

Unit—The Earth, Sun, and Moon System

Essential Question: What roles do forces play in the patterns and stability of the solar system?

CHAPTER 11 The Sun-Earth-Moon System, pp. 312–341

Major Understandings: **PS 1.1c** The Sun and the planets that revolve around it are the major bodies in the solar system. Other members include comets, moons, and asteroids. Earth’s orbit is nearly circular. **1.1e** Most objects in the solar system have a regular and predictable motion. These motions explain such phenomena as a day, a year, phases of the Moon, eclipses, tides, meteor showers, and comets. **1.1g** Moons are seen by reflected light. The Moon’s phases as observed from Earth are the result of seeing different portions of the lighted area of the Moon’s surface. **1.1h** The apparent motions of the Sun, Moon, planets, and stars across the sky can be explained by Earth’s rotation and revolution. **1.1i** The tilt of Earth’s axis of rotation and the revolution of Earth around the Sun cause seasons on Earth. The length of daylight varies depending on latitude and season. **1.1j** The shape of Earth, the other planets, and stars is nearly spherical.

Week 1	Section 1 Earth , pp. 312–319 Objectives: <ul style="list-style-type: none"> Examine Earth’s physical characteristics. Differentiate between rotation and revolution. Discuss what causes seasons to change. 		Alignment with NYS Core Curriculum: PS 1.1h The apparent motions of the Sun, Moon, planets, and stars across the sky can be explained by Earth’s rotation and revolution. 1.1j The shape of Earth, the other planets, and stars is nearly spherical. Also Covered: PS 1.1c, 1.1e, 1.1i
	Lesson 1 (45 min) Advanced Planning/Notes to Teachers Lab setup	Investigation/Activity Essential Question Activity: <i>Science Journal</i> , Teacher Edition, p. 312A Launch Lab: <i>Model Rotation and Revolution</i> , p. 313	Homework/Extra Practice Reading Essentials, pp. 147–152 Take Home Science Notebook, pp. 117–120 Complete lab wrap-up questions
	Lesson 2 (45 min) Advanced Planning/Notes to Teachers Lab setup	Investigation/Activity Transparency: <i>A Mysterious Kind of Place</i> Transparency: <i>Teaching Transparency</i> MiniLAB: <i>Making Your Own Compass</i> , p. 316 (Lab worksheet available in the Chapter FastFile, p. 3) Suggested Time: 15–20 minutes	Homework/Extra Practice NY Physical Setting boxes, pp. 315, 318 Complete lab wrap-up questions Section 1 Review, p. 319 Read text, pp. 320–324
	Section 2 The Moon—Earth’s Satellite , pp. 320–329 Objectives: <ul style="list-style-type: none"> Identify phases of the Moon and their cause. Explain why solar and lunar eclipses occur. Infer what the Moon’s surface features may reveal about is history. 		Alignment with NYS Core Curriculum: PS 1.1g Moons are seen by reflected light. Our Moon orbits Earth, while Earth orbits the Sun. The Moon’s phases as observed from Earth are the result of seeing different portions of the lighted area of the Moon’s surface. The phases repeat in a cyclic pattern in about one month. Also Covered: PS 1.1c, 1.1e
	Lesson 3 (45 min) Advanced Planning/Notes to Teachers Lab setup	Investigation/Activity Transparency: <i>A Lovely Gibbous Earth</i> MiniLAB: <i>Comparing the Sun and the Moon</i> , p. 321 (Lab worksheet available in the Chapter FastFile, p. 4) Suggested Time: 15–20 minutes	Homework/Extra Practice Reading Essentials, pp. 153–157 Take Home Science Notebook, pp. 121–122 NY Physical Setting boxes, pp. 321, 323 Complete lab wrap-up questions Read text, pp. 325–328

