

BJU Press
Course Outline Fourth Grade
Science (2nd Edition)

Unit Content and Objectives	Time	Methods, Activities and Evaluation	Books and Materials	Biblical Integration
<p>Unit 1: History of the Moon The Students Will:</p> <ul style="list-style-type: none"> • describe an object by using the five senses. • discriminate between things that can and cannot be observed. • describe the difference between the Creation model and the Evolution Model. • demonstrate the difficulties of the Capture Theory. • describe the Condensation Theory. • describe three evidences of the moon's young age. • write a sentence concerning previously known information about the moon. • write a sentence concerning new information about the moon. 	30-45 min. 3 days per week	Read and discuss material in text Use interactive and hands-on activities outlined in the Teacher's Edition. Conduct Finding Out activities with students as a class, in small groups, and individually Evaluation Techniques: Notebook pages Classroom discussion and review Individual and group projects Tests and quizzes	<u>Science 4 for Christian Schools</u> <u>Teacher's Edition</u> Pages 3-22 <u>Student Text</u> Pages 2-16 <u>Notebook</u> Pages 1 Various instructional material as listed and specified in the Teacher's Edition	<p>BAT: Bible Action Truth BP: Bible Promise ROG: Reflections of God</p> <p>BAT:</p> <ul style="list-style-type: none"> • 1b Repentance and faith • 2c Faithfulness • 7f Praise • 8b Faith in the power of the Word of God <p>BP:</p> <ul style="list-style-type: none"> • I - God as Master • H - God as Father <p>ROG:</p> <ul style="list-style-type: none"> • God creates • God sustains

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<p>Unit 2: Insects, Arachnids, and Myriapods The Students Will:</p> <ul style="list-style-type: none"> • list the common characteristics of insects. • describe the states of incomplete and complete metamorphosis. • identify characteristics and examples of the Order Orthoptera. • mimic the feeding actions of a nymph dragonfly. • solve a word problem about the dragonfly's life cycle. • differentiate between moths and butterflies. • list characteristics used in identifying moths and butterflies. • compare the body structure of bees and ants. • compare the social activities of bees and ants. • group insects according to the number and structure of their wings. • use a simple classification key. • identify those characteristics that make spiders different from other arthropods. • distinguish between insects and spiders. 	<p>30-45 min. 3 days per week</p>	<p>Read and discuss material in text Use interactive and hands-on activities outlined in the Teacher's Edition. Conduct Finding Out activities with students as a class, in small groups, and individually</p> <p>Evaluation Techniques: Notebook pages Classroom discussion and review Individual and group projects Tests and quizzes</p>	<p><u>Science 4 for Christian Schools</u> <u>Teacher's Edition</u> Pages 25-58</p> <p><u>Student Text</u> Pages 18-38</p> <p><u>Notebook</u> Pages 2-11</p> <p>Various instructional material as listed and specified in the Teacher's Edition</p>	<p>BAT:</p> <ul style="list-style-type: none"> • 2e Work <p>BP:</p> <ul style="list-style-type: none"> • I -God as Master <p>ROG:</p> <ul style="list-style-type: none"> • God creates 	

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<p>Unit 3: Electricity The Students Will:</p> <ul style="list-style-type: none"> • determine whether two objects will cause a shock or spark. • find the similarity between S. Elmo's fire and thunder and lighting. • determine an atom's charge. • determine whether two atoms will repel or attract each other. • distinguish between a conductor and an insulator. • describe how an electromagnet works. • describe how a magnet can produce electricity. 	<p>30-45 min. 3 days per week</p>	<p>Read and discuss material in text Use interactive and hands-on activities outlined in the Teacher's Edition. Conduct Finding Out activities with students as a class, in small groups, and individually</p> <p>Evaluation Techniques: Notebook pages Classroom discussion and review Individual and group projects Tests and quizzes</p>	<p><u>Science 4 for Christian Schools</u> <u>Teacher's Edition</u> Pages 61-78</p> <p><u>Student Text</u> Pages 40-54</p> <p><u>Notebook</u> Pages 12-16</p> <p>Various instructional material as listed and specified in the Teacher's Edition</p>	<p>BAT:</p> <p>BP:</p> <ul style="list-style-type: none"> • I - God as Master <p>ROG:</p> <ul style="list-style-type: none"> • God is all-powerful • God creates 	

