

# **Teacher Page: Case Study- Industrial Ecosystems: copying nature (p. 291)**

**Unit:** Unit 7

**Grade Level Indicator:**

**Description:**

**Time:** 25 minutes

**Materials:** Book page 291

**Procedure:**

**Warm-up:**

**Instructional Strategies:**

**Assessment:** Grade question, student participation

**Variations:** Do questions orally with teacher led instruction,

**Interdisciplinary Connection:**

**Sample Data/ Answers:** The answer key follows the student page.

Name \_\_\_\_\_ Date \_\_\_\_\_ Period \_\_\_\_\_

**Case Study: *Industrial Ecosystems: copying nature***

*(pages 291-292)*

1. According to one scientific principle of sustainability in nature, one organisms output of waste is another organisms \_\_\_\_\_

2. What is a resource exchange web?  
\_\_\_\_\_  
\_\_\_\_\_

3. What country has a functional electrical power plant that cycles all of its waste products? \_\_\_\_\_

4. What other US city has modeled the ecoindustrial park?  
\_\_\_\_\_

5. An abandoned industrial site is called a? \_\_\_\_\_

6. Define industrial ecology? \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

7. Biomimicry provides what types of economic benefits for businesses?  
\_\_\_\_\_  
\_\_\_\_\_

8. List two other benefits of biomimicry.  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

## Key

1. Input of energy
2. Wastes of one manufacturer becomes the raw material for another.
3. Kalundborg, Denmark
4. Chattanooga
5. Brownfields
6. Designing industrial/manufacturing sites around the principles of ecology
7. Encouraging recycling, pollution prevention, reduces the cost of waste management and pollution regulations.
8. Reduced healthcare costs, better public image, stimulates new ideas for problems.