

BJU Press - 5th Grade - Science - Quarter 2 Map

Week	Lessons	Project/Activity	Modification	Submit	Objectives
1	46-50	Test 3	Skip 44-45 Combine 49 and 50	Test 3	 Chapter 3 Test Students will be able to: Explain the importance of energy and heat in designing useful technology Define "energy" Differentiate between potential energy and kinetic energy Recognize that energy is often classified as either potential or kinetic Recognize that the amount of thermal energy depends on the temperature and mass of a substance Differentiate between thermal energy and temperature Predict how the mass of a substance affects the amount of thermal energy it can transfer Experiment to test a hypothesis
2	51-55		Combine 54 and 55		 Students will be able to: Recognize that increasing or decreasing thermal energy can cause matter to change to a different state Explain what happens during thermal expansion Define "calorie" Recognize that substances differ in their ability to store thermal energy Recognize that a food calorie is also called a kilocalorie Calculate the resting metabolic rate Track calorie consumption for three days

3	56-60	Moon Station Activity			 8. Define "heat" 9. Recognize that heat always flows from a warmer substance to cooler substance 10. Identify and describe three ways that heat occurs 11. Differentiate between conductors and insulators Students will be able to: Predict which type of insulation will best keep water
					 Predict which type of insulation will best keep water warm Test different types of insulation to determine which is the most effective Measure and use numbers in an activity Identify some common fuels Distinguish between renewable and nonrenewable resources Name some ways fuel is used Give examples of unwanted heat Explain how scientists controlled heat for the reentry of space capsules Name two types of insulation used on space shuttles Name some ways that thermal energy is part of our everyday lives Show how Christian scientists can do operation science to exercise biblical dominion, Give examples of discoveries that show that operational science does not need to refer to evolutionary principles to be successful Explain why biomimicry is an example of exercising dominion to love our neighbor and to glorify God Design a piece of equipment for a moon station Research equipment developed for the space program
4	61-65	Test 4	Combine 64 and 65	Test 4	Chapter 4 Review and Test
					 Recognize the interrelationship of scientific concepts Recognize, from a Christian worldview, reasons for

					 studying climate 3. Understand the role of metrology in preserving human life 4. Apply the biblical teaching on the value of human life to everyday situations 5. Describe the atmosphere 6. Define "air pressure" 7. Recognize that gravity pulls the atmosphere toward the earth 8. Name an instrument that measures air pressure 9. Identify and describe the two lower layers of the atmosphere
5	66-70	Moisture in the Air	Do 66 and 67 in 2 days Combine 69 and 70	Moisture in the Air	 Students will be able to: Compare and contrast high-pressure, air masses, and low-pressure air masses Define "front" Describe three types of fronts Explain how temperature affects wind Differentiate between global winds and local winds Name examples of global winds and local winds Name examples of global winds and local winds Predict whether water soil will warm or cool at the same rate Identify and control variables Measure and record temperatures Relate temperature changes to the ability of each substance to hold and give off heat Define "precipitation" Differentiate among rain, sleet, snow, and hail Define "humidity" Identify and describe three basic shapes of clouds
6	71-75		Combine 74 and 75		 Students will be able to: 1. Describe characteristics of thunderstorms, tornadoes, and hurricanes 2. Differentiate between a weather watch and weather warning 3. Research safety precautions for a type of severe weather

				 Make and present a poster or pamphlet Describe the job of a meteorologist Read and Interpret basic symbols on a weather map Make working weather instruments Use the instruments to gather information about the weather Record data Use data to make weather predictions
7	76-80	Activity, answers in Genesis		 Students will be able to: Explain how clouds form Define a biblical view of evidence Defend a biblical view of evidence for one ice age against a secular view of evidence for multiple ices ages Chapter 5 Review and Test Students will be able to: Appreciate the effect of human intervention on a wetland biome Apply the Bible's teaching of stewardship of creation to biomes Generate possible solutions to the concerns about destroying or using biomes Differentiate between a biome and the biosphere Identify climate as a major influence on land biomes Describe basic characteristics of the tundra Name some ways that animals and plants survive on the tundra
8	81-87	Help prevent water loss	Combine 81 and 82 Combine 86 and 87	 Students will be able to: 1. Describe basic characteristics of the coniferous forest 2. Describe basic characteristics of the deciduous forest 3. Differentiate between conifer and deciduous trees 4. Name two ways that animals in the deciduous forest survive the changing seasons 5. Describe basic characteristics of grasslands 6. Compare and contrast prairies and savannas

					 Name ways some savanna grasses and trees survive the dry season Describe characteristics that all deserts have in common Name some ways that desert animals and plants survive the extreme temperatures and dryness Identify some characteristics of water-efficient plants Predict how waxy surfaces on some leaves and stems protect from the climate
9	88-91,94, 95	Biodome, Test 6	Skip 92 and 93	Test 6	 Students will be able to: Research a biome Create a model of that biome Name the two categories of aquatic biomes Explain why coral reefs are called "the rain forests of the sea" Identify the force that keeps river water moving Describe kinds of wetlands Recognize that people have the God-given responsibility to be good stewards of the earth Chapter 6 Review and Test