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<p>Unit 4: Plants The Students Will:</p> <ul style="list-style-type: none"> • identify types of fungi. • observe the hyphae of mold with a magnifying glass. • differentiate between algae, mosses, and liverworts. • identify algae under a microscope. • classify terms associated with plants into major plant divisions. • recognize that not all ferns are edible. • differentiate between types of conifers by their leaves. • describe conifer needle cross sections. • differentiate between monocotyledons and dicotyledons. • identify parts of a flower. 	<p>30-45 min. 3 days per week</p>	<p>Read and discuss material in text Use interactive and hands-on activities outlined in the Teacher's Edition. Conduct Finding Out activities with students as a class, in small groups, and individually</p> <p>Evaluation Techniques: Notebook pages Classroom discussion and review Individual and group projects Tests and quizzes</p>	<p><u>Science 4 for Christian Schools</u> <u>Teacher's Edition</u> Pages 81-106</p> <p><u>Student Text</u> Pages 56-76</p> <p><u>Notebook</u> Pages 17-22</p> <p>Various instructional material as listed and specified in the Teacher's Edition</p>	<p>BAT:</p> <p>BP:</p> <ul style="list-style-type: none"> • I -God as Master <p>ROG:</p> <ul style="list-style-type: none"> • God creates 	

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<p>Unit 5: Length, Area and Volume The Students Will:</p> <ul style="list-style-type: none"> • recognize different units of measurement. • estimate distance using a pencil. • classify measuring units into the metric or English system. • perform measurements using the metric system. • measure the length and width of objects using the metric system. • calculate the area of an object. • calculate the volume of regular polygons. 	<p>30-45 min. 3 days per week</p>	<p>Read and discuss material in text Use interactive and hands-on activities outlined in the Teacher's Edition. Conduct Finding Out activities with students as a class, in small groups, and individually</p> <p>Evaluation Techniques: Notebook pages Classroom discussion and review Individual and group projects Tests and quizzes</p>	<p><u>Science 4 for Christian Schools</u> <u>Teacher's Edition</u> Pages 109-127</p> <p><u>Student Text</u> Pages 78-90</p> <p><u>Notebook</u> Pages 23-28</p> <p>Various instructional material as listed and specified in the Teacher's Edition</p>	<p>BAT:</p> <ul style="list-style-type: none"> • 2e Work • 5a Love • 5e Friendliness • 7c Praise • 7d Contentment • 8a Faith in God's promises 	

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<p>Unit 6: Digestion The Students Will:</p> <ul style="list-style-type: none"> • identify the tongue as the part of the mouth that moves food around. • identify the teeth as the part of the mouth that breaks food into small pieces. • identify saliva as a liquid in the mouth that softens and moistens the food and changes some starches into sugar. • identify the parts of the esophagus. • define <i>Peristalsis</i>. • identify statements about the digestive functions of the stomach as true or false. • explain the function of one part of the digestive system. 	<p>30-45 min. 3 days per week</p>	<p>Read and discuss material in text Use interactive and hands-on activities outlined in the Teacher's Edition. Conduct Finding Out activities with students as a class, in small groups, and individually</p> <p>Evaluation Techniques: Notebook pages Classroom discussion and review Individual and group projects Tests and quizzes</p>	<p><u>Science 4 for Christian Schools</u> <u>Teacher's Edition</u> Pages 131-149</p> <p><u>Student Text</u> Pages 92-106</p> <p><u>Notebook</u> Pages 29-30</p> <p>Various instructional material as listed and specified in the Teacher's Edition</p>	<p>BAT:</p> <ul style="list-style-type: none"> • 1c Separation from the world • 3d Mind • 3d Body as a temple • 6c Spirit-filled • 7d Contentment <p>BP:</p> <p>ROG:</p> <ul style="list-style-type: none"> • God creates 	

