

Online Resources

Designing Computer Programs

Click on each lesson to access its online resources. Page numbers refer to pages in the Teacher Guide. Some links provide access to files created by the Core Knowledge Foundation, including PDF documents that you can download and view with the appropriate software (such as [Adobe Reader](#)).

[Introduction](#)

[Lesson 2](#)

[Lesson 3](#)

[Lesson 4](#)

[Lesson 5](#)

[Lesson 6](#)

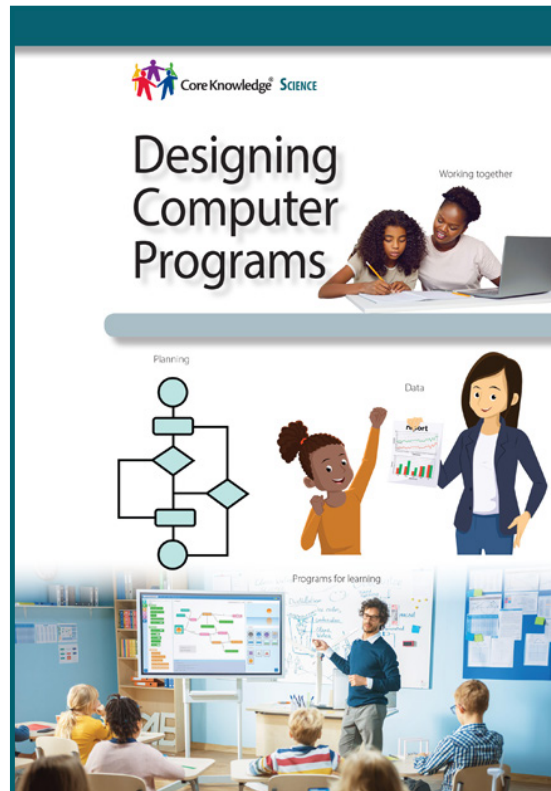
[Lesson 7](#)

[Lesson 8](#)

[Lesson 9](#)

[Lesson 10](#)

[Teacher Resources](#)



NOTE: There are no online resources for Lesson 1.

CKSci Online Resources may include links to sites external to the Core Knowledge Foundation, as well as the coreknowledge.org website. Please note that the external sites are owned and operated by third-parties; the Core Knowledge Foundation is not responsible for the content or maintenance of these third party resources. Teachers and parents should carefully review the content of these third party resources to determine if they appropriate for use with their students.

Online Resources

Designing Computer Programs

Introduction

Page	Resource Links
3	<p>Note to Core Knowledge Teachers:</p> <p>Core Knowledge Science (Website)</p> <p>This unit has been informed by the Computer Science Teacher Association (CSTA) K–12 Standards. Learn more about the standards. (Website)</p>
7	Common Core State Standards for English Language Arts (PDF Document)
13	Resources for Effective and Safe Classroom and Online Activities (PDF Document)
14–15	Materials List for Grade 5 <i>Designing Computer Programs</i> (PDF Document)

← [Table of Contents](#) [First Lesson](#) →

CKSci Online Resources may include links to sites external to the Core Knowledge Foundation, as well as the coreknowledge.org website. Please note that the external sites are owned and operated by third-parties; the Core Knowledge Foundation is not responsible for the content or maintenance of these third party resources. Teachers and parents should carefully review the content of these third party resources to determine if they appropriate for use with their students.

Online Resources

Designing Computer Programs

Lesson 2

Page	Resource Links
30	<p data-bbox="204 594 423 625">Lesson 2, Part 1:</p> <p data-bbox="204 646 1133 678">MentalUP - Cybersecurity for Kids: 5 Practical Ways to Explain It (Article)</p> <p data-bbox="204 751 1539 825">NOTE: Preview all videos, and cue beyond introductory advertisements before classroom display. Many video clips are best displayed with the sound muted and supported by teacher explanation.</p>

[← Previous Lesson](#) [Next Lesson →](#)

CKSci Online Resources may include links to sites external to the Core Knowledge Foundation, as well as the coreknowledge.org website. Please note that the external sites are owned and operated by third-parties; the Core Knowledge Foundation is not responsible for the content or maintenance of these third party resources. Teachers and parents should carefully review the content of these third party resources to determine if they appropriate for use with their students.

