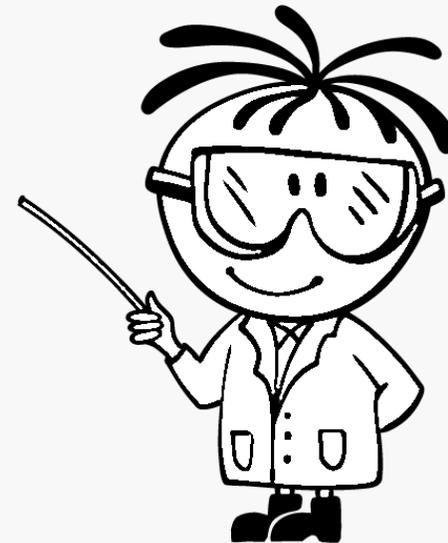




# GRADE 12

# HUMAN REPRODUCTION

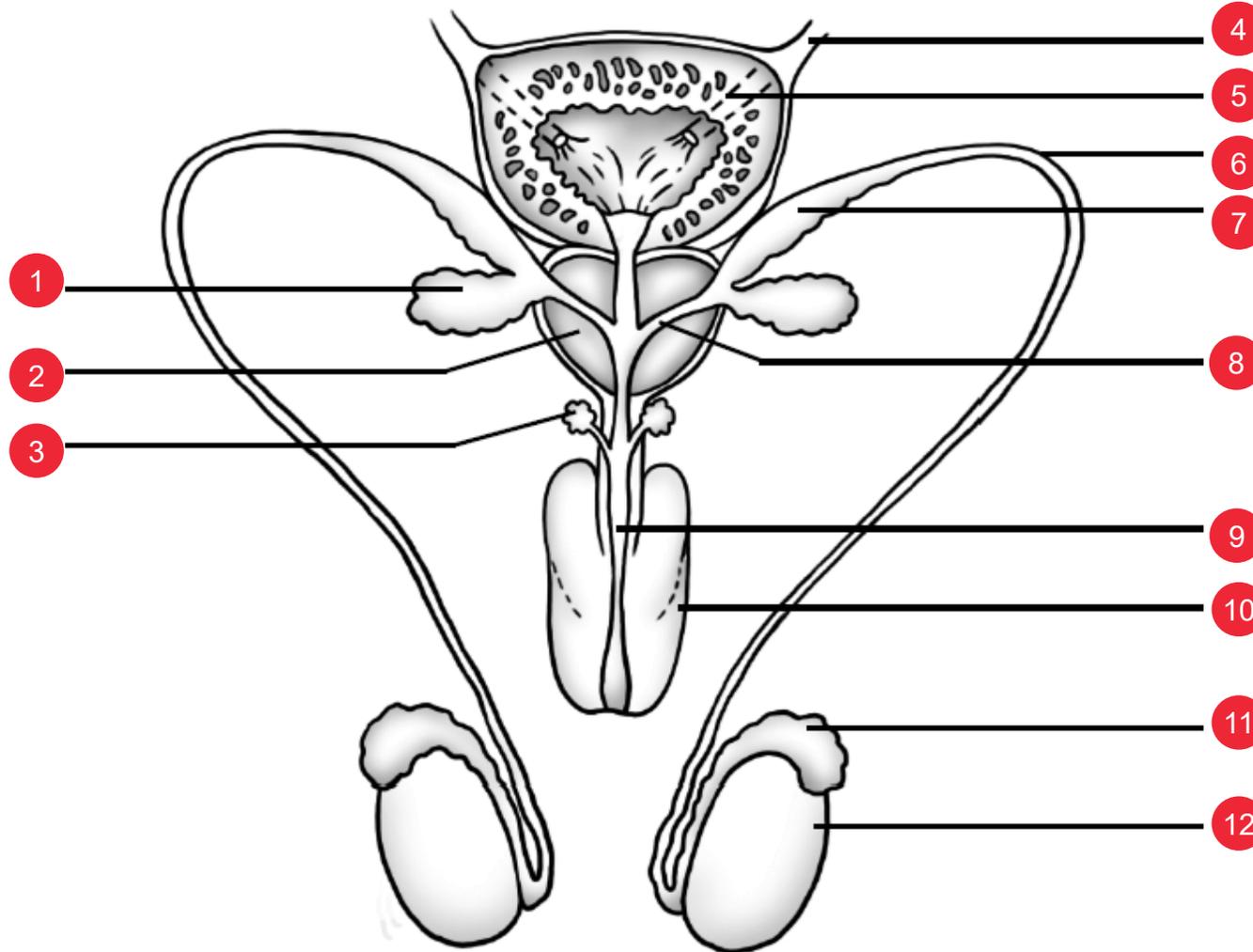
