

Course Content – Science (SCI)

Physical Science II

Content: **(Science) Glencoe Course 4**

Unit 1 – Storms

Where do storms come from? How do they form? What kind of damage do they do? Are all of the effects of storms harmful? The information in this unit will help students understand the causes and effects of storms.

Chapter 1 – Weather Prediction / *The Approaching Storm*

Chapter 2 – Severe Weather / *The Storm Center*

Chapter 3 – The Effects of Storms / *Aftermath of the Storm*

Unit 2 – Ecology

Like parts of a mobile, ecosystems hang in a delicate balance. If you disturb one part, all parts are disturbed. But over time a new balance is reached. Whether it's a forest, a coral reef, or a busy city, learn more about how ecosystems change and recover in this unit.

Chapter 4 – Biotic and Abiotic Factors / *Organisms and Their Environments*

Chapter 5 – Cycling of Matter and Energy / *Ecosystems in Balance*

Chapter 6 – Changes in Ecosystems / *Upsetting the Balance*

Unit 3 – Food

Food is the means by which organisms obtain energy to live. But how does energy get into the food? How does an organism release that energy? How do plants obtain energy? How is food preserved to keep it safe to eat? The answers to these questions are served up in Unit 3

Chapter 7 – Biochemistry / *What's in the food you eat?*

Chapter 8- Photosynthesis / *Solar-Powered Recycling*

Chapter 9 – Soil Formation / *The Life-Giving Earth*

Chapter 10 - Chemistry of Food / *From Field to Table*

Unit 4 – Resources

Shiny black coal is one of the Earth's most abundant, important resources. What other resources does Earth hold? How are they extracted from Earth's surfaces? Can we make sure the supply of coal and other important resources will last? Dig into Unit 4 to find out.

Chapter 11 – Resources / *Earth's Limited Treasures*

Chapter 12 – The Formation of Resources / *Finding Earth's Treasures*

Chapter 13 – Petroleum Chemistry / *Petroleum Power*

Chapter 14 – Recycling / *Saving Limited Resources*

Unit 5 – Shelter

How do people solve the problems of providing shelter? In this unit, find out how sites are selected for buildings, what materials are used in construction, and how buildings are heated, cooled, and provided with electricity. Pick up your hammer along with Unit 5 and let's get started.

Chapter 15 – Earth's Crust in Motion / *Building on Stable Ground*

Chapter 16 – Structures and Materials / *Choosing the Right Materials*

Chapter 17 – Forces and Machines / *Building a House*

Chapter 18 – Transfer of Thermal Energy / *Heating and Cooling*

Chapter 19 – Electrical Energy / *More Power to you*

Unit 6 – Disease

You're sneezing. Your eyes are watering. Is it an allergy? The flu? The common cold? Maybe you were exposed to a toxic substance. How are diseases detected and classified? How are they prevented? Grab a tissue and turn to Unit 6 to find out.

Chapter 20 – Types of Disease / *Getting Sick*

Chapter 21 – Preventing and Treating Disease / *Maintaining Your Health*

Chapter 22 – Detecting Disease / *Examining the Causes of Disease*

Unit 7 – Flight

What forces and fuels enable birds, planes, and helicopter to fly? How is flight a necessary part of the life cycle of some plants and fungi? What forces do rockets use to escape Earth's gravity? Unit 7 is a first-class ticket to answering these questions.

Chapter 23 – Physics of Flight / *Getting Off the Ground*

Chapter 24 – Structures of Flight / *Soaring Birds and Planes*

Chapter 25 – Physics of Space Flight / *Flying Beyond Earth's Atmosphere*

