SECTION 5-2 Gymnosperms
(pages 150-155)

This section gives examples of the group of seed plants known as gymnosperms and describes their features and how they reproduce.

► What Are Gymnosperms? (page 150)

1. What is a gymnosperm? ______________________________________

______________________________________________________________

2. Is the following sentence true or false? Gymnosperms have seeds that
do not have a protective covering. ______________________

► Types of Gymnosperms (pages 151-152)

3. Is the following sentence true or false? Gymnosperms are the oldest
type of seed plant. ______________________

Match the gymnosperms with their features. Some gymnosperms may be
used more than once.

<table>
<thead>
<tr>
<th>Features</th>
<th>Gymnosperms</th>
</tr>
</thead>
<tbody>
<tr>
<td>4. Only one species exists today.</td>
<td>a. cycads</td>
</tr>
<tr>
<td>5. These are cone-bearing plants.</td>
<td>b. ginkgo</td>
</tr>
<tr>
<td>6. These plants live only in hot, dry deserts.</td>
<td>c. gnetophytes</td>
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<tr>
<td>7. They grow in tropical and subtropical areas.</td>
<td>d. conifers</td>
</tr>
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<td>8. Most keep their needles year round.</td>
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<tr>
<td>9. These plants look like palm trees with cones.</td>
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<tr>
<td>10. Often planted along city streets because they tolerate air pollution.</td>
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</tbody>
</table>
Reproduction (pages 152-154)

11. Most gymnosperms have reproductive structures called ____________.

12. Is the following sentence true or false? Male cones contain ovules at the base of each scale. ____________

13. What is pollen? ____________________________________________________________________________

__________________________________________________________________________________________

14. A structure that contains an egg cell is a(n) ________________.

15. What happens during pollination? ______________________________________________________________________

__________________________________________________________________________________________

16. Is the following sentence true or false? Cones that have immature seeds point upward. ________________

17. Complete the cycle diagram showing the steps in the reproduction of gymnosperms.

A pine tree produces male and female ________________.

The seeds that land in a suitable place will grow into new ________________.

__________ carries seeds away.

After fertilization, the ________________ develops and the seed forms on the scale.

When ________________ are mature, the scales open.

Gymnosperms and the Living World (page 155)

18. Circle the letter of each product that conifers provide.
   a. fruit        b. paper        c. turpentine        d. cotton fibers

19. Is the following sentence true or false? Clear cutting a forest for lumber prevents the loss of soil and homes for wildlife. ________________