A. Define all boldface terms listed below from the reference material.

1) niche

2) habitat

3) food chain

4) producer

5) primary consumers

6) secondary consumers

7) decomposers

8) food webs

9) population

10) threatened species

11) endangered species

12) limiting factor

13) carrying capacity

B. Complete the trophic levels in the “food pyramid.” (*Text boxes are provided.)*

 top

level

C. Make four practical “food pyramids” using the food webs set up on pages 2 and 3 of the reference material. Fill in the appropriate spaces using actual organisms.

(1) page 2 (3) page 3

phytoplankton

phytoplankton

 (2) page 2 (4) page 3

phytoplankton

aquatic plants

Aquatic Ecology Worksheet Answer Key

A. Define all terms in the reference material which are listed below (the boldface terms):

1) *niche* an animal’s role or “way of living” in the environment; food

 habits, spawning behavior, seasonal migrations

2) *habitat* the immediate physical and biological environment in which an

 organism lives; cover, food, spawning sites

3) *food chain* movement of energy and nutrients through a series of

 plants and animals in an ecosystem

4) *producer* photosynthetic green plants

5) *primary consumers* animals feeding on green plants

6) *secondary consumers* animals feeding on primary consumers

7) *decomposers* bacteria, fungi which return the nutrients to the environment

8) *food webs* complicated and interwoven food chains showing interdependence of

 animals and plants

9) *population* group of organisms of the same species that lives in a given habitat

 and may interbreed

10) *threatened species* populations get so small that they cannot reproduce enough indiv-

 iduals to replace the ones that die; the population begins to decline

11) *endangered species* severely threatened species which is in imminent

 danger of going extinct

12) *limiting factor* a non-living factor in the environment that limits the number of

 individuals in a given population

13) *carrying capacity* the maximum number of individuals in a population that can be

 sustained by the habitat

1. Complete the trophic levels in the “food pyramid.”

 top

level

Decomposers

 tertiary

consumers

 secondary

consumers

primary consumers

primary producers

C. Now you will make four practical “food pyramids” using the food webs set up on pages 2 and 3 of the reference material. Fill in the appropriate spaces using actual organisms.

(1) **page 2**

Golden shiner

Pike

Stonefly nymph

perch

crayfish

zooplankton

Aquatic plant

phytoplankton

Other Possibilities:

Phytoplankton 🡪 zooplankton 🡪 golden shiner 🡪 northern pike

Phytoplankton 🡪 zooplankton 🡪 yellow perch 🡪 northern pike

Aquatic Plant 🡪 golden shiner 🡪 northern pike

 (2) **page 3**

Sea bass

starfish

crab

mussels

shrimp

zooplankton

phytoplankton

phytoplankton

Other Possibilities:

Phytoplankton 🡪 zooplankton 🡪 shrimp 🡪 crab 🡪 sea bass 🡪 man

Phytoplankton 🡪 zooplankton 🡪 shrimp 🡪 small fish 🡪 sea bass 🡪 man

Phytoplankton 🡪 zooplankton 🡪 limpets 🡪 starfish

Phytoplankton 🡪 shrimp 🡪 small fish 🡪 sea bass 🡪 bluefish 🡪 man