**Cross Cutting Concept Stems**

**Patterns**

1. The pattern I notice is \_\_\_\_\_\_ because\_\_\_\_.
2. I can you use this pattern in an explanation by \_\_\_\_\_.
3. From the pattern \_\_\_\_\_ I predict that \_\_\_\_\_\_\_\_, because \_\_\_\_\_\_\_\_\_\_.

**Cause & Effect**

1. One cause of \_\_\_\_\_\_\_\_\_ (effect) might be \_\_\_\_\_\_.
2. From the cause-effect relationship I would claim that \_\_\_\_\_\_\_\_.
3. I tested what I thought was the cause and effect relationship by \_\_\_\_\_\_\_.

**Scale, Proportion & Quantity**

1. In this science idea scale is important because \_\_\_\_\_.
2. In this science idea proportion is important because \_\_\_\_\_.
3. In this science idea quantity is important because \_\_\_\_\_.

**Systems & Systems Models**

1. The parts of the system are \_\_\_\_, \_\_\_\_\_, \_\_\_\_\_.
2. In this system \_\_\_\_\_\_ interacts with \_\_\_\_\_\_ to cause \_\_\_\_\_.
3. The model I used to describe the system we studied was \_\_\_\_\_\_\_\_\_\_\_\_ because it \_\_\_\_\_\_\_\_.

**Energy & Matter**

1. I think energy changed because it \_\_\_\_\_\_\_\_\_.
2. Matter in this system went from \_\_\_\_ to \_\_\_\_\_.
3. The evidence I have for matter being conserved in this system is \_\_\_\_\_\_\_\_\_.
4. The interaction of energy and matter in this system is observed when \_\_\_\_\_\_\_\_.

**Structure and Function**

1. The important structures are \_\_\_\_\_\_\_\_\_.
2. The \_\_\_\_\_\_\_\_\_\_\_\_\_ (structure) performs \_\_\_\_\_\_\_\_ (function).
3. I think that \_\_\_\_\_\_\_\_ (structure) could perform the same function because \_\_\_\_\_\_\_\_\_\_.

 **Stability and Change**

1. The system displays stability by \_\_\_\_\_\_\_\_\_.
2. Even though the system appears stable I know that \_\_\_\_\_\_\_\_\_\_ (changes) were happening.
3. The reason this system can remain stable is \_\_\_\_.