Online Resources

Designing Computer Programs

Lesson 3

Page	Resource Links
41	Lesson 3, Part 1: Spectrum CSS - Data Visualization Fundamentals (Article)
46	Lesson 3, Part 3: Nightingale - Data Visualization for Kids (Article)

NOTE: Preview all videos, and cue beyond introductory advertisements before classroom display. Many video clips are best displayed with the sound muted and supported by teacher explanation.

← [Previous Lesson](#) [Next Lesson](#) →

CKSci Online Resources may include links to sites external to the Core Knowledge Foundation, as well as the coreknowledge.org website. Please note that the external sites are owned and operated by third-parties; the Core Knowledge Foundation is not responsible for the content or maintenance of these third party resources. Teachers and parents should carefully review the content of these third party resources to determine if they appropriate for use with their students.

Online Resources

Designing Computer Programs

Lesson 4

Page	Resource Links
50	<p>Lesson 4, Part 1:</p> <p>Edutopia - Deeper Learning: A Collaborative Classroom is Key (Article)</p> <p>NOTE: Preview all videos, and cue beyond introductory advertisements before classroom display. Many video clips are best displayed with the sound muted and supported by teacher explanation.</p>

[← Previous Lesson](#) [Next Lesson →](#)

CKSci Online Resources may include links to sites external to the Core Knowledge Foundation, as well as the coreknowledge.org website. Please note that the external sites are owned and operated by third-parties; the Core Knowledge Foundation is not responsible for the content or maintenance of these third party resources. Teachers and parents should carefully review the content of these third party resources to determine if they appropriate for use with their students.

Online Resources

Designing Computer Programs

Lesson 5

Page	Resource Links
56	<p>Lesson 5, Part 1:</p> <p>PBS Learning Media - The Design Process (Interactive)</p> <p>NOTE: Preview all videos, and cue beyond introductory advertisements before classroom display. Many video clips are best displayed with the sound muted and supported by teacher explanation.</p>

[← Previous Lesson](#) [Next Lesson →](#)

CKSci Online Resources may include links to sites external to the Core Knowledge Foundation, as well as the coreknowledge.org website. Please note that the external sites are owned and operated by third-parties; the Core Knowledge Foundation is not responsible for the content or maintenance of these third party resources. Teachers and parents should carefully review the content of these third party resources to determine if they appropriate for use with their students.

Online Resources

Designing Computer Programs

Lesson 6

Page	Resource Links
66	<p>Lesson 6, Part 1:</p> <p>Coders Campus - Basic Programming Concepts: Learn the Fundamentals Used in Coding (Article)</p> <p>NOTE: Preview all videos, and cue beyond introductory advertisements before classroom display. Many video clips are best displayed with the sound muted and supported by teacher explanation.</p>

[← Previous Lesson](#) [Next Lesson →](#)

CKSci Online Resources may include links to sites external to the Core Knowledge Foundation, as well as the coreknowledge.org website. Please note that the external sites are owned and operated by third-parties; the Core Knowledge Foundation is not responsible for the content or maintenance of these third party resources. Teachers and parents should carefully review the content of these third party resources to determine if they appropriate for use with their students.

Online Resources

Designing Computer Programs

Lesson 7

Page	Resource Links
75	<p>Lesson 7, Part 1:</p> <p>Study.com - What is Usability?: Definition & Tools (Article)</p> <p>National Center on Accessible Educational Materials - What is Accessibility? (Article)</p>
80	<p>Lesson 7, Part 3:</p> <p>Universal Design Living Laboratory - The Seven Principles of Universal Design (Article)</p> <p>CareerFoundry - 7 Principles of Universal Design to Make Your UX Inclusive (Blog)</p> <p>Interaction Design Foundation - Learn to Create Accessible Websites with the Principles of Universal Design (Article)</p>
<p>NOTE: Preview all videos, and cue beyond introductory advertisements before classroom display. Many video clips are best displayed with the sound muted and supported by teacher explanation.</p>	

← [Previous Lesson](#) [Next Lesson](#) →

CKSci Online Resources may include links to sites external to the Core Knowledge Foundation, as well as the coreknowledge.org website. Please note that the external sites are owned and operated by third-parties; the Core Knowledge Foundation is not responsible for the content or maintenance of these third party resources. Teachers and parents should carefully review the content of these third party resources to determine if they appropriate for use with their students.

