Matter and Energy Transfer Study Guide

Instructions: Fill in each statement with the correct word from the word bank. Each word is only used once and all words are used.

1. Matter is made up of **atoms**. Examples of matter include **wood**, **bones**, **water**, and **air** (order of these four answers does not matter).

2. Energy is not matter. Energy is what organisms get from food that allows them to **do** things. Energy transfers the capacity to complete everyday behaviors, like **growing**, **breathing**, **moving**, and **reproducing** (order of these four answers does not matter).

3. When referring to how matter and energy move through an ecosystem, matter **cycles** and energy **flows**.

4. **Matter** takes up space, has mass, and can be captured in a balloon or bag. **Energy** does not take up space, has no mass, and has no physical form.

5. Matter that is not food, such as water, air, and decomposed materials in soil, is changed by **plants** into matter that is food.

6. Organisms obtain food, water, and gases from the environment and release **waste**, such as pee, poop, heat, sweat, drool, and carbon dioxide, back into the environment.

7. ** Decomposers ** break down waste into the soil.

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Word Bank:

<table>
<thead>
<tr>
<th>Wood</th>
<th>Cycles</th>
<th>Growing</th>
<th>Flows</th>
<th>Matter</th>
<th>Decomposers</th>
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</thead>
<tbody>
<tr>
<td>Energy</td>
<td>Water</td>
<td>Plants</td>
<td>Bones</td>
<td>Air</td>
<td>Moving</td>
</tr>
<tr>
<td>Reproducing</td>
<td>Atoms</td>
<td>Do</td>
<td>Waste</td>
<td>Breathing</td>
<td></td>
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</tbody>
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