### Content Vocabulary

**Animal Reproduction and Development**

**Directions:** Write the correct term in the boxes to the right of each clue. Then unscramble the letters in the shaded boxes to spell a seventh term.

<table>
<thead>
<tr>
<th>cycle</th>
<th>fertilization</th>
<th>metamorphosis</th>
<th>ovary</th>
</tr>
</thead>
<tbody>
<tr>
<td>sexual reproduction</td>
<td>testis</td>
<td>zygote</td>
<td></td>
</tr>
</tbody>
</table>

1. organ that produces egg cells

2. process that produces offspring

3. a recurring series of events

4. results when an egg cell and sperm cell join

5. a type of development experienced by frogs and ladybugs

6. cell that forms after fertilization occurs

7. When they are unscrambled, the letters in the shaded boxes spell ________________, the organ that produces sperm.
Animal Reproduction and Development

A. Sexual Reproduction

1. In sexual reproduction, _________________ from a female and a male combine, producing a(n) _________________.
   a. Genetic material from the female is in a cell called a(n) _________________.
   b. Genetic material from the male is in a cell called a(n) _________________.
   c. Most animals reproduce sexually, but some reproduce _____________________.

2. Male and female animals of the same species often look _____________________.
   Males are often more _________________ or ____________________ than females of the same species.

3. The male reproductive system contains two organs called _____________________.
   a. Testes produce _____________________. cells.
   b. Sperm are _________________________ cells with ___________________________ that enable them to swim through fluid to reach an egg cell.

4. Most female reproductive systems contain two organs called _____________________.
   a. Ovaries produce _____________________. cells.
   b. Eggs are _________________________ than sperm and do not move on their own.

5. Egg and sperm cells join during the process of _________________________.
   a. The product of fertilization is a new cell called a(n) _________________.
   b. A zygote develops into a new _____________________________.
   c. A zygote contains ____________________________ material from the egg and the sperm.

6. In some animals, fertilization occurs inside the body and is called _________________ fertilization.
   a. For internal fertilization to occur, the male needs a specialized structure that deposits _________________ at or near the female reproductive system.
   b. Internal fertilization ensures that a(n) _________________, which develops from a zygote, is protected and _________________________.


Lesson Outline continued

7. Fertilization that occurs outside of the body of an animal is called _______ fertilization.
   a. Most animals that reproduce by external fertilization produce a(n) _________ number of eggs.
   b. Such animals usually do not care for the _________ eggs or care for newly hatched _________.

B. Development
   1. A zygote grows by _________ and cell divisions and becomes a(n) _________.
   2. For some animals such as birds, embryos develop _________ the body.
      a. For these animals, each embryo is usually protected inside a(n) _________.
      b. The _________ in the egg provides food for the developing embryo.
      c. The egg’s covering protects the embryo, helps keep it _________, and discourages _________.
   3. Other embryos, including most mammals, develop inside the _________.
      a. For some of these animals, embryos get _________ from the mother.
      b. For others, embryos develop in a(n) _________ inside the mother.
   4. _________ is the length of time between fertilization and birth.
   5. A developmental process in which the form of an animal’s body changes as the animals grows from an egg to an adult is known as _________.
      a. Some animals such as ladybugs go from egg to _________ to adult.
      b. Tadpoles are the _________ stage of a frog and can live only in water.
      c. The adult frog can live on _________ or in _________.
Animal Reproduction and Development

Directions: Use the diagram to respond to each statement by writing the letter of the term that matches it correctly. Each term may be used more than once.

A  Sexual Reproduction

B  Internal development

C  External development

1. Fertilization is part of this process.
2. This happens before a kangaroo is born.
3. A developing snake uses the yolk for nourishment.
4. A ladybug changes from a larva to a pupa.
5. A human baby grows for nine months before being born.
6. This occurs before a baby sparrow hatches from an egg.
7. This occurs before a turtle hatches from an egg that has been buried in the sand by its mother.
8. Fish release sperm in the water that join with eggs.
9. This is what happens before a baby calf is born in an open field.
10. A female frog deposits eggs under water that are later joined by sperm.
11. This happens inside frog eggs before tadpoles hatch.
12. This is the changing of a ladybug pupa into an adult beetle.
Key Concept Builder

Animal Reproduction and Development

Key Concept  What are the roles of male and female reproductive organs?

Directions: On the line before each definition, write the letter of the term that matches it correctly. Each term may be used more than once.

_____  1. specialized reproductive cells join
_____  2. organs that produce eggs
_____  3. sperm
_____  4. testes
_____  5. the combining of genetic material
_____  6. reproductive cells with tails that enable them to swim
_____  7. the combining of a sperm and an egg
_____  8. reproductive cells that cannot move on their own
_____  9. an ovary
_____ 10. can be born with all its reproductive cells
_____ 11. produces an offspring
_____ 12. produces a fluid to help the movement of reproductive cells
_____ 13. results in a zygote
_____ 14. how most animals reproduce
_____ 15. usually two ovaries
_____ 16. contain the larger of the two types of reproductive cells

A. male reproductive organs
B. female reproductive organs
C. sexual reproduction
Key Concept Builder

**LESSON 3**

**Animal Reproduction and Development**

**Key Concept** What are the different types of animal development?

**Directions:** On each line, write the term or phrase that correctly completes each sentence.

1. The external development of a ladybug larva includes hatching from an egg,  
   to __________________,  
   to __________________,  
   to __________________.

<table>
<thead>
<tr>
<th><strong>Compare and Contrast</strong></th>
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<tbody>
<tr>
<td><strong>External Development</strong></td>
</tr>
<tr>
<td>2. An embryo develops __________________.</td>
</tr>
<tr>
<td>4. An embryo gets nourishment from __________________.</td>
</tr>
<tr>
<td>6. A zygote grows by __________________ until it becomes an embryo.</td>
</tr>
<tr>
<td>8. The young hatch from eggs __________________.</td>
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