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<p>Unit 7: The Moon's Structure and Motions The Students Will:</p> <ul style="list-style-type: none"> • identify the four features of the moon's surface: plains, mountains, craters, and rills. • describe why the mountains of the moon are more jagged than those on earth. • compute the weight of various items as they would be on the moon. • label the perigee and apogee of the moon's orbit around the earth. • demonstrate the synchronous rotation-revolution pattern of the moon. • demonstrate the effects of gravity and inertia. • identify the phases of the moon. • differentiate between <i>waxing</i> and <i>waning</i>. 	<p>30-45 min. 3 days per week</p>	<p>Read and discuss material in text Use interactive and hands-on activities outlined in the Teacher's Edition. Conduct Finding Out activities with students as a class, in small groups, and individually</p> <p>Evaluation Techniques: Notebook pages Classroom discussion and review Individual and group projects Tests and quizzes</p>	<p><u>Science 4 for Christian Schools</u> <u>Teacher's Edition</u> Pages 153-175</p> <p><u>Student Text</u> Pages 107-122</p> <p><u>Notebook</u> Pages 31-37</p> <p>Various instructional material as listed and specified in the Teacher's Edition</p>	<p>BAT:</p> <ul style="list-style-type: none"> • 7c Praise <p>BP:</p> <ul style="list-style-type: none"> • I - God as Master <p>ROG:</p> <ul style="list-style-type: none"> • God creates • God is all-powerful • God sustains 	

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<p>Unit 8: Animal Defenses The Students Will:</p> <ul style="list-style-type: none"> • match mimics with the animals they imitate. • match camouflaged animals with their surroundings. • name animals whose bright colors signal danger. • name animals and their predators. • tell the type of defense an animal uses. • identify the built-in defense or tactic a given animal will use when in danger. 	<p>30-45 min. 3 days per week</p>	<p>Read and discuss material in text Use interactive and hands-on activities outlined in the Teacher's Edition. Conduct Finding Out activities with students as a class, in small groups, and individually</p> <p>Evaluation Techniques: Notebook pages Classroom discussion and review Individual and group projects Tests and quizzes</p>	<p><u>Science 4 for Christian Schools</u> <u>Teacher's Edition</u> Pages 179-195</p> <p><u>Student Text</u> Pages 124-138</p> <p><u>Notebook</u> Pages 38-41</p> <p>Various instructional material as listed and specified in the Teacher's Edition</p>	<p>BAT:</p> <p>BP:</p> <ul style="list-style-type: none"> • I - God as Master <p>ROG:</p> <ul style="list-style-type: none"> • God creates 	

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<p>Unit 9: Light The Students Will:</p> <ul style="list-style-type: none"> record the effects of different objects on the speed of light. record changes in the direction that light travels. record their observations about optical illusion. explain the role of light in producing color. identify the parts of the human eye that are color preceptors. list the primary colors of light and of pigments and tell which colors in the spectrum are complementary. identify various surfaces as good or poor reflectors. list the qualities that are present in a good reflector. describe how a mirror is made and how it reflects light. define <i>concave</i> and <i>convex</i> with reference to mirrors. explain the purpose of the laser. list two uses of the laser. 	<p>30-45 min.. 5 days</p>	<p>Read and discuss material in text Use interactive and hands-on activities outlined in the Teacher's Edition. Conduct Finding Out activities with students as a class, in small groups, and individually</p> <p>Evaluation Techniques: Notebook pages Classroom discussion and review Individual and group projects Tests and quizzes</p>	<p><u>Science 4 for Christian Schools</u> <u>Teacher's Edition</u> Pages 199-223</p> <p><u>Student Text</u> Pages 140-156</p> <p><u>Notebook</u> Pages 42-47</p> <p>Various instructional material as listed and specified in the Teacher's Edition</p>	<p>BAT:</p> <ul style="list-style-type: none"> 8a Faith in God's promises <p>BP:</p> <ul style="list-style-type: none"> I - God as Master H - God as Father <p>ROG:</p> <ul style="list-style-type: none"> God creates God is all-knowing 	