Week 1 (con't)	Lesson 4 (45 min) Advanced Planning/Notes to Teachers Lab setup	Investigation/Activity Quick Demo: <i>Produce an Eclipse</i> , Teacher Edition, p. 323 Discussion: <i>Nocturnal Solar Eclipse</i> , Teacher Edition, p. 323 Discussion: <i>Nocturnal Lunar Eclipse</i> , Teacher Edition, p. 324	Homework/Extra Practice Reading Essentials, pp. 158–160 Take Home Science Notebook, p. 123 Read text, pp. 329
	Lesson 5 (45 min) Advanced Planning/Notes to Teachers Lab setup	Investigation/Activity Lab: <i>Moon Phases and Eclipses</i> , p. 329 (Lab worksheet available in the Chapter FastFile, pp. 5–6) Suggested Time: 1 class period	Homework/Extra Practice Section 2 Review, p. 312 Complete lab wrap-up questions Read text, p. 330–333
Week 2	Section 3 Exploring Earth's Moon , pp. 330–333 Objectives: <ul style="list-style-type: none"> Describe recent discoveries about the Moon. Examine facts about the Moon that might influence future space travel. 		Alignment with NYS Core Curriculum: PS 1.1c The Sun and the planets that revolve around it are the major bodies in the solar system. Other members include comets, moons, and asteroids. Earth's orbit is nearly circular. Also Covered: PS 1.1e, 1.1g
	Lesson 6 (45 min) Advanced Planning/Notes to Teachers Lab setup	Investigation/Activity Transparency: <i>Moon Science</i> Make a Model: <i>The Aitken Basin</i> , Teacher Edition, p. 331 Discussion: <i>Moon Exploration</i> , Teacher Edition, p. 333	Homework/Extra Practice Reading Essentials, pp. 161–164 Take Home Science Notebook, pp. 124–128 NY Physical Setting box, p. 332 Section 3 Review, p. 333 Complete lab wrap-up questions Read text, pp. 334–335
	Lesson 7 (45 min) Advanced Planning/Notes to Teachers Lab setup	Investigation/Activity Lab: <i>Tilt and Temperature</i> , pp. 334–335 (Lab worksheet available in the Chapter FastFile, pp. 9–10) Suggested Time: 1 class period	Homework/Extra Practice Complete lab wrap-up questions Fast File: Chapter Review, pp. 37–38 Visit glencoe.com for Self Check Quiz Chapter Review
	Lesson 8 (45 min) Advanced Planning/Notes to Teachers	Investigation/Activity Chapter Assessment Options: Intermediate-Level Science Examination Practice ExamView® <i>Assessment Suite</i> Chapter Review at glencoe.com For additional assessment options, refer to <i>Performance Assessment in the Science Classroom</i> for rubrics and task lists.	Homework/Extra Practice Read text, <i>Ocean Motion</i> , pp. 342–347

CHAPTER 12 Ocean Motion, pp. 342–369

Major Understandings: **PS 1.1d** Gravity is the force that keeps planets in orbit around the Sun and the Moon in orbit around the Earth. **1.1e** Most objects in the solar system have a regular and predictable motion. **2.1a** Nearly all the atmosphere is confined to a thin shell surrounding Earth. The atmosphere is a mixture of gases, including nitrogen and oxygen with small amounts of water vapor, carbon dioxide, and other trace gases. The atmosphere is stratified into layers, each having distinct properties. Nearly all weather occurs in the lowest layer of the atmosphere. **2.1e** Rocks are composed of minerals. Only a few rock-forming minerals make up most of the rocks of Earth. Minerals are identified on the basis of physical properties such as streak, hardness, and reaction to acid. **2.2a** The interior of Earth is hot. Heat flow and movement of material within Earth cause sections of Earth’s crust to move. This may result in earthquakes, volcanic eruption, and the creation of mountains and ocean basins. **3.1h** Density can be described as the amount of matter that is in a given amount of space. If two objects have equal volume, but one has more mass, the one with more mass is denser. **4.1b** Fossil fuels contain stored solar energy and are considered nonrenewable resources. They are a major source of energy in the United States. Solar energy, wind, moving water, and biomass are some examples of renewable energy resources. **4.2a** Heat moves in predictable ways, flowing from warmer objects to cooler ones, until both reach the same temperature. **4.2b** Heat can be transferred through matter by the collisions of atoms and/or molecules (conduction) or through space (radiation). In a liquid or gas, currents will facilitate the transfer of heat (convection). **4.2e** Temperature affects the solubility of some substances in water. **4.4a** Different forms of electromagnetic energy have different wavelengths. Some examples of electromagnetic energy are microwaves, infrared light, visible light, ultraviolet light, X-rays, and gamma rays. **4.4c** Vibrations in materials set up wave-like disturbances that spread away from the source. Sound waves are an example. Vibrational waves move at different speeds in different materials. Sound cannot travel in a vacuum. **5.1b** The motion of an object can be described by its position, direction of motion, and speed. **5.2d** Friction is a force that opposes motion.

