

HOT-DOG TOSS!

Goals

- Students will:
- Understand the meaning of graphs.
 - Practice interpretation and analysis of graphs.
 - Make valid observations.
 - Inter relationships.
 - Evaluate correlations between graphical relationships. (with an oceanography twist!)
 - Relate this to climate change!



Assessments

Performance: Students will demonstrate understanding by answering critical thinking questions about graphs (different levels).

Product: Convert data from HOT-DOGS to computer simulation and demonstrate this understanding by completing a project.

Curriculum



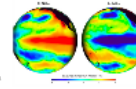
Procedure

- Review different types of graphs.
- Tutorial on HOT-DOGS with C-MORE Resources.
- Contour graph visualization 1993-2004.
- Using HOT-DOGS data, students analyze graphs and make correlations.
- Students will synthesize their learning in a final project.



Key Concepts

- HOT-DOGS provides real-time data on physical and biogeochemical ocean properties and processes.
- An excellent computer simulation shows Pacific Ocean temperatures between the years 1993 to 2004 from Robert Bigdare's presentation.
- Graphs generated on the HOT-DOGS site can be used to correlate with the visual computer simulation of ocean temperature in the Pacific.
- Generating observations and correlations from the data can lead to evidence of La Nina and El Nino in certain years and climate change.



HOT-DOG TOSS!

(Hawaii Ocean Time-series Data Organizational and Graphical System for Temperature, Oxygen, Salinity Synthesis) Where!



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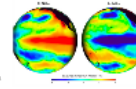
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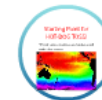
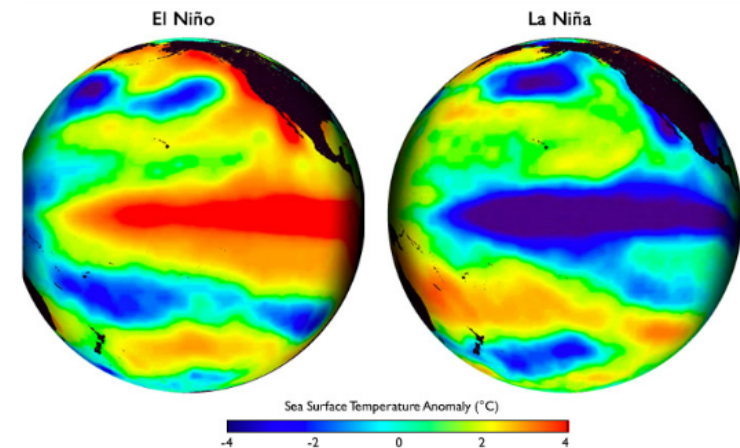
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(Hawaii Ocean Time-series Data Organizational
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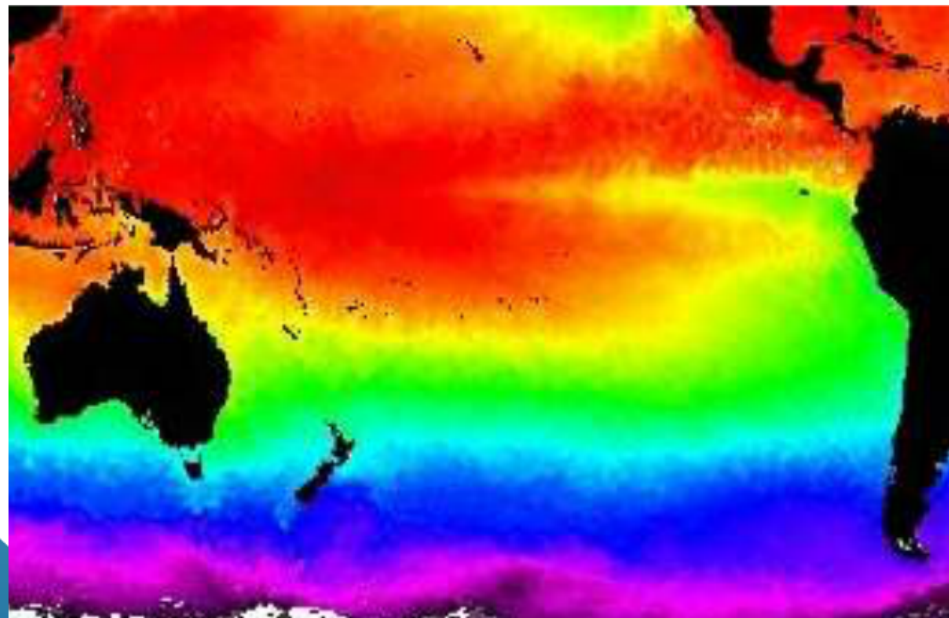
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Starting Point for HOT-DOG TOSS!

Watch video simulation and students will
make observations!



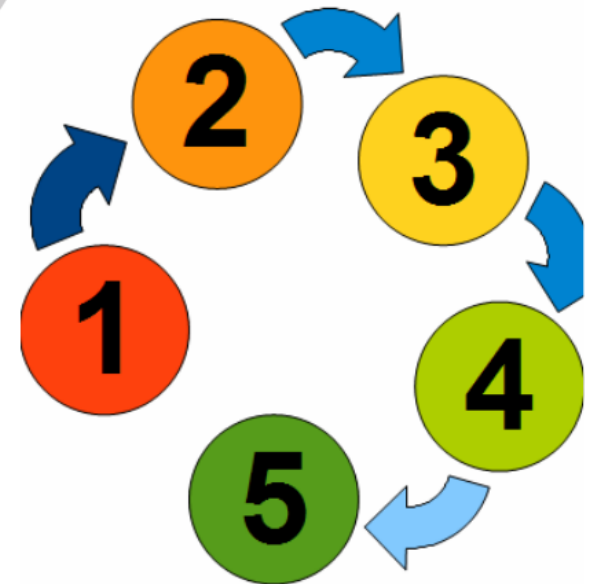
Objectives

- Students will observe contour graphs and identify trends/patterns within the graphs.
- Groups of students will record observations (2-3) for each graph.
- Students will demonstrate their comprehension of the graphs by presenting their findings to the class.
- Students will synthesize their results by writing a conclusion which they will communicate effectively through a Powerpoint, Prezi, poster, skit, song, round-table discussion or other method that is approved by their teacher.



Procedure

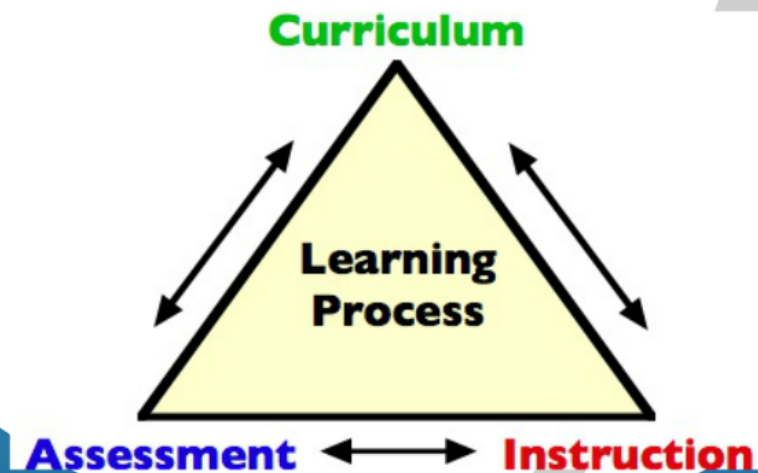
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