Name\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Energy Pyramid Data Sheet

Table 1: Available Energy in Trophic Levels

|  |  |  |  |
| --- | --- | --- | --- |
| **Trophic Level** | **Organisms** | **Energy units per year** | **Percent Energy Transferred** |
| Trophic Level 1 |  | 1000 | N/A |
| Trophic Level 2 |  | 100 |  |
| Trophic Level 3 |  | 10 |  |
| Trophic Level 4 |  | 1 |  |

Are organisms in trophic level one **AUTOTROPHS** or **HETEROTROPHS** (circle one)

**Questions and Analysis:**

1. The beaker with 1000 ml represents which part of a food chain \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
   1. The 1st cup represented the \_\_\_\_\_\_\_\_\_\_\_\_\_ trophic level, or, the \_\_\_\_\_\_\_\_\_\_\_\_\_ consumer.
   2. The 2nd cup represented the \_\_\_\_\_\_\_\_\_\_\_\_ trophic level, or, the \_\_\_\_\_\_\_\_\_\_\_\_\_\_ consumer.
   3. The 3rd cup represented the \_\_\_\_\_\_\_\_\_\_\_\_ trophic level, or, the \_\_\_\_\_\_\_\_\_\_\_\_\_\_ consumer.
2. Could the ecosystem represented in **Table 1** support another level above level four?
3. On Table 1, does the calculated amount of energy transferred fit our rule of 10%? \_\_\_\_\_\_\_, why?
4. The beaker and cups that you arranged in Part III represented a food chain.
   1. The beaker with 1000 ml represented which level? \_\_\_\_\_\_\_\_\_\_
   2. How much of the original energy was left in the 3rd cup (tertiary consumer)? \_\_\_\_\_\_%