REVISION



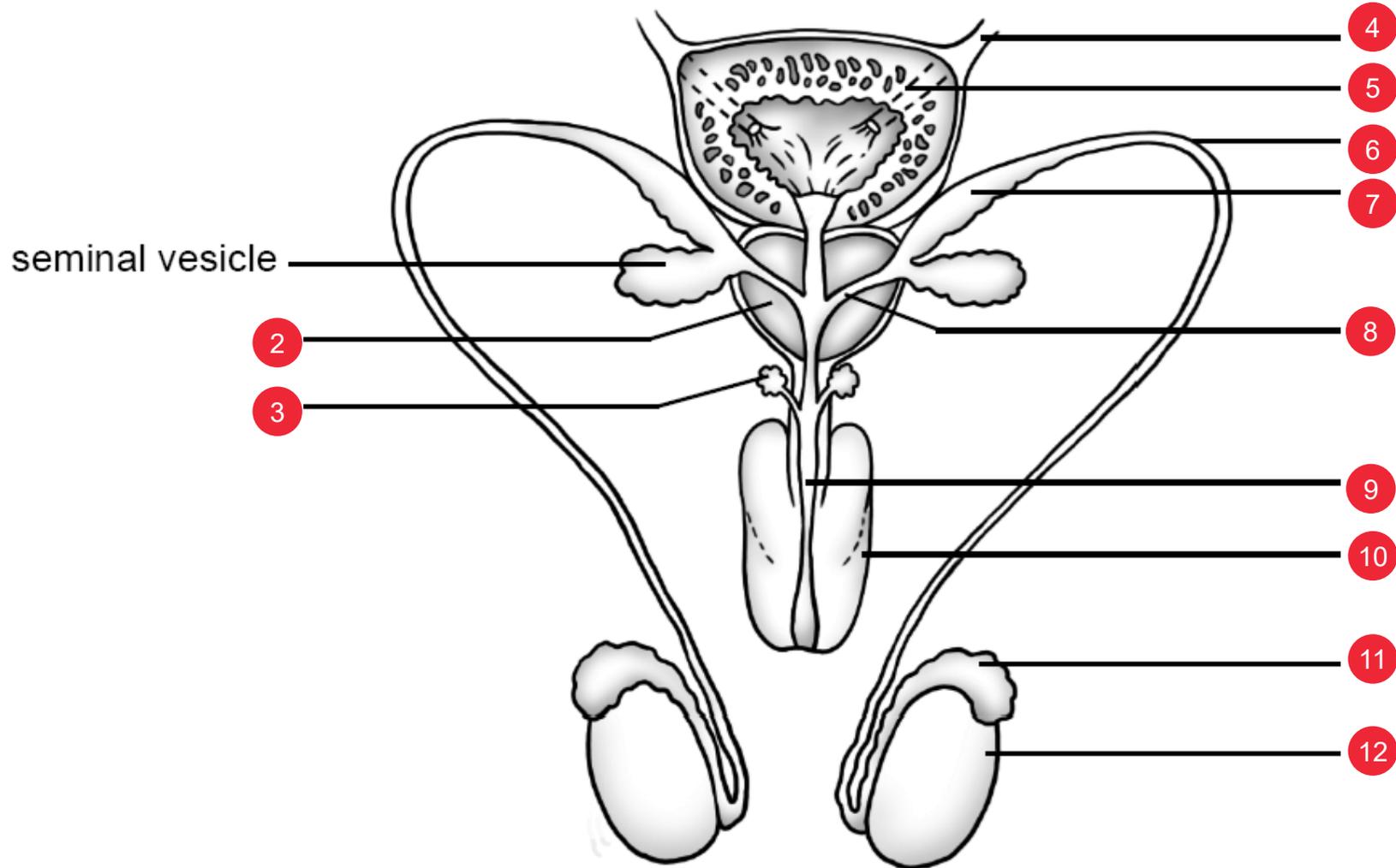
THE  
**ANSWER**  
SERIES *Your Key to Exam Success*