<p>Week 2 (con’t)</p>	<p>Section 1 Ocean Water, pp. 342–347 Objectives:</p> <ul style="list-style-type: none"> Identify the origin of the water in Earth’s oceans. Explain how dissolved salts and other substances get into seawater. Describe the composition of seawater. 		<p>Alignment with NYS Core Curriculum: PS 4.1b Fossil fuels contain stored solar energy and are considered nonrenewable resources. They are a major source of energy in the United States. Solar energy, wind, moving water, and biomass are some examples of renewable energy resources. Also Covered: PS 3.1a, 2.1e, 2.2a</p>
<p>Lesson 9 (45 min) Advanced Planning/Notes to Teachers</p> <p>Lab setup</p>		<p>Investigation/Activity Launch Lab: <i>Explore How Currents Work</i>, p. 343 Transparency: <i>Salt of the Sea</i> Make a Model: <i>Ocean Salinity</i>, Teacher Edition, p. 346 Suggested Time: 10–15 minutes Discussion: <i>Water Shortages</i>, Teacher Edition, p. 346</p>	<p>Homework/Extra Practice Reading Essentials, pp. 165–169 Take Home Science Notebook, pp. 129–132 NY Physical Setting box, p. 345 Section 1 Review, p. 347 Complete lab wrap-up questions Read text, pp. 348–353</p>
<p>Section 2 Ocean Currents, pp. 348–353 Objectives:</p> <ul style="list-style-type: none"> Explain how winds and the Coriolis effect influence surface currents. Discuss the temperatures of coastal waters. Describe density currents. 		<p>Alignment with NYS Core Curriculum: PS 3.1h Density can be described as the amount of matter that is in a given amount of space. If two objects have equal volume, but one has more mass, the one with more mass is denser. Also Covered: PS 4.2a, 4.2b, 4.2e</p>	

