

 GRADES 1 to 12 DAILY LESSON LOG	School:		Grade Level:	V
	Teacher:		Learning Area:	SCIENCE
	Teaching Dates and Time:	SEPTEMBER 5 – 9, 2022 (WEEK 3)	Quarter:	1ST QUARTER

	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY
I. OBJECTIVES	1. Describe changes in materials under different conditions. 2. Cite the conditions/factors that bring about changes in materials.				
A. Content Standards	Materials undergo changes due to oxygen and heat				
B. Performance Standards	The learner uses local, recyclable solid and/ or liquid materials in making useful products.				
C. Learning Competencies/Objectives Write the LC code for each	Investigate changes that happen in materials under the following conditions: 1 presence or lack of oxygen 2 application of heat S5MT-Ic-d-2				
II. CONTENT	Changes in Materials Due to Heat and Oxygen				
III. LEARNING RESOURCES					
A. References					
1. Teacher's Guide pages					
2. Learner's Material pages					
3. Textbook pages					
4. Additional Materials from Learning Resource (LR) portal					
B. Other Learning Resources					
IV. PROCEDURES					
	What I Know A. Directions: Identify the changes that took place in the following activities when there is an application of heat and with the presence or absence of oxygen.	What is It Heat, as discussed in your previous grade, is a form of energy. It is an energy that is transferred between objects of different temperature. Temperature is the hotness and coldness of an object and it is measured using a thermometer. Our	What's In Directions: Identify which among the following activities shows Physical Change or Chemical Change when applied with heat. Write PC for Physical Change and CC for Chemical Change. 1. Melting of candle 4. Cooking Rice	What I Can Do A. Directions: Study the following objects. Determine the by-product or result when the material is applied with heat. Remember, some examples of heat sources are the Sun, burning fuel, electric heater, and human body. Caution: DO NOT place the actual materials below in direct heat like fire.	Weekly Test

	A 1. Boiling of water 2. Cooking rice 3. Darkening of eggplant 4. Fish kill 5. Decaying garbage B A. breakdown of materials due to bacteria and fungus B. temperature changes to 100 degrees Celsius C. color changes observed commonly among vegetables and fruits D. water gets absorb into the grain, and heat softens the starch then alters its texture when cooked E. occurs when there is lack of oxygen in the ponds or bodies of water	main source of heat is the Sun. Heat can bring about a physical change in matter. Some solid materials melt when the heat is applied to them. A common example is a piece of melting ice taken out of the refrigerator. The ice absorbs heat from the surroundings, which will then melt after a few minutes. On the other hand, water evaporates when it is subjected to heat. Just like when your mother hangs your wet laundry under the sun. After several minutes or hours, the clothes become dry, which means that the water in your clothes evaporated. Heat does not only produce a physical change in materials, sometimes heating a material causes it to undergo chemical change. The chemical changes caused by heat are irreversible. One common example of this is cooked food. The egg your mother cooked for your breakfast has undergone a chemical change. Now, can you bring the egg back into its liquid form before it was cooked? No you can't, the cooked egg cannot be changed back to its original form. Applying heat to the material results in processes of physical and chemical changes. Physical change happens when only the appearance of the material	2. Burning of wood 5. Frying Egg 3. Boiling of water What's New Let us now investigate the changes in materials in the presence or absence of oxygen. Have you observed your mother slicing an eggplant? What was the color of the eggplant while it was being sliced? What was its color after a few minutes? Were there any changes in the color? Did it turn brown after slicing?	1.  (Bollozos, nd) rubbing alcohol 2.  (Bollozos, nd) ice cubes 3.  (Bollozos, nd) chocolate	
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		changes and no new material is formed. Meanwhile, chemical change happens when heat is applied and the material changes its size, shape, color, and smell, and a new material is formed.			
	What’s In Directions: Based on the given physical and chemical properties of matter, identify which property is being described. Choose your answer from the words in the box. HardnessElasticityConductivityBiodegradabilityBrittleness 1. Ability to break easily 2. Ability to decompose by microorganism 3. Ability to let the heat and electricity to pass through 4. Ability to be stretched and return to its original shape 5. Ability to resist pressure that may cause deformation	What’s More Activity 1 Directions: From the given activities below, identify which shows physical change or chemical change by writing your answers using the table below as a guide. Frying egg Boiling water Burning of paper Grilling chicken Melting chocolate Drying of wet clothes Heating of white sugar Melting of ice cream Drying fishes under the sun Drying wet palay under the sun Physical change through the application of heat Chemical change through the application of heat	What is It The changes in the color of the inner fleshy part of the eggplant is due to its exposure to oxygen. The same phenomena could also be observed in potato, banana, guava, cassava, and other fruits and vegetables. How do you keep the eggplant from turning brown? Place in a large bowl of water with a teaspoon of salt dissolved in it. The water should be enough for all the sliced eggplant to dip in fully. This is to prevent the oxygen present in the air to react with the chemicals present in vegetables. Another example of a change in materials when oxygen is present is in combustion. It occurs when oxygen combines with another substance (as fuel) and produces fire with heat and light. Combustion is also known as burning. It is always exothermic, that is, giving off heat. In combustion, oxygen, fuel, and heat are always present.	Assessment A. Directions: Study the following situations and identify what is likely to happen when the heat is applied to the object. Choose the answer inside the parenthesis. 1. The (melting, melts) of butter when left out in a warm room is an example of (chemical change, physical change) 2. An ice cream cone (melting, melts) on a hot day is an example of . (chemical change, physical change) 3. Charcoal (burns, burning) on the grill is an example of _____. (chemical change, physical change) 4. Frying an egg on a (heated, heating) pan is an example of _____. (chemical change, physical change) B. Directions: Choose and write the letter of the correct answer in your answer sheet. 1. The presence or absence of oxygen in the materials may result in _____. A. the burning of the materials B. the melting of the materials C. the change in the materials D. no change in the materials 2. Iron, nails, cans, and other metals with iron when exposed to moisture may develop ____ . A. dust B. rust C. heat D. fuel 3. The inner part of the potatoes and apples change in color because of . A. water in it	

