

Science Grade 7

Science Grade 7 Physical Science: Mixtures and Solutions (MS)						
Outcome	1 - Beginning The student is having difficulty demonstrating an understanding of the concept.	2 – Approaching The student is developing an understanding of the concept.	3 – Meeting The student consistently demonstrates an understanding of the concept or has achieved the concept.	4- Exemplary The student independently demonstrates an in-depth understanding of the concept, and consistently applies this knowledge to new situations.		
MS7.1 Distinguish between pure substances and mixtures (mechanical mixtures and solutions) using the particle model of matter.	 With help, I can list the characteristics of a pure substance and a mixture (mechanical mixtures and solutions). With help, I can state the main ideas of the particle model of matter 	 I can list the characteristics of a pure substance and a mixture (mechanical mixtures and solutions). I can explain the 4 main elements of the particle model of matter. 	 I can compare a pure substance and a mixture, using their characteristics and examples. I can use the particle model of matter to distinguish between pure substances and mixtures. 	 I can classify a substance I have analyzed before as a pure substance or a mixture, and explain my reasoning. I can develop an experiment to compare pure substances and mixtures using the particle model of matter. 		
Comments						



Science Grade 7

June 2020

Science Grade 7							
Physical Science: Mixtures and Solutions (MS)							
		1 - Beginning	2 – Approaching	3 – Meeting	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.		
MS7.2 Investigate methods of separating the components of mechanical mixtures and solutions, and analyze the impact of industrial and agricultural applications of those methods.	Methods of separation	• With help, I can carry out simple processes to describe a few methods used to separate mechanical mixtures and solutions including mechanical sorting, filtration, evaporation, distillation, magnetism, OR chromatography.	 I can carry out simple processes with some accuracy to describe a few methods used to separate mechanical mixtures and solutions including mechanical sorting, filtration, evaporation, distillation, magnetism, OR chromatography. 	 I can carry out processes accurately to describe several methods used to separate mechanical mixtures and solutions including mechanical sorting, filtration, evaporation, distillation, magnetism, AND chromatography. 	 I can design and carry out an accurate investigation to describe several methods used to separate mechanical mixtures and solutions including mechanical sorting, filtration, evaporation, distillation, magnetism, AND chromatography. 		
	Impact of applications	 With help, I can explain a few industrial OR agricultural applications of methods of separating the components of mechanical mixtures and solutions. 	 I can explain a few industrial OR agricultural applications of methods of separating the components of mechanical mixtures and solutions. 	 I can report on the strengths and limitations of several industrial AND agricultural applications of methods of separating the components of mechanical mixtures and solutions, with examples and details. 	 I can recommend methods of separating the components of mechanical mixtures and solutions for industrial AND agricultural applications, with support. 		
Comments			L		1		



Science Grade 7							
		1 - Beginning	2 – Approaching	3 – Meeting	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.		
MS7.3 Investigate the properties and applications of solutions, including solubility and concentration.	Properties	 I can carry out simple processes to list the properties of solutions, including solubility OR concentration. 	 I can carry out simple processes with some accuracy to list the properties of solutions, including solubility OR concentration. 	 I can carry out processes accurately to describe the properties of solutions, including solubility AND concentration. 	 I can design and carry out an accurate investigation to describe the properties of solutions, including solubility AND concentration. 		
	Applications	 I can carry out simple processes to list applications of solutions. 	 I can carry out simple processes with some accuracy to list applications of solutions. 	 I can carry out processes accurately to explain the applications of solutions, with examples. 	 I can design and carry out an accurate investigation to compare the applications of solutions or determine which application is most effective in a specific situation. 		
Comments							