**Inquiry Question 1: What is a scientific model?**

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| What is a scientific model? |
| State some types/categories of scientific models. |
| State some examples of scientific models. |

**Inquiry Question 2: What makes scientific models useful?**

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| Why make scientific models? What makes them useful? When would we use them? |
| Why would it be important that scientific models can make predictions? |
| Describe a model that uses data from multiple scientific disciplines in which to be built and refined. |

**Inquiry Question 3: When should a particular model be used?**

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| Explain how a particular epidemic model was improved using new evidence. |
| Explain how a particular universe model was improved using new evidence. |
| Explain how a particular atomic model was improved using new evidence. |
| Explain how a climate model was improved using new evidence. |
| Describe the benefits of using a model in comparison to performing the experiment continuously; e.g.: weather/climate models, disease models using animals, planetary models of orbits. |

**Inquiry Question 4: How can a model be constructed to simplify understanding of a scientific concept?**

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| Describe the advantages of a chosen simple model. |
| Describe the limitations of that same simple model. |
| Describe the advantages of a chosen complex model. |
| Describe the limitations of that same complex model. |