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<p>Unit 10: Machines The Students Will:</p> <ul style="list-style-type: none"> • list inclined planes that they see at home and at school. • identify examples of inclined planes. • identify examples of pulleys • identify examples of wheel-and-axle machines. • identify the fulcrum of a lever. • identify the load of a lever. • identify the force of a lever. 	<p>30-45 min. 3 days per week</p>	<p>Read and discuss material in text Use interactive and hands-on activities outlined in the Teacher's Edition. Conduct Finding Out activities with students as a class, in small groups, and individually</p> <p>Evaluation Techniques: Notebook pages Classroom discussion and review Individual and group projects Tests and quizzes</p>	<p><u>Science 4 for Christian Schools</u> <u>Teacher's Edition</u> Pages 227-247</p> <p><u>Student Text</u> Pages 158-170</p> <p><u>Notebook</u> Pages 48-52</p> <p>Various instructional material as listed and specified in the Teacher's Edition</p>	<p>BAT:</p> <p>BP:</p> <p>ROG:</p> <ul style="list-style-type: none"> • God is holy 	

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<p>Unit 11: Trees The Students Will:</p> <ul style="list-style-type: none"> • tell about famous trees, both from history and from their own backyard or city. • distinguish between simple and compound leaves. • distinguish between lobed and unlobed leaves. • distinguish between palmately compound leaves and pinnately compound leaves. • use a classification key to identify trees. • list the basic characteristics of a tree as determined by observation. 	<p>30-45 min. 3 days per week</p>	<p>Read and discuss material in text Use interactive and hands-on activities outlined in the Teacher's Edition. Conduct Finding Out activities with students as a class, in small groups, and individually</p> <p>Evaluation Techniques: Notebook pages Classroom discussion and review Individual and group projects Tests and quizzes</p>	<p><u>Science 4 for Christian Schools</u> <u>Teacher's Edition</u> Pages 251-267</p> <p><u>Student Text</u> Pages 172-182</p> <p><u>Notebook</u> Pages 53-56</p> <p>Various instructional material as listed and specified in the Teacher's Edition</p>	<p>BAT:</p> <p>BP:</p> <ul style="list-style-type: none"> • E - Christ as Sacrifice • H -God as Father <p>ROG:</p> <ul style="list-style-type: none"> • God creates • God is all-powerful 	

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<p>Unit 12: How Earth's Crust Wears Down The Students Will:</p> <ul style="list-style-type: none"> • identify methods of mechanical and chemical weathering. • identify parts of the soil. • find evidence of mass-wasting and erosion in a neighborhood. • describe the problem of mass-wasting or erosion. • predict the effects of water on a flat field and a sloped field. • describe the effects of slowing water on the soil it is carrying. • identify soil-conserving plowing methods. • distinguish between soil-conserving practices and erosive practices. 	<p>30-45 min. 3 days per week</p>	<p>Read and discuss material in text Use interactive and hands-on activities outlined in the Teacher's Edition. Conduct Finding Out activities with students as a class, in small groups, and individually</p> <p>Evaluation Techniques: Notebook pages Classroom discussion and review Individual and group projects Tests and quizzes</p>	<p><u>Science 4 for Christian Schools</u> <u>Teacher's Edition</u> Pages 271-293</p> <p><u>Student Text</u> Pages 184-201</p> <p><u>Notebook</u> Pages 57-61</p> <p>Various instructional material as listed and specified in the Teacher's Edition</p>	<p>BAT:</p> <ul style="list-style-type: none"> • 1a Understanding Jesus Christ • 2c Responsibility • 3d Body as a temple • 8a Faith in God's promises • 8b Faith in the Power of the Word of God <p>BP:</p> <ul style="list-style-type: none"> • I - God as Master <p>ROG:</p> <ul style="list-style-type: none"> • God is all-powerful • God sustains 	