$\qquad$ Date $\qquad$

## Warm-Up: Ecology Review

1. For the food web below, label each organism: (some may have more than one label)

| P - producer | H - herbivore |
| :--- | :--- |
| 1 - primary consumer | C - carnivore |
| $2-$ secondary consumer | O - omnivore |
| $3-$ tertiary consumer |  |

3 - tertiary consumer

2. Construct a food chain from the food web above, and then explain how energy flows through your food chain.
3. Construct an energy pyramid from your food chain in number 2 .
a) Identify which animal has the most amount of available energy? $\qquad$
b) Identify which animal has the least amount of available energy? $\qquad$
4. Write True or False on the line provided:
$\qquad$ a) Primary consumers always make up the first trophic level in a food web.
$\qquad$ b) Ecological pyramids show the relative amount of energy or matter contained within each trophic level in a given food web.
$\qquad$ c) On average, about 50 percent of the energy available within one trophic level is transferred to the next trophic level.
$\qquad$ d) The more levels that exist between a producer and a given consumer, the larger the percentage of the original energy from producers is available to that consumer.
5. Use the diagram to answer the matching set below.


Match the organism with its trophic level. A trophic level may be used more than once.

## Organism

$\qquad$ 1. algae
2. grasshopper
3. marsh grass
4. marsh hawk
5. plankton-eating fish
6. ribbed mussel
$\qquad$
7. shrew
$\qquad$
8. zooplankton
$\qquad$
$\qquad$
$\qquad$

## Trophic Level

A. primary producer
B. first-level consumer
C. second-level consumer
D. third-level consumer

