



BJU Press - 6th Grade - Science - Quarter 3 Map

Week	Unit/ Lessons	Project/ Activity	Modification	Submit	Objectives
1	Lesson 94-97				<p>Lesson 94:Electricity and Magnetism</p> <ol style="list-style-type: none">1. Recognize God's use of man's curiosity2. Preview the chapter content <p>Lesson 95: Static Electricity, Current Electricity</p> <ol style="list-style-type: none">1. Explain what causes static electricity.2. Identify the two things needed for an electric current to flow.3. Describe the characteristics of conductors, resistors and insulators. <p>Lesson 96: Activity: An “Unbreakable” Circuit</p> <ol style="list-style-type: none">1. Design and build an "unbreakable" circuit.2. Experiment to test hypotheses. <p>Lesson 97: Circuits, Measuring Electricity, Batteries</p> <ol style="list-style-type: none">1. Differentiate between parallel circuits and series circuits.2. Distinguish among the three basic units of electrical measurement: volt ampere and watt.3. Explain how a battery works.
2	Lesson 98-101				<p>Lesson 98: Magnetism</p> <ol style="list-style-type: none">1. Describe what happens to magnets at their poles.2. Explain the relationship between magnetism and electricity.3. Identify and describe the parts of a generator.4. Explain how a generator works <p>Lesson 99: Exploration: Famous Inventors</p> <ol style="list-style-type: none">1. Research an inventor.2. Present a speech honoring an inventor. <p>Lesson 100:Activity: Build an Electromagnet</p> <ol style="list-style-type: none">1. Identify ways to increase a wire's magnetism.2. Predict ways to strengthen an electromagnet.

					<p>3. Experiment to test predictions.</p> <p>Lesson 101: Technology: Magnetic Levitation</p> <ol style="list-style-type: none"> 1. Explain how electromagnets are used in maglev trains. 2. Identify some ways a maglev train may benefit the environment and transportation
3	Lesson 102-106		Combine lessons 103 and 104 together, review and test the same day.		<p>Lesson 102: Electronics</p> <ol style="list-style-type: none"> 1. Explain the difference between electricity and electronics. 2. Identify the benefits of an integrated circuit. 3. Identify some of the parts of a computer. <p>Lesson 103: Chapter 8 Review</p> <p>Lesson 104: Chapter 8 Test</p> <p>Lesson 105: Motions and Machines</p> <ol style="list-style-type: none"> 1. Recognize that only God values creativity. 2. Preview the chapter content. <p>Lesson 106: Motion</p> <ol style="list-style-type: none"> 1. Differentiate between speed and velocity. 2. Explain why a reference point is needed to observe motion. 3. Describe the relationship of mass and velocity to momentum.
4	Lesson 107-111	Mini Cars in motion		Mini Cars in motion	<p>Lesson 107: Laws of Motion</p> <ol style="list-style-type: none"> 1. Identify Newton's three laws of motion. 2. Explain that both gravity and friction work against inertia. <p>Lesson 108: Activity: Mini Cars in Motion</p> <ol style="list-style-type: none"> 1. Plan a demonstration to illustrate the laws of motion. 2. Experiment to show each of the laws of motion with toy cars. 3. Identify the laws of motion in real-life situations. <p>Lesson 109: Exploration: Roller Coaster</p> <ol style="list-style-type: none"> 1. Design and make a model roller coaster. 2. Discover relationships between slope speed and momentum <p>Lesson 110: Work, Simple Machines: Levers</p> <ol style="list-style-type: none"> 1. Explain that work equals force times distance. 2. Describe a lever. 3. Identify several common levers. 4. Differentiate among the three classes of levers. <p>Lesson 111: Simple Machines: Pulleys, Wheels and Axles, Inclined Planes, Wedges, and Screws. Compound Machines.</p> <ol style="list-style-type: none"> 1. Describe a pulley wheel and axle inclined plane wedge and screw. 2. Discern between a fixed pulley, a moveable pulley and a block and tackle. 3. Explain what a compound machine is.

