



Unit 1 Matter and Its Interactions

Grade 5 Science

Unit Description:

Students will describe that matter is made of particles that are too small to be seen. The evidence collected from measuring and graphing quantities will prove that regardless of the type of change that occurs when heating, cooling or mixing substances, the total weight of matter is conserved. Students will observe and measure materials based on their properties in order to identify them. An investigation will be conducted to determine whether the mixing of two or more substances results in new substances.

Science Standards:

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| 5-PS1-1 | Develop a model to describe that matter is made of particles that are too small to be seen. |
| 5-PS1-2 | Measure and graph quantities to provide evidence that regardless of the type of change that occurs when heating, cooling or mixing substances, the total weight of matter is conserved. |
| 5-PS1-3 | Make observations and measurements to identify materials based on their properties. |
| 5-PS1-4 | Conduct an investigation to determine whether the mixing of two or more substances results in new substances. |

Enduring Understandings- Unit Anchor Phenomenon:

A sugar refinery experienced a series of violent explosions due to sugar dust particles in the air.

Essential Questions- Reflective Summaries:

- How did sugar dust particles travel through the Imperial Sugar Refinery?
- How did the particles of matter contribute to the explosion?
- How did the properties of sugar change after the explosion took place?
- Would the outcome of the explosion been different if sugar dust didn't travel through the air? Use evidence from the unit to support your response.