Week 3	Lesson 10 (45 min) Advanced Planning/Notes to Teachers Lab setup	Investigation/Activity Transparency: <i>That Could Cool a Lot of Lemonade</i> MiniLAB: <i>Modeling a Density Current</i> , p. 351 (Lab worksheet available in the Chapter FastFile, p. 3) Suggested Time: 10–15 minutes Discussion: <i>Cold Currents</i> , Teacher Edition, p. 350	Homework/Extra Practice Reading Essentials, pp. 170–175 Take Home Science Notebook, pp. 133–135 NY Physical Setting box, p. 350 Section 2 Review, p. 353 Complete lab wrap-up questions Read text, pp. 354–360
Section 3 Ocean Waves and Tides , pp. 354–360 Objectives: <ul style="list-style-type: none"> Describe wave formation. Distinguish between the movement of water particles in a wave and the movement of the wave. Explain how ocean tides form. 		Alignment with NYS Core Curriculum: PS 1.1e Most objects in the solar system have a regular and predictable motion. These motions explain such phenomena as a day, a year, phases of the Moon, eclipses, tides, meteor showers, and comets. Also Covered: PS 1.1d, 4.4a, 4.4c, 5.1b, 5.2d	
	Lesson 11 (45 min) Advanced Planning/Notes to Teachers Lab setup	Investigation/Activity Transparency: <i>Run, Grunion, Run</i> MiniLAB: <i>Modeling Water Particle Movement</i> , p. 355 (Lab worksheet available in the Chapter FastFile, p. 4.) Suggested Time: 15 minutes National Geographic <i>Visualizing Wave Movement</i> , p. 356 Discussion: <i>Gravitational Forces</i> , Teacher Edition, p. 360	Homework/Extra Practice Reading Essentials, pp. 176–180 Take Home Science Notebook, pp. 136–140 Complete lab wrap-up questions Read text, p. 361
	Lesson 12 (45 min) Advanced Planning/Notes to Teachers Lab setup	Investigation/Activity Lab: <i>Wave Properties</i> , p. 361 (Lab worksheet available in the Chapter FastFile, pp. 5–6) Suggested Time: 1 class period	Homework/Extra Practice NY Physical Setting boxes, pp. 355, 357, 359 Section 3 Review, p. 360 Complete lab wrap-up questions Read text, pp. 362–363
	Lesson 13 (45 min) Advanced Planning/Notes to Teachers Lab setup	Investigation/Activity Lab: <i>Sink or Float?</i> , pp. 362–363 (Lab worksheet available in the Chapter FastFile, pp. 7–8) Suggested Time: 1 class period	Homework/Extra Practice Complete lab wrap-up questions Fast File: Chapter Review, pp. 35–36
	Lesson 14 (45 min) Advanced Planning/Notes to Teachers	Investigation/Activity Essential Question Activity: <i>Model</i> , Teacher Edition, p. 365	Homework/Extra Practice Visit glencoe.com for Self Check Quiz Chapter Review
Week 4	Lesson 15 (45 min) Advanced Planning/Notes to Teachers	Investigation/Activity Chapter Assessment Options: Intermediate-Level Science Examination Practice ExamView® <i>Assessment Suite</i> Chapter Review at glencoe.com For additional assessment options, refer to <i>Performance Assessment in the Science Classroom</i> for rubrics and task lists.	Homework/Extra Practice Read text, <i>The Solar System</i> , pp. 370–377

Chapter 13 The Solar System, pp. 370–403

Major Understandings: **PS 1.1c** The Sun and the planets that revolve around it are the major bodies in the solar system. **1.1d** Gravity is the force that keeps planets in orbit around the Sun and the Moon in orbit around the Earth. **1.1e** Most objects in the solar system have a regular and predictable motion. **2.1a** Nearly all the atmosphere is confined to a thin shell surrounding Earth. The atmosphere is a mixture of gases, including nitrogen and oxygen with small amounts of water vapor, carbon dioxide, and other trace gases. The atmosphere is stratified into layers, each having distinct properties. Nearly all weather occurs in the lowest layer of the atmosphere.

