World Domination

Standards: **HS-LSS-1, HS-LS2-2, CCSS.MATH.CONTENT.HSS.IC.A.2, CCSS.MATH.CONTENT.HSS.ID.B.6.A**

SUMMARY

World Domination: Will an organism really invade the world? Using scientific examples of growth to evaluate mathematical models.

RESOURCES

Unit Overview

Lesson 1: Day 1 World Domination

Lesson 2: Day 2 World Domination

STANDARDS

Content Standards (science and math):

Science
HS-LS2-1: Use mathematical models and/or computational representations to support explanations of factors that affect carrying capacity of ecosystems at different scales [Clarification Statement: emphasis is on quantitative analysis and comparison of the relationships among the interdependent facts including boundaries, resources, climate, and competitions. Examples of mathematical comparisons could include graphs, charts, histograms, and populations changes gathered from simulations or historical data sets.] [Assessment Boundary: Assessment does not include deriving mathematical equations to make comparisons.]

CCSS.MATH.CONTENT.HSS.IC.A.2
Decide if a specified model is consistent with results from a given data-generating process, e.g., using simulation.

CCSS.MATH.CONTENT.HSS.ID.B.6.A
Fit a function to the data; use functions fitted to data to solve problems in the context of the data. Use given functions or choose a function suggested by the context. Emphasize linear, quadratic, and exponential models.

NGSS:
HS-LS2-2: Use mathematical representations to support and revise explanations based on evidence about factors affecting biodiversity and populations in ecosystems of different scales. [Clarification Statement: Examples of mathematical representations include finding the average, determining trends, and using graphical comparisons of multiple sets of data.] [Assessment Boundary: Assessment is limited to provided data.]

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