13.14: Reproductive System Worksheet Answers

1. Add the labels to the diagram of the reproductive system of a male dog shown below.

![Reproductive System Diagram](https://med.libretexts.org/Bookshelves/Veterinary_Medicine/Book%3A_Anatomy_and_Physiology_of_Animals_(Lawson)/13%…)

2. Fill in the table using the choices in the list below.

<table>
<thead>
<tr>
<th>Structure</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>D. Penis</td>
<td>1. Organ that delivers semen to the female reproductive tract</td>
</tr>
<tr>
<td>E. Seminiferous tubules</td>
<td>2. Where sperm are produced</td>
</tr>
</tbody>
</table>
C. Vas deferens (sperm duct) | 3. The tube that carries sperm from the epididymis to the urethra.
---|---
F. Urethra | 4. The tube that carries both sperm and urine down the penis.
A. Accessory glands | 5. Organs that contribute 90% of the semen.
B. Epididymis | 6. Tubules where sperm are stored.

3. The diagram below shows a section through a testis.

Colour and label the structures of the diagram.
1. Seminiferous tubules in which the sperm are made. Blue
2. Collecting ducts where the sperm are stored. Green
3. Epididymis in which sperm mature and become motile. Red
4. Fibrous coat surrounding and protecting the testis. Brown
5. Vas deferens or sperm duct. Yellow

4. The diagram below shows a sperm. Colour and label the following areas.
   a) The DNA-containing area. Brown
   b) The enzyme-containing sac that aids sperm penetration of the egg. Yellow
   c) The midpiece - contains mitochondria for energy for sperm movement. Red
   d) The tail – propels the sperm along the female tract. Blue
5. a) What is the difference between sperm and semen?
Sperm are the gametes that carry the genetic material (head, midpiece and tail) while semen is the fluid produced by the accessory glands plus the sperm carried in it.

b) What is the difference between infertility and impotence?
Infertility is the inability to conceive and have offspring while impotence is the inability to mate.

6. Add labels to the diagram of the female reproductive system below.

7. Fill in the following table with the words from the list below. Some words may need to be used more than once.

<table>
<thead>
<tr>
<th>Term</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>F. Uterus</td>
<td>1. Chamber that houses the developing foetus</td>
</tr>
<tr>
<td>E. Vagina</td>
<td>2. Canal that receives the penis during copulation</td>
</tr>
<tr>
<td>C. Fallopian tube</td>
<td>3. Usual site of fertilisation</td>
</tr>
<tr>
<td>C. Fallopian tube</td>
<td>4. Duct through which the ovum travels to reach the uterus.</td>
</tr>
</tbody>
</table>
D. Cervix 5. A sphincter muscle between the uterus and the vagina

B. Vulva 6. External genitalia

A. Ovary 7. Where the ova are produced

8. The diagram below shows an ovary with the stages of development of the ovum during an ovarian cycle.

i) Chose different colours and colour in:
   a) The cells that produce oestrogen. Red
   b) The structure that produces progesterone. Yellow
   c) All the ova. blue

ii) In the space provided, name the event shown as “event A’ on the diagram.

9. a) Arrange the following events in the ovarian cycle in the correct order in which they occur. Put the numbers in the correct order in the boxes below.

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>4. <strong>Follicle stimulating hormone (FSH)</strong> secreted by the anterior pituitary gland</td>
<td>6. <strong>Ovum develops in the follicle</strong></td>
</tr>
<tr>
<td>7. <strong>Oestrogen secreted by follicle cells</strong></td>
<td>1. <strong>Luteinising hormone secreted by the anterior pituitary gland</strong></td>
</tr>
<tr>
<td>2. <strong>Ovulation of mature ovum</strong></td>
<td>5. <strong>Corpus luteum develops</strong></td>
</tr>
<tr>
<td>3. <strong>Progesterone secreted by corpus luteum</strong></td>
<td></td>
</tr>
</tbody>
</table>

10 The diagrams below show different stages in the ovarian cycle.

i. In the spaces under the diagrams write a few words describing what is happening in diagram above.

ii. Now show by means of arrows added to the diagram, where the hormones FSH (follicle stimulating hormone), LH (luteinising hormone), oestrogen and progesterone act or are produced.
11. State whether the following statements are true or false. If false write in the correct answer.

1. The mixing of foetal and maternal blood in the placenta allows easy transfer of nutrients and oxygen to the foetus.
   
   **F.** Although the foetal and maternal blood flow close to each other they do not mix in a healthy placenta.

2. Adrenaline cannot easily cross the placenta.
   
   **T**

3. Antibodies cannot pass across the placenta from the mother.
   
   **F.** Antibodies from the mother do cross the placenta to the foetus.

   
   **F.** Colostrum contains antibodies but not hormones.

5. Oestrogen stimulates milk "let-down".
   
   **F.** Oxytocin from the posterior pituitary gland is the hormone that stimulates milk "let-down".

6. Young animals often have to be given iron supplements because milk contains very little iron.
   
   **T**

12. Insert the correct term into the table.

<table>
<thead>
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</tr>
</thead>
<tbody>
<tr>
<td><strong>D. Follicle stimulating hormone</strong></td>
<td>1. The hormone that stimulates the growth of ovarian follicles.</td>
</tr>
<tr>
<td><strong>A. Progesterone</strong></td>
<td>2. The hormone that is secreted by the corpus luteum</td>
</tr>
<tr>
<td><strong>F. Morula</strong></td>
<td>3. A ball of cells produced by early division of the fertilised egg.</td>
</tr>
<tr>
<td><strong>G. Blastocyst</strong></td>
<td>4. The hollow ball of cells produced by later division of the fertilised egg.</td>
</tr>
<tr>
<td><strong>C. Luteinising hormone</strong></td>
<td>5. The hormone that changes the empty follicle into the corpus luteum.</td>
</tr>
</tbody>
</table>
### Placenta
6. The membranes that form around the embryo to allow diffusion of nutrients and oxygen etc. between the foetal and maternal blood systems.

### Implantation
7. Attachment of the fertilized egg to the uterine lining

### Chorionic gonadotrophin
8. The hormone that is used in some pregnancy tests.

### Oestrogen
9. The hormone secreted by the ovarian follicle.

### Colostrum
10. The first milk.

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**Contributors**

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