Online Resources

Designing Computer Programs

Lesson 8

Page	Resource Links
84	<p>Lesson 8, Part 1</p> <p>Kathleen Morris Primary Tech - A Beginner's Guide to Copyright and Creative Commons (Article)</p> <p>NOTE: Preview all videos, and cue beyond introductory advertisements before classroom display. Many video clips are best displayed with the sound muted and supported by teacher explanation.</p>

[← Previous Lesson](#) [Next Lesson →](#)

CKSci Online Resources may include links to sites external to the Core Knowledge Foundation, as well as the coreknowledge.org website. Please note that the external sites are owned and operated by third-parties; the Core Knowledge Foundation is not responsible for the content or maintenance of these third party resources. Teachers and parents should carefully review the content of these third party resources to determine if they appropriate for use with their students.

Online Resources

Designing Computer Programs

Lesson 9

Page	Resource Links
94	<p>Lesson 9, Part 2:</p> <p>ScratchJr (Website / App)</p> <p>ScratchJr - About ScratchJr (Website)</p> <p>ScratchJr - Motion Blocks (Handout)</p> <p>NOTE: Preview all videos, and cue beyond introductory advertisements before classroom display. Many video clips are best displayed with the sound muted and supported by teacher explanation.</p>

← [Previous Lesson](#) [Next Lesson](#) →

CKSci Online Resources may include links to sites external to the Core Knowledge Foundation, as well as the coreknowledge.org website. Please note that the external sites are owned and operated by third-parties; the Core Knowledge Foundation is not responsible for the content or maintenance of these third party resources. Teachers and parents should carefully review the content of these third party resources to determine if they appropriate for use with their students.

Online Resources

Designing Computer Programs

Lesson 10

Page	Resource Links
98	<p>Lesson 10, Part 2:</p> <p>Scratch (Website)</p> <p>Scratch - Getting Started Tutorials (Website)</p> <p>Scratch - Pong Game Educator Guide (PDF Document)</p> <p>Scratch - Make a Chase Game Educator Guide (PDF Document)</p> <p>Scratch - Pong Game Coding Cards (Handout)</p> <p>Scratch - Chase Game Coding Cards (Handout)</p> <p>Scratch - Pong Game Tutorial (Tutorial)</p> <p>Scratch - Chase Game Tutorial (Tutorial)</p> <p>NOTE: Preview all videos, and cue beyond introductory advertisements before classroom display. Many video clips are best displayed with the sound muted and supported by teacher explanation.</p>

← [Previous Lesson](#) [Teacher Resources](#) →

CKSci Online Resources may include links to sites external to the Core Knowledge Foundation, as well as the coreknowledge.org website. Please note that the external sites are owned and operated by third-parties; the Core Knowledge Foundation is not responsible for the content or maintenance of these third party resources. Teachers and parents should carefully review the content of these third party resources to determine if they appropriate for use with their students.

Online Resources

Designing Computer Programs

Teacher Resources

Page	Resource Links
106– 111	<p>Teacher Guide Appendices:</p> <p>Appendix A: Glossary (PDF Document)</p> <p>Appendix B: Internet Safety (PDF Document)</p> <p>Appendix C: Strategies for Acquiring Materials (PDF Document)</p> <p>Internet Safety:</p> <p>U.S. Department of Education (Website)</p> <p>National Cybersecurity Alliance (Website)</p> <p>Safety in the Science Classroom:</p> <p>NSTA Safety Resources (Website)</p> <p>Safety Resources for Elementary Teachers (PDF Document)</p>

← [Previous Lesson](#)

CKSci Online Resources may include links to sites external to the Core Knowledge Foundation, as well as the coreknowledge.org website. Please note that the external sites are owned and operated by third-parties; the Core Knowledge Foundation is not responsible for the content or maintenance of these third party resources. Teachers and parents should carefully review the content of these third party resources to determine if they appropriate for use with their students.