

Science Grade 7 June 2020

Science Grade 7 Physical Science: Heat and Temperature (HT)							
	-	2 – Approaching	<u> </u>	4- Exemplary			
Outcome	The student is having difficulty demonstrating an understanding of the concept.	The student is developing an understanding of the concept.	The student consistently demonstrates an understanding of the concept or has achieved the concept.	The student independently demonstrates an in-depth understanding of the concept, and consistently applies this knowledge to new situations.			
HT7.1 Assess the impact of past and current heating and cooling technologies related to food, clothing, and shelter on self,	 I can explain the impact of one past OR one current heating OR cooling technology related to food, clothing OR shelter. 	 I can explain the impact of one past OR one current heating AND cooling technology related to food, clothing OR shelter. 	 I can explain the impact of one past AND one current heating AND cooling technology related to food, clothing AND shelter. 	 I can compare the relative impact of one past AND one current heating AND cooling technology related to food, clothing AND shelter. 			
society, and the environment. Comments	 With help, I can propose a few benefits and challenges of one past OR one current heating and cooling technology related to food, clothing or shelter for myself, society, OR the environment. 	 I can propose a few benefits and challenges of one past OR one current heating and cooling technology related to food, clothing or shelter for myself, society, OR the environment. 	 I can propose the benefits and the challenges of one past AND one current heating and cooling technology related to food, clothing or shelter for myself, society, AND the environment. 	 I can propose solutions to the challenges presented by a current heating and cooling technology related to food, clothing or shelter, with support. 			



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HT7.2 Explain how understanding differences between states of matter and the effect of heat on changes in state provide evidence for the particle theory.	• With help, I can carry out simple processes to determine how heat affects states of matter.	 I can carry out simple processes with some accuracy to determine how heat affects states of matter. 	 I can carry out processes accurately to determine the effects of changes in temperature on solids, liquids, and gases. 	 I can design and carry out an accurate investigation to determine the effects of changes in temperature on solids, liquids, and gases. 		
Tor the particle theory.	 With help, I can make connections between evidence gathered while investigating states of matter and changes in states of matter and the particle theory of matter. 	between evidence gathered while investigating states of	 I can explain how evidence gathered while investigating states of matter and changes in states of matter illustrates each of the four elements of the particle theory of matter. 	 I can use evidence gathered while investigating states of matter and changes in states of matter to support or refute the particle theory of matter. 		
Comments	1	1				



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HT7.3 Investigate principles and applications of heat transfer via the processes of conduction, convection, and radiation.	Principles	 I can carry out simple processes to define conduction, convection, OR radiation. 	 I can carry out simple processes with some accuracy to define conduction, convection, AND radiation. 	 I can carry out processes accurately to explain the principles of heat transfer via the processes of conduction, convection, AND radiation. 	 I can design and carry out an accurate investigation to determine the differences in the ability of different surfaces to absorb and reflect radiant heat. 		
	Applications	 I can carry out simple processes to identify different applications of heat transfer. 	processes with some	 I can carry out processes accurately to describe different technological applications of heat transfer via the processes of conduction, convection, and radiation. 	 I can design and carry out an accurate investigation to point out the strengths and limitations of applications of technologies designed to enhance or restrict the transfer of heat energy. 		

Comments