Science Grade 7 Physical Science: Mixtures and Solutions (MS)				
Outcome	**1 – Little Evidence** With help, I understand parts of the simpler ideas and do a few of the simpler skills.	**2 – Partial Evidence** I understand the simpler ideas and can do the simpler skills. I am working on the more complex ideas and skills.	**3 – Sufficient Evidence** I understand the more complex ideas and can master the complex skills that are taught in class**. I achieve the outcome.**	**4- Extensive Evidence** I have a deep understanding of the complex ideas, and I can use the skills I have learned in situations that were not taught in class.
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 4 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
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Outcome		1 – Little Evidence With help, I understand parts of the simpler ideas and do a few of the simpler skills.	2 – Partial Evidence I understand the simpler ideas and can do the simpler skills. I am working on the more complex ideas and skills.	3 – Sufficient Evidence I understand the more complex ideas and can master the complex skills that are taught in class. **I achieve the outcome.**	4- Extensive Evidence I have a deep understanding of the complex ideas, and I can use the skills I have learned in situations that were not taught in class.
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					

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Outcome		**1 – Little Evidence** With help, I understand parts of the simpler ideas and do a few of the simpler skills.	**2 – Partial Evidence** I understand the simpler ideas and can do the simpler skills. I am working on the more complex ideas and skills.	**3 – Sufficient Evidence** I understand the more complex ideas and can master the complex skills that are taught in class**. I achieve the outcome.**	**4- Extensive Evidence** I have a deep understanding of the complex ideas, and I can use the skills I have learned in situations that were not taught in class.
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					