<p>Week 4 (con't)</p>	<p>Section 1 The Solar System, pp. 370–377 Objectives:</p> <ul style="list-style-type: none"> Compare models of the solar system. Explain that gravity holds planets in orbits around the Sun. 	<p>Alignment with NYS Core Curriculum: PS 1.1c The Sun and the planets that revolve around it are the major bodies in the solar system. Other members include comets, moons, and asteroids. Earth's orbit is nearly circular. 1.1d Gravity is the force that keeps planets in orbit around the Sun and the Moon in orbit around the Earth.</p>	
	<p>Lesson 16 (45 min) Advanced Planning/Notes to Teachers Lab setup</p>	<p>Investigation/Activity Launch Lab: <i>Model Crater Formation</i>, p. 371 Transparency: <i>Far Out</i> Discussion: <i>Number of Planets</i>, Teacher Edition, p. 373 National Geographic <i>Visualizing the Solar System's Formation</i>, p. 375</p>	<p>Homework/Extra Practice Reading Essentials, pp. 181–184 Take Home Science Notebook, pp. 141–144 Complete lab wrap-up questions</p>
	<p>Lesson 17 (45 min) Advanced Planning/Notes to Teachers</p>	<p>Investigation/Activity Virtual Lab: <i>How big?</i> Teacher Edition, p. 373</p>	<p>Homework/Extra Practice NY Physical Setting box, p. 374 Section 1 Review, p. 376 Read text, p. 377</p>
	<p>Lesson 18 (45 min) Advanced Planning/Notes to Teachers Lab setup</p>	<p>Investigation/Activity Lab: <i>Planetary Orbits</i>, p. 377 (Lab worksheet available in the Chapter FastFile, pp. 5–6) Suggested Time: 1 class period</p>	<p>Homework/Extra Practice Complete lab wrap-up questions Read text, pp. 378–383</p>
<p>Week 5</p>	<p>Section 2 The Inner Planets, pp. 378–383 Objectives:</p> <ul style="list-style-type: none"> List the inner planets in order from the Sun. Describe each inner planet. Compare and contrast Venus and Earth. 	<p>Alignment with NYS Core Curriculum: PS 1.1c The Sun and the planets that revolve around it are the major bodies in the solar system. Other members include comets, moons, and asteroids. Earth's orbit is nearly circular. Also Covered: PS 1.1d, 1.1e, 2.1a</p>	
	<p>Lesson 19 (45 min) Advanced Planning/Notes to Teachers Lab setup</p>	<p>Investigation/Activity Transparency: <i>Really Far Out</i> MiniLAB: <i>Inferring Effects of Gravity</i>, p. 381 (Lab worksheet available in the Chapter FastFile, p. 3) Suggested Time: 15–20 minutes</p>	<p>Homework/Extra Practice Reading Essentials, pp. 185–190 Take Home Science Notebook, pp. 145–147 Complete lab wrap-up questions</p>
	<p>Lesson 20 (45 min) Advanced Planning/Notes to Teachers Lab setup</p>	<p>Investigation/Activity Quick Demo: <i>A Day on Mercury</i>, Teacher Edition, p. 379 Discussion: <i>Mission to Mars</i>, Teacher Edition, p. 380 Applying Math: <i>Diameter of Mars</i>, Teacher Edition, p. 382</p>	<p>Homework/Extra Practice NY Physical Setting box, p. 379 Section 2 Review, p. 383 Complete lab wrap-up questions Read text, pp. 384–389</p>

<p>Week 5 (con't)</p>	<p>Section 3 The Outer Planets, pp. 384–391 Objectives:</p> <ul style="list-style-type: none"> Describe the characteristics of Jupiter, Saturn, Uranus, and Neptune. Describe the largest moons of each of the outer planets. 	<p>Alignment with NYS Core Curriculum: PS 1.1c The Sun and the planets that revolve around it are the major bodies in the solar system. Other members include comets, moons, and asteroids. Earth’s orbit is nearly circular.</p>
<p>Lesson 21 (45 min) Advanced Planning/Notes to Teachers</p> <p>Lab setup</p>	<p>Investigation/Activity Transparency: <i>Relative Dimensions</i> MiniLAB: <i>Modeling Planets</i>, p. 386 (Lab worksheet available in the Chapter FastFile, p. 4) Suggested Time: 1 class period</p>	<p>Homework/Extra Practice Reading Essentials, pp. 191–195 Take Home Science Notebook, pp. 148–150 NY Physical Setting box, p. 387 Section 3 Review, p. 389 Complete lab wrap-up questions Read text, : p. 392–395</p>
<p>Section 4 Other Objects in the Solar System, pp. 392–395 Objectives:</p> <ul style="list-style-type: none"> Describe how comets change when they approach the Sun. Distinguish among comets, meteoroids, and asteroids. Explain that objects from space sometimes impact Earth. 	<p>Alignment with NYS Core Curriculum: PS 1.1c The Sun and the planets that revolve around it are the major bodies in the solar system. Other members include comets, moons, and asteroids. 1.1e Most objects in the solar system have a regular and predictable motion. Also Covered: PS 2.1a</p>	
<p>Lesson 22 (45 min) Advanced Planning/Notes to Teachers</p>	<p>Investigation/Activity Transparency: <i>We Don’t Even Live There Yet!</i> Tie to Prior Knowledge: <i>Meteor Showers</i>, p. 392 Oops!: <i>It Came From Outer Space!</i>, p. 398 Discussion: <i>Halley’s Comet</i>, p. 393 Visual Learning, p. 394 FYI, <i>Meteorites</i>, Teacher Edition, p. 394</p>	<p>Homework/Extra Practice Reading Essentials, pp. 196–198 Take Home Science Notebook, pp. 151–154 NY Physical Setting box, p. 394 Section 4 Review, p. 395 Read text, pp. 396–397</p>
<p>Lesson 23 (45 min) Advanced Planning/Notes to Teachers</p> <p>Lab setup</p>	<p>Investigation/Activity Lab: <i>Solar System Distance Model</i>, pp. 396–397 (Lab worksheet available in the Chapter FastFile, pp. 7–8) Suggested Time: 1 class period</p>	<p>Homework/Extra Practice Complete lab wrap-up questions Fast File: Chapter Review, pp. 41–42 Visit glencoe.com for Self Check Quiz Chapter Review</p>
<p>Week 6</p>	<p>Lesson 24 (45 min) Advanced Planning/Notes to Teachers</p>	<p>Investigation/Activity Chapter Assessment Options: Intermediate-Level Science Examination Practice ExamView® <i>Assessment Suite</i> Chapter Review at glencoe.com For additional assessment options, refer to <i>Performance Assessment in the Science Classroom</i> for rubrics and task lists.</p>

