

Grade 8 Science Curriculum Correlations Guide

“Energy Can be Transferred as Both a Particle and a Wave”

These Curriculum Correlations Packages differ from Unit Study Kits. The purpose of the Curriculum Correlation Guide is to outline how a specific curriculum resource aligns with BC's standards, showing you which sections of the material to complete. It has been designed to help you prioritize your time and effort, assisting you in addressing the content and core competencies in British Columbia.

We recommended that you complete in consultation with your teacher, so that your student's learning style and needs can be addressed.

The following resources are included in this package, and will need to be returned to HCOS:

1. God's Design for the Physical World: Heat and Energy TEXT by Debbie & Richard Lawrence
2. God's Design for the Physical World: Heat and Energy TEACHER SUPPLEMENT by Debbie & Richard Lawrence
3. Correlations Guide

Overview

- Only some chapters are required, as outlined in the section below. This Unit should take 5 weeks to complete at a very moderate pace. Please return to the Library upon completion so that it can be made available to other families.
- The text presents the important information. We've outlined for you the important chapters to read, and the important elements to complete.
- Every once in a while, the text refers to Worksheets, Lab Sheets, Quizzes and Tests. It is not necessary that you complete the work found on these sheets, but if you so desire, you may download them [here](#) (scroll down to the end of the webpage, add to cart and download).

Preparation

- We encourage you to keep your work in a journal, and take photos of the experiments and activities you complete as you go. It is easier to keep everything in one place, rather than to scramble to find it all later.
- Look ahead to the Recommended Activity each week, and plan to obtain the necessary materials.

Week 1

Teacher Supplement/Answers: pages 34-35

Waves: Chapter 22; pages 78-80 (Answer the questions in the “Taking it Further” section on page 80 in your journal)

Electromagnetic Spectrum/Different Kinds of Rays: Chapter 23; page 81- 83 (Answer the questions in the “Taking it Further” section on page 83 in your journal)

Recommended Activity: Wave Characteristics; page 80

Week 2

Teacher Supplement/Answers: page 39

Light: Chapter 28 - pages 101-103 (Answer the questions in the “Taking it Further” section on page 104 in your journal)

Color: Chapter 29 - pages 104-106 (Answer the questions in the “Taking it Further” section on page 106 in your journal)

Recommended Activity: Splitting Light OR Combining Light; page 105

Week 3

Teacher Supplement/Answers: pages 40-41

Reflection: Chapter 30; pages 107-109 (Answer the questions in the “Taking it Further” section on page 108 in your journal)

Mirrors: Chapter 31; pages 110-112 (Answer the questions in the “Taking it Further” section on page 112 in your journal)

Recommended Activity: Angle of Incidence; page 109

Week 4

Teacher Supplement/Answers: pages 41-42

Refraction: Chapter 32; pages 113-115 (Answer the questions in the “Taking it Further” section on page 114 in your journal)

Lenses: Chapter 33; pages 116-118 (Answer the questions in the “Taking it Further” section on page 118 in your journal)

Recommended Activity: Density and Refraction; page 115

Week 5

1. Complete the **Challenge questions** found in Quiz 6 on page 43 of the Teacher Supplement. You will need to dictate or write out the questions for your student.
2. Collect your work and send samples to your contact teacher. Include photos of the activities/experiments you completed.