

# Earth System Science Investigation



A GLOBE® Learning Investigation



# Earth System Science Investigation at a Glance

## Suggested Activities

- Read the *Introduction* to become familiar with studying Earth system science at different space and time scales.
- [\*What Can We Learn About Our Seasons\*](#), [\*What Are Some Factors That Affect Seasonal Patterns \(Atmosphere Investigation\)\*](#), [\*How Do Seasonal Temperature Patterns Vary Among Different Regions of the World \(Atmosphere Investigation\)\*](#) learning activities introduce students to characteristics and patterns of seasons.
- [\*Modeling the Reasons for Seasonal Change and Seasonal Change on Land and Water\*](#) learning activities helps students understand factors that cause seasonal patterns.
- [\*Connecting the Parts of the Study Site\*](#), [\*Representing the Study Site in a Diagram\*](#), [\*Using Graphs to Show Connections\*](#), [\*Diagramming the Study Site for Others\*](#), and [\*Comparing the Study Site to One in Another Region\*](#) learning activities allow students to explore Earth system connections at the local scale.
- [\*Defining Regional Boundaries\*](#) and [\*Effects of Inputs and Outputs on a Region\*](#) learning activities allow students to explore Earth system connections at the regional scale.
- [\*Your Regional to Global Connections\*](#) and [\*Components of the Earth System Working Together\*](#) learning activities allow students to explore Earth system connections at the global scale.



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## **Learning Activities**

### Introduction to Seasons

- [What Can We Learn About Our Seasons?](#)
- [Modeling the Reasons for Seasonal Change](#)
- [Seasonal Change on Land and Water](#)

### [Introduction to Exploring the Connections](#)

#### Local Connections

- [Connecting the Parts of the Study Site](#)
- [Representing the Study Site in a Diagram](#)
- [Using Graphs to Show Connections](#)
- [Diagramming the Study Site for Others](#)
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#### Regional Connections

- [Defining Regional Boundaries](#)
- [Effects of Inputs and Outputs on a Region](#)

#### Global Connections

- [Your Regional to Global Connection](#)
- [Components of the Earth System Working Together](#)