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| Monday | January 14th, 2019 |
| **MS-PS3.-3B**: Conservation of Energy and Energy Transfer Energy is spontaneously transferred out of hotter regions or objects and into colder ones.  |
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| **Content****Objective** | Students will explore thermal energy transfer by observing an ice cube melting in their hands by recording at least 2 details of their observations in the Type 2 format.  |
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| **Language****Objective** | Students will write to describe their exploration of thermal energy transfer by observing an ice cube melting in their hands and recording at least 2 details of their observations in the Type 2 format.  |
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| **Phenomena** | **Connecting Vocabulary** | **Connecting Vocabulary** |
| What type of cup would keep my coffee the hottest? | Increase DecreaseWarmerCooler | Thermal EnergyHeat TransferParticles Kinetic EnergyTemperature |

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| Tuesday | January 15th, 2019 |
| **MS-PS3.-3B**: Conservation of Energy and Energy Transfer Energy is spontaneously transferred out of hotter regions or objects and into colder ones. |
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| **Content****Objective** | Students will conduct an investigation to determine the effect of different types of matter on thermal energy transfer by tracking energy flow in a designed system by accurately identifying which material allowed for the greatest and least change in temperature on a lab sheet. (Explore 2) |
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| **Language****Objective** | Students will write to describe an investigation to determine the effect of different types of matter on thermal energy transfer by tracking energy flow in a designed system by accurately identifying which material allowed for the greatest and least change in temperature on a lab sheet using a sentence stem. |
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| **Phenomena** | **Connecting Vocabulary** | **Connecting Vocabulary** |
| What type of cup would keep my coffee the hottest? | Increase DecreaseWarmerCooler | Thermal EnergyHeat TransferParticles Kinetic EnergyTemperature |

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| Wednesday | January 16th, 2019 |
| **MS-PS3.-3B**: Conservation of Energy and Energy Transfer Energy is spontaneously transferred out of hotter regions or objects and into colder ones. |
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| **Content****Objective** | Students will examine the nature and movement of thermal energy by conduction, convection, and radiation by conducting 3 experiments and as a result construct a definition of all 3 from their observations. (Explore 1) |
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| **Language****Objective** | Students will write to define the nature and movement of thermal energy by conduction, convection, and radiation after conducting 3 experiments.  |
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| **Phenomena** | **Connecting Vocabulary** | **Connecting Vocabulary** |
| What type of cup would keep my coffee the hottest? | Increase DecreaseWarmerCooler | Thermal EnergyHeat TransferParticles Kinetic EnergyTemperature |

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| Thursday | January 17th, 2019 |
| **MS-PS3.-3B**: Conservation of Energy and Energy Transfer Energy is spontaneously transferred out of hotter regions or objects and into colder ones. |
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| **Content****Objective** | Students will examine the nature and movement of thermal energy by conduction, convection, and radiation by conducting 3 experiments and as a result construct a definition of all 3 from their observations. (Explore 1) Day 2 |
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| **Language****Objective** | Students will write to define the nature and movement of thermal energy by conduction, convection, and radiation after conducting 3 experiments.  |
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| **Phenomena** | **Connecting Vocabulary** | **Connecting Vocabulary** |
| What type of cup would keep my coffee the hottest? | Increase DecreaseWarmerCooler | Thermal EnergyHeat TransferParticles Kinetic EnergyTemperature |

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| Friday | January 18th, 2019 |
| **MS-PS3.-3B**: Conservation of Energy and Energy Transfer Energy is spontaneously transferred out of hotter regions or objects and into colder ones. |
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| **Content****Objective** | Students will be able to make a claim based on evidence in the wax chip investigation about how energy is transferred by conduction using accurate observations and at least 1 reason. CER Type 3 |
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| **Language****Objective** | Students will write a claim based on evidence in the wax chip investigation about how energy is transferred by conduction using accurate observations and at least 1 reason and FCA: Claim, FCA Evidence/Reason, FCA: Complete Sentences. (CER Type 3) |
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| **Phenomena** | **Connecting Vocabulary** | **Connecting Vocabulary** |
| What type of cup would keep my coffee the hottest? | Increase DecreaseWarmerCooler | Thermal EnergyHeat TransferParticles Kinetic EnergyTemperature |