

Correlation to Show Compatibility of *Glencoe Physical Science with Earth Science* with the Next Generation Science Standards Disciplinary Core Ideas

Glencoe Physical Science with Earth Science provides optimal flexibility for the initial implementation of the Next Generation Science Standards (NGSS) into your curriculum. This correlation to the Disciplinary Core Ideas (DCIs) will help guide and inform your curriculum decisions as you transition the NGSS into your science instruction.

Lesson Title	Disciplinary Core Ideas	Pages
Chapter 1 • The Nature of Science		
1 The Methods of Science		6-13
2 Standards of Measurement		14-20
3 Communicating with Graphs		21-25
4 Science and Technology		26-41
Chapter 2 • Motion		
1 Describing Motion	This topic is a prerequisite for PS2.A.	44-50
2 Velocity and Momentum	PS2.A	51-55
3 Acceleration	PS2.A	56-69
Chapter 3 • Forces and Newton's Laws		
1 Forces	PS2.A, PS2.B	72-79
2 Newton's Laws of Motion	PS2.A	80-85
3 Using Newton's Laws	PS2.A	86-101
Chapter 4 • Work and Energy		
1 Work and Machines	This topic is an extension of PS2.A.	106-113
2 Describing Energy	PS3.A, PS3.B	114-119
3 Conservation of Energy	PS3.A, PS3.B, PS3.D	120-135
Chapter 5 • Thermal Energy		
1 Temperature, Thermal Energy, and Heat	PS3.A	138-143
2 Conduction, Convection, and Radiation	PS3.A, PS3.B	144-151
3 Using Thermal Energy	PS3.A, PS3.B, PS3.D	152-167

Lesson Title	Disciplinary Core Ideas	Pages
Chapter 6 • Electricity		
1 Electric Charge	PS1.A, PS2.B, PS3.A, PS3.C	170-177
2 Electric Current	This topic is an extension of PS3.A.	178-184
3 More Complex Circuits	This topic is an extension of PS3.A.	185-199
Chapter 7 • Magnetism and Its Uses		
1 Magnetism	PS1.A, PS2.B, PS3.A	202-208
2 Electricity and Magnetism	PS2.B, PS3.A, PS3.B, PS3.C	209-215
3 Producing Electric Current	PS2.B, PS3.A, PS3.C	216-231
Chapter 8 • Energy Sources and the Environment		
1 Fossil Fuels	PS3.D, ESS3.A, ESS3.C	234-240
2 Nuclear Energy	PS1.C, ESS3.A, ESS3.C	241-247
3 Renewable Energy Sources	PS4.B, ESS3.A, ESS3.C	248-254
4 Environmental Impacts	LS4.D, ESS3.A, ESS3.C	255-269
Chapter 9 • Introduction to Waves		
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2 Wave Properties	PS4.A	279-285
3 The Behavior of Waves	PS4.A, PS4.C	286-303
Chapter 10 • Sound		
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2 Properties of Sound	PS4.A	
3 Music	PS4.A	
4 Using Sound	PS4.A, PS4.C	

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Chapter 11 • Electromagnetic Waves

1 What are electromagnetic waves?	PS2.B, PS3.A, PS4.A, PS4.B	338-344
2 The Electromagnetic Spectrum	PS4.B, PS4.C	345-351
3 Radio Communication	PS4.A, PS4.B, PS4.C	352-365

Chapter 12 • Light

1 The Behavior of Light	PS4.A	368-372
2 Light and Color	This topic is an extension of PS4.A.	373-377
3 Producing Light	This topic is an extension of PS4.A.	378-383
4 Using Light	This topic is an extension of PS4.A.	384-397

Chapter 13 • Mirrors and Lenses

1 Mirrors	This topic is an extension of PS4.A.	400-407
2 Lenses	This topic is an extension of PS4.A.	408-414
3 Optical Instruments	PS4.C	415-427

Chapter 14 • Solids, Liquids, and Gases

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2 Properties of Fluids	PS1.A	441-446
3 Behavior of Gases	PS1.A	447-459

Chapter 15 • Classification of Matter

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2 Concentration and Solubility	This topic is an extension of PS1.A.	653-657
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Lesson Title	Disciplinary Core Ideas	Pages
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Chapter 23 • Organic Compounds		
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2 Versatile Materials	This topic is an extension of PS1.A.	746-752
3 Polymers and Composites	This topic is an extension of PS1.A and PS1.B.	753-767
Chapter 25 • Earth's Internal Processes		
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2 Earthquakes	ESS2.A, ESS3.B	780-787
3 Earth's Interior	ESS1.C, ESS2.A	788-790
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Chapter 26 • Earth's Materials		
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2 Igneous Rocks	Prerequisite topic for ESS2.A and ESS3.A.	817-823
3 Sedimentary Rocks	Prerequisite topic for ESS2.A and ESS3.A.	824-829
4 Metamorphic Rocks and the Rock Cycle	Prerequisite topic for ESS2.A and ESS3.A.	830-843

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Chapter 30 • The Solar System

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