			For example, when you lit a candle, its wick burns if oxygen and wax (candle) is present and heat is produced. Other examples include the burning of wood or charcoal for cooking and burning of petrol or diesel to run your car. If oxygen is present in a wet material with iron, such as a nail or steel bar, the formation of rust occurs. It only happens when iron, oxygen, and water react with one another. Rust occurs when iron or alloys such as steel corrode, thus rusting is commonly known as iron or steel corrosion.	B. chemicals in it C. exposure to heat D. exposure to oxygen 4. The following activities cause a change in matter. Which of these has a bad effect on the environment? A. slicing fruits B. sewing clothes C. peeling vegetables D. breaking empty bottles of liquor 5. The following are effects in the environment by the changes in matter. Which of these has a good effect on the environment? A. air pollution B. composting C. deforestation D. water pollution 6. Many families use wood as fuel in cooking food. What is the bad effect on the environment of this activity? A. deforestation B. air pollution C. land pollution D. water pollution	
	What’s New Directions: The following are activities done on objects where heat is applied. Draw a star if it shows physical change or a half moon if it shows chemical change. 1. Heating a handful of sugar 2. Boiling of water 3. Burning of paper 4. Drying of clothes 5. Grilling pork		What’s More Directions: For the given activities, read and study the situations, then answer the follow-up questions. Activity 1 “Fire Out” Have you seen a fire or flame? If not, observe the fire in the picture below  • How does fire start?		

			• Will fire continue its flame in the absence of oxygen? • Suppose we will cover it with a basin, what do you think will happen to the fire? • What are the three important things needed for combustion to occur?		
V. REMARKS					
VI. REFLECTION					
A. No. of learners who earned 80% in the evaluation					
B. No. of learners who require additional activities for remediation who scored below 80%					
C. Did the remedial lessons work? No. of learners who have caught up with the lesson					

D. No. of learners who continue to require remediation					
E. Which of my teaching strategies worked well? Why did these work?					
F. What difficulties did I encounter which my principal or supervisor can help me solve?					
G. What innovation or localized materials did I use/discover which I wish to share with other teachers?					