5	Lesson 112-116		Do lessons 113 and 114 together, review and test the same day.	<p>Lesson 112: Activity: How Much Force?</p> <ol style="list-style-type: none"> 1. Experiment to show that an inclined plane reduces the amount of force needed to do work. 2. Measure metrically in newtons and centimeters. 3. Define operationally the results of the activity. <p>Lesson 113: Chapter 9 Review</p> <p>Lesson 114: Chapter 9 Test</p> <p>Lesson 115: Stars</p> <ol style="list-style-type: none"> 1. Recognize the interrelationship of science concepts in the unit. 2. Relate how God's glory is reflected in the vastness of the stars. 3. Review the unit and chapter content. <p>Lesson 116: Our closest Star</p> <p>Characteristics of Stars</p> <ol style="list-style-type: none"> 1. Explain how stars produce their own light. 2. Distinguish between apparent magnitude and absolute magnitude of stars. 3. Identify classifications of stars according to color. 4. Explain ways distance is measured in space. 5. Interpret diagrams.
6	Lesson 117-121		Choose between activity 119 and 120. If you would like to do both, then choose one to do on Friday as a family.	<p>Lesson 117: Kinds of Stars</p> <ol style="list-style-type: none"> 1. Differentiate between a pulsating variable star and an eclipsing variable star. 1. Describe the causes of novas and supernovas. 2. Describe how astronomers think neutron stars and black holes are formed. <p>Lesson 118: Observing the Heavens</p> <ol style="list-style-type: none"> 1. Identify various constellations. 2. Defend why a Christian should not be involved in astrology. 3. Describe the difference between a reflecting telescope and a refracting telescope. 4. Identify instruments used to study the stars. <p>Lesson 119: Activity: Pinhole Constellations</p> <ol style="list-style-type: none"> 1. Make a model of a constellation. 2. Recognize and name several star groups and constellations. <p>Lesson 120: Exploration: A Different Look.</p> <ol style="list-style-type: none"> 1. Make a model of a constellation. 2. Plot points on a graph. 3. Relate the model to the relative distances of stars. <p>Lesson 121: Star Groups</p> <ol style="list-style-type: none"> 1. Identify how many stars are in a binary star group and in a multiple star group. 2. Differentiate between an open star cluster. 3. Identifying our galaxy is the Milky Way.

					<ol style="list-style-type: none"> 4. Recognize that our galaxy is part of a cluster of galaxies called the Local Group. 5. Describe asteroids, meteoroids, meteors, meteorites and comets.
7	Lesson 122-127		<p>Lesson 122 Would be a fun family activity.</p> <p>You may choose to skip lesson 123.</p> <p>Do lessons 124 and 125 together, Review and Test the same day.</p>	Chapter 10 Test	<p>Lesson 122: Exploration: Stargazing</p> <ol style="list-style-type: none"> 1. Interpret and use a star chart. 2. Identify objects in the night sky. 3. Record observations. <p>Lesson 123: Activity: Crater Creations</p> <ol style="list-style-type: none"> 1. Test factors that affect the size and depth of craters. 2. Measure mass and length. 3. Use a chart to record information. 4. Make and test predictions. <p>Lesson 124: Chapter 10 Review</p> <p>Lesson 125: Chapter 10 Test</p> <p>Lesson 126: Solar System</p> <ol style="list-style-type: none"> 1. recognize that God's creation is orderly. 2. Preview the chapter content. <p>Lesson 127: Space Exploration</p> <ol style="list-style-type: none"> 1. Explain how a rocket uses thrust to launch. 2. Describe characteristics of space exploration tools such as rockets, space shuttle, satellites and probes. 3. Distinguish between a space shuttle and a probe. 4. Identify ways that living in space is different from living on Earth.

8	Lesson 128-132		Do lessons 129 and 130 together		<p>Lesson 128: Technology: Inflatable Spacecraft</p> <ol style="list-style-type: none"> 1. Describe some types of inflatable spacecraft. 2. Understand the basics of inflatable technology. 3. Explain the advantages of inflatable spacecraft. <p>Lesson 129: Activity: Rocket Race</p> <ol style="list-style-type: none"> 1. Hypothesize how design affects the performance of a balloon rocket. 2. Demonstrate an understanding of Newton's third law of motion <p>Lesson 130: The Sun, The Seasons</p> <ol style="list-style-type: none"> 1. Identify the parts of the sun. 2. Describe the characteristics of a solar storm. 3. Describe relationships between the sun and the planets. 4. Summarize why Earth experiences seasons. <p>Lesson 131: The Planets</p> <ol style="list-style-type: none"> 1. Describe similarities among the inner planets. 2. Summarize how people have gradually learned about the planets. 3. Identify characteristics of Mercury, Venus and Mars. <p>Lesson 132: Earth, The Moon, Project Apollo, Eclipses.</p> <ol style="list-style-type: none"> 1. Explain some ways God made Earth unique. 2. Describe why the same side of the moon always faces Earth. 3. Restate details about the Apollo 11 mission. 4. Describe the causes of solar and lunar eclipses.
9	Lesson 133-138		<p>Choose between lesson 133 and 135. You may do both, but you will need to do it on Friday..</p> <p>Do lessons 137 and 138 together, Review and Test the same day.</p>	Chapter 11 Test	<p>Lesson 133: Activity: Spare Parts solar Oven</p> <ol style="list-style-type: none"> 1. Construct a solar oven that will melt a marshmallow. 2. Infer relationships between materials used and results. <p>Lesson 134: The Outer Planets</p> <ol style="list-style-type: none"> 1. Identify characteristics of each of the outer planets. 2. Define dwarf planet. 3. Explain why Pluto is classified as a dwarf planet. 4. Explain how we know information about the outer planets and the Kuiper Belt. <p>Lesson 135: Exploration: Solar Walk</p> <ol style="list-style-type: none"> 1. Construct a scale model of the solar system. 2. Gain a greater understanding of the vastness of our solar system. <p>Lesson 136: Exploration: Travel Brochure</p> <ol style="list-style-type: none"> 1. Design a travel brochure for a planet. 2. Collect data. 3. Write from research. <p>Lesson 137: Chapter Review</p> <p>Lesson 138: Chapter 11 Test.</p>