

Activities:

You will begin this event by watching a mathematical clip located at <http://scaleupstem.ncsu.edu/video>. Next, you will complete the Bouncing Ball activity using Fathom and create a document showcasing your findings. You will then research and create a scenario for a situation in the real world which you would mathematically devise a solution using exponential and logarithmic equations. Finally, you will synthesize and solve your classmate's scenarios providing them with peer evaluations.

Criteria for Success:

The video reflection will include...

- Your thoughts and views on the use of mathematics throughout the world
- Correct spelling, grammar, and punctuation

The Bouncing Ball activity will include...

- A screen shot of the data produced in Fathom
- A screen shot of the graphical representation of the data produced in Fathom
- A screen shot of the tabular and graphical representation of the transformed data produced in Fathom
- Correctly written summation notation of the data
- A screen shot of the graphical representation of the ball bounce heights
- A correctly written prediction function
- A correctly written inverse function
- A screen shot of the tabular and graphical representation of the inverse function
- Responses to the analysis with correct spelling, grammar, and punctuation

The real world scenario will include...

- A student designed scenario utilizing exponential and logarithmic functions
- A solution to your scenario justifying your results
- Correct spelling, grammar, and punctuation.

Activities:

You will begin this event by watching a mathematical clip located at <http://scaleupstem.ncsu.edu/video>. Next, you will complete the Bouncing Ball activity using Fathom and create a document showcasing your findings. You will then research and create a scenario for a situation in the real world which you would mathematically devise a solution using exponential and logarithmic equations. Finally, you will synthesize and solve your classmate's scenarios providing them with peer evaluations.

Criteria for Success:

The video reflection will include...

- Your thoughts and views on the use of mathematics throughout the world
- Correct spelling, grammar, and punctuation

The Bouncing Ball activity will include...

- A screen shot of the data produced in Fathom
- A screen shot of the graphical representation of the data produced in Fathom
- A screen shot of the tabular and graphical representation of the transformed data produced in Fathom
- Correctly written summation notation of the data
- A screen shot of the graphical representation of the ball bounce heights
- A correctly written prediction function
- A correctly written inverse function
- A screen shot of the tabular and graphical representation of the inverse function
- Responses to the analysis with correct spelling, grammar, and punctuation

The real world scenario will include...

- A student designed scenario utilizing exponential and logarithmic functions
- A solution to your scenario justifying your results
- Correct spelling, grammar, and punctuation.