Science 7 Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Block: \_\_\_\_\_\_\_\_\_\_ **Backyard Ecosystem** Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Objective**: To observe, identify and classify the parts of an ecosystem.

**Materials**:

5m long string

Hand lens

Metric Ruler

Plastic bag

Meter stick

**Procedure**:

1. Make a circle on the ground with your string to represent an ecosystem.
2. Observe EVERYTHING in your circle ecosystem.
3. Record your observations on the chart below.
4. Take small samples of each component and put them in your plastic bag.

**Data**:

1. The circle shown represents your string, fill in the diagram with all of your observations. Make sure to specifically label everything that you include in your diagram.

**Data Analysis**:

Define the terms biotic and abiotic in the space provided on the chart. Classify your items into those two categories.

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| --- | --- |
| **Biotic** | **Abiotic** |
| Definition: | Definition: |
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**Questions & Conclusions**:

1. Did every group have biotic factors? Abiotic factors? Give examples.
2. Do all ecosystems have biotic and abiotic factors? Give examples not used above.
3. Use your glossary to define in your own words the terms below:
   1. Producer
   2. Consumer
   3. Decomposer
4. Are producers abiotic or biotic?

1. Are consumers abiotic or biotic?
2. Are decomposers abiotic or biotic?
3. Choose two different colors. Go back to your abiotic, biotic chart and circle all of the producers in one color and the consumers in another.
4. Draw a diagram using arrows that represents the connection between producers, consumers, and decomposers in your circle ecosystem: