wolf has now joined them on the bank of the river. Can you get the farmer, his sheep and cabbage across safely?

- **If you leave the sheep with the cabbage, the sheep will eat the cabbage.**
- **If you leave the wolf with the sheep, the wolf will eat the sheep.**
- **The farmer cannot swim.**

Linked Documents and Class Resource

[Teacher’s NB 9/5](#)

[Infinite Variables Lab 2-1](#)

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*Fayette County
 2018-19
 District Content Map*

Learning Objectives – “Students can...”

1. Analyze and respond to the YouTube - Q Review. (BW)
2. Lab 2-1 “The Infinite Variables Table” / Interpreting Data & Graphing

Assessment

In-class completion of the notebook/bell work (f)
 Lab 2-1 The Infinite Variables Table / Test Trials & Data Collection

Homework

1. Complete Lab 2-1 / Graphing – 9/10
2. Quiz 3-1: Lab 2-1 & Notebook Concepts – 9/7

Reminders / DO NOT COPY

Collect box material for gravity coaster lab 3-1

Turn in \$15.00 lab supplies fee

Bell work

YouTube Science – Watch the video and respond to the questions below.

1. **Using an example from the video – How can math be used to explain non-mathematical things?**
2. **Why is it so hard to see math in our everyday lives?**
3. **If math could be used to explain everything – would this be good or bad?**
Explain your response



YouTube Video Link – Math Explains Everything

Linked Documents and Class Resource

[Teacher’s NB 9/6](#)

[YouTube Science Video - Brain Games](#)

[Infinite Variables Lab 2-1](#)

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Fayette County

2018-19

District Content Map

Date: September 7, 2018

School Day: 016

Learning Objectives – “Students can...”

1. Share ideas by writing a paragraph in their science journal. (BW)
2. Quiz 2-1: Lab 1-1 & Notebook Concepts

Assessment

In-class completion of the notebook/bell work (f)
Quiz 2-1: Lab 1-1 & Notebook Concepts (f)

Homework

1. Lab 2-1 Data Table & Test Trials – 9/10
2. Return signed grade sheet – 9/10

Reminders / DO NOT COPY

Collect box material for gravity coaster lab 3-1
Turn in \$15.00 lab supplies fee

Bell work

Science Journal: Day 3

Complete a paragraph containing no less than five additional sentences that continue the lead below.

“Science and math are pretty much like...”

Linked Documents and Class Resource

[Teacher’s NB 9/7](#)

[Infinite Variables Lab 2-1](#)

*Quiz 3-1**

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Fayette County

2018-19

District Content Map

Week 4: September 4 - 7, 2018

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Vocabulary 1-1 & 2-1 – Understanding Science³

Concept Vocabulary – Complete the starred* terms in the notebook. This is review vocabulary / No terms are added this week.

Vocabulary Term	Definition
Conclusion*	A summary based on experimental evidence. A conclusion explains an observation, question, hypothesis, experimental design, experimental/graphic data and summary statement.
Ethics	The moral principles of behavior, and the careful consideration of an action. Example: Scientific - <u>Can we use DNA to make a dinosaur?</u> – Ethical: <u>Should we use DNA to make a dinosaur?</u>
Experiment*	A scientific procedure used to make a discovery, test a hypothesis, or demonstrate a known fact.
Genius	Very clever;
Hypothesis*	A proposed explanation made on the basis of limited evidence.
Invention – Innovation*	(Invention) The creation of something new – a method, idea or product and (innovation) the continuation of that process over time.
Observation*	To witness an event that is not fully understood – Scientific method
Question*	To request general/specific information about an observation – Scientific method
Reasoning*	The act of using what you know – to determine the meaning of what you do not know.
Research*	To study, calculate and/or investigate as a means to form a conclusion.
Science*	The process we use to understand the laws of a system. Scientific method: Observation, question, hypothesis, experimentation, data collection, conclusion
Technology*	The application of scientific knowledge for practical purposes, especially in industry.

YouTube Science – Watch the video and respond to the questions below.

1. **Using an example from the video – How can math be used to explain non-mathematical things?**
2. **Why is it so hard to see math in our everyday lives?**
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Explain your response

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