Chapter 14 Stars and Galaxies, pp. 404–435

Major Understandings: PS 1.1a Earth's Sun is an average-sized star. The Sun is more than a million times greater in volume than Earth. **1.1b** Other stars are like the Sun but are so far away that they look like points of light. Distances between stars are vast compared to distances within our solar system. **1.1c** The Sun and the planets that revolve around it are the major bodies in the solar system. Other members include comets, moons, and asteroids. Earth's orbit is nearly circular. **1.1d** Gravity is the force that keeps planets in orbit around the Sun and the Moon in orbit around the Earth. **4.1a** The Sun is a major source of energy for Earth. **4.4a** Different forms of electromagnetic energy have different wavelengths. Some examples of electromagnetic energy are microwaves, infrared, light, visible light, ultraviolet light, X-rays, and gamma rays.

<p>Week 6 (con't)</p>	<p>Section 1: Stars, pp. 404–410 Objectives:</p> <ul style="list-style-type: none"> Explain why some constellations are visible only during certain seasons. Distinguish between absolute magnitude and apparent magnitude. 		<p>Alignment with NYS Core Curriculum: PS 1.1b Other stars are like the Sun but are so far away that they look like points of light. Distances between stars are vast compared to distances within our solar system.</p>
<p>Lesson 25 (45 min) Advanced Planning/Notes to Teachers</p> <p style="text-align: center;">Lab setup</p>	<p style="text-align: center;">Investigation/Activity</p> <p>Launch Lab: <i>Why do clusters of galaxies move apart?</i>, p. 405 Transparency: <i>A Starry Night</i> Lab: <i>Sunspots</i>, p. 415 (Lab worksheet available in the Chapter FastFile, pp. 5–6) Suggested Time: 10 minutes each day for five days</p>	<p style="text-align: center;">Homework/Extra Practice</p> <p>Reading Essentials, pp. 199–202 Take Home Science Notebook, pp. 155–158 Complete lab wrap-up questions</p>	
<p>Lesson 26 (45 min) Advanced Planning/Notes to Teachers</p> <p style="text-align: center;">Lab setup</p>	<p style="text-align: center;">Investigation/Activity</p> <p>Lab: <i>Sunspots</i>, continued 10 minutes MiniLAB: <i>Observing Star Patterns</i>, p. 407 (Lab worksheet available in the Chapter FastFile, p. 3) Suggested Time: 15–20 minutes</p>	<p style="text-align: center;">Homework/Extra Practice</p> <p>NY Physical Setting boxes, pp. 408, 409 Section 1 Review, p. 410 Complete lab wrap-up questions Read text, pp. 411–414</p>	
<p>Section 2 The Sun, pp. 411–414 Objectives:</p> <ul style="list-style-type: none"> Explain that the Sun is the closest star to Earth. Describe the structure of the Sun. Describe sunspots, prominences, and solar flares. 		<p>Alignment with NYS Core Curriculum: PS 1.1a The Sun is more than a million times greater in volume than Earth. 1.1c The Sun and the planets that revolve around it are the major bodies in the solar system. Other members include comets, moons, and asteroids. Also Covered: PS 1.1d, 4.1a</p>	
<p>Lesson 27 (45 min) Advanced Planning/Notes to Teachers</p>	<p style="text-align: center;">Investigation/Activity</p> <p>Lab: <i>Sunspots</i>, continued 10 minutes Transparency: <i>A Hot Topic</i> Quick Demo: <i>Sunspots</i>, Teacher Edition, p. 412 Discussion: <i>Coronagraph</i>, Teacher Edition, p. 413 Curriculum Connection: <i>Math</i>, Teacher Edition, p. 413 Visual Learning, Figure 8, Teacher Edition, p. 413</p>	<p style="text-align: center;">Homework/Extra Practice</p> <p>Reading Essentials, pp. 203–206 Take Home Science Notebook, pp. 159–161 NY Physical Setting box, p. 412 Section 2 Review, p. 414 Read text, pp. 416–421</p>	
<p>Section 3 Evolution of Stars, pp. 416–421 Objectives:</p> <ul style="list-style-type: none"> Describe how stars are classified. Compare the Sun to other types of stars on the H-R diagram. Describe how stars evolve. 		<p>Alignment with NYS Core Curriculum: PS 1.1b Other stars are like the Sun but are so far away that they look like points of light. Distances between stars are vast compared to distances within our solar system. Also Covered: PS 4.4a</p>	

Week 6 (con't)	Lesson 28 (45 min) Advanced Planning/Notes to Teachers Lab setup	Investigation/Activity Lab: <i>Sunspots</i> , continued 10 minutes Virtual Lab: <i>Star Classification</i> , Teacher Edition, p. 417	Homework/Extra Practice Reading Essentials, pp. 207–212 Take Home Science Notebook, pp. 162–164 NY Physical Setting box, p. 417 Section 3 Review, p. 421 Complete lab wrap-up questions Read text, pp. 422–427
	Section 4 Galaxies and the Universe , pp. 422–427 Objectives: <ul style="list-style-type: none"> Describe the Sun’s position in the Milky Way Galaxy. Explain that the same natural laws that apply to our solar system also apply to other galaxies. 		Alignment with NYS Core Curriculum: PS 1.1d Gravity is the force that keeps planets in orbit around the Sun and the Moon in orbit around the Earth. Also Covered: PS 1.1b, 4.4a
Week 7	Lesson 29 (45 min) Advanced Planning/Notes to Teachers Lab setup	Investigation/Activity Lab: <i>Sunspots</i> , continued 10 minutes Transparency: <i>What are we looking at?</i> MiniLAB: <i>Measuring Distance in Space</i> , p. 424 (Lab worksheet available in the Chapter FastFile, p. 4) Suggested Time: 10–15 minutes	Homework/Extra Practice Reading Essentials, pp. 213–216 Take Home Science Notebook, pp. 165–168 Complete lab wrap-up questions Read text, pp. 428–429
	Lesson 30 (45 min) Advanced Planning/Notes to Teachers Lab setup	Investigation/Activity Lab: <i>Measuring Parallax</i> pp. 428–429 (Lab worksheet available in the Chapter FastFile, pp. 7–8) Suggested Time: 1 class period	Homework/Extra Practice NY Physical Setting box, p. 425 Complete lab wrap-up questions Section 4 Review, p. 427
	Lesson 31 (45 min) Advanced Planning/Notes to Teachers	Investigation/Activity Essential Question Activity: <i>Experimental Design</i> , Teacher Edition, p. 431	Homework/Extra Practice Fast File: Chapter Review, pp. 41–42 Visit glencoe.com for Self Check Quiz Chapter Review
	Lesson 32 (45 min) Advanced Planning/Notes to Teachers	Investigation/Activity Chapter Assessment Options: Intermediate-Level Science Examination Practice ExamView® <i>Assessment Suite</i> Chapter Review at glencoe.com For additional assessment options, refer to <i>Performance Assessment in the Science Classroom</i> for rubrics and task lists.	Homework/Extra Practice Read text, <i>Conserving Resources</i> , pp. 220–229