# MALE REPRODUCTIVE SYSTEM

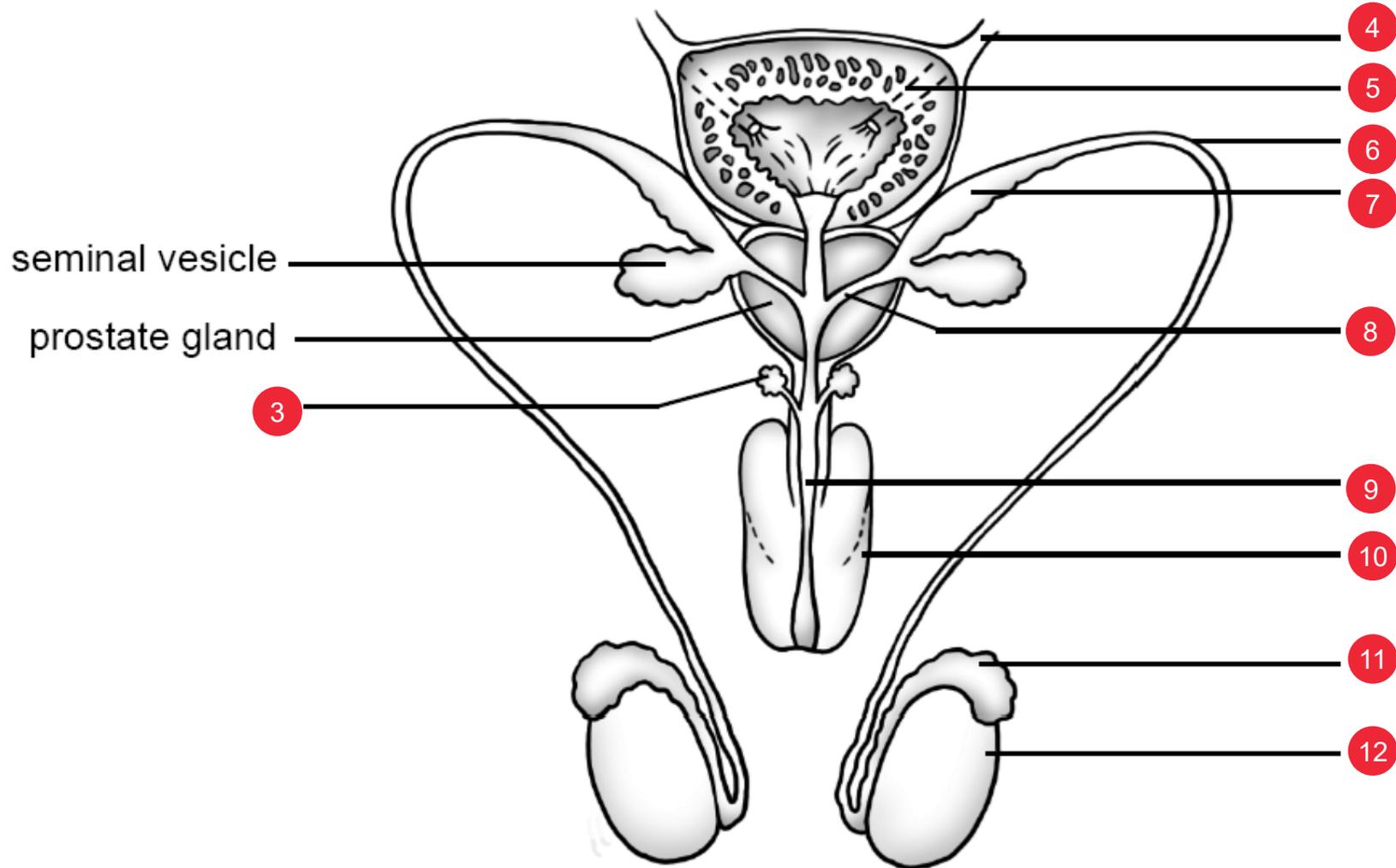
Provide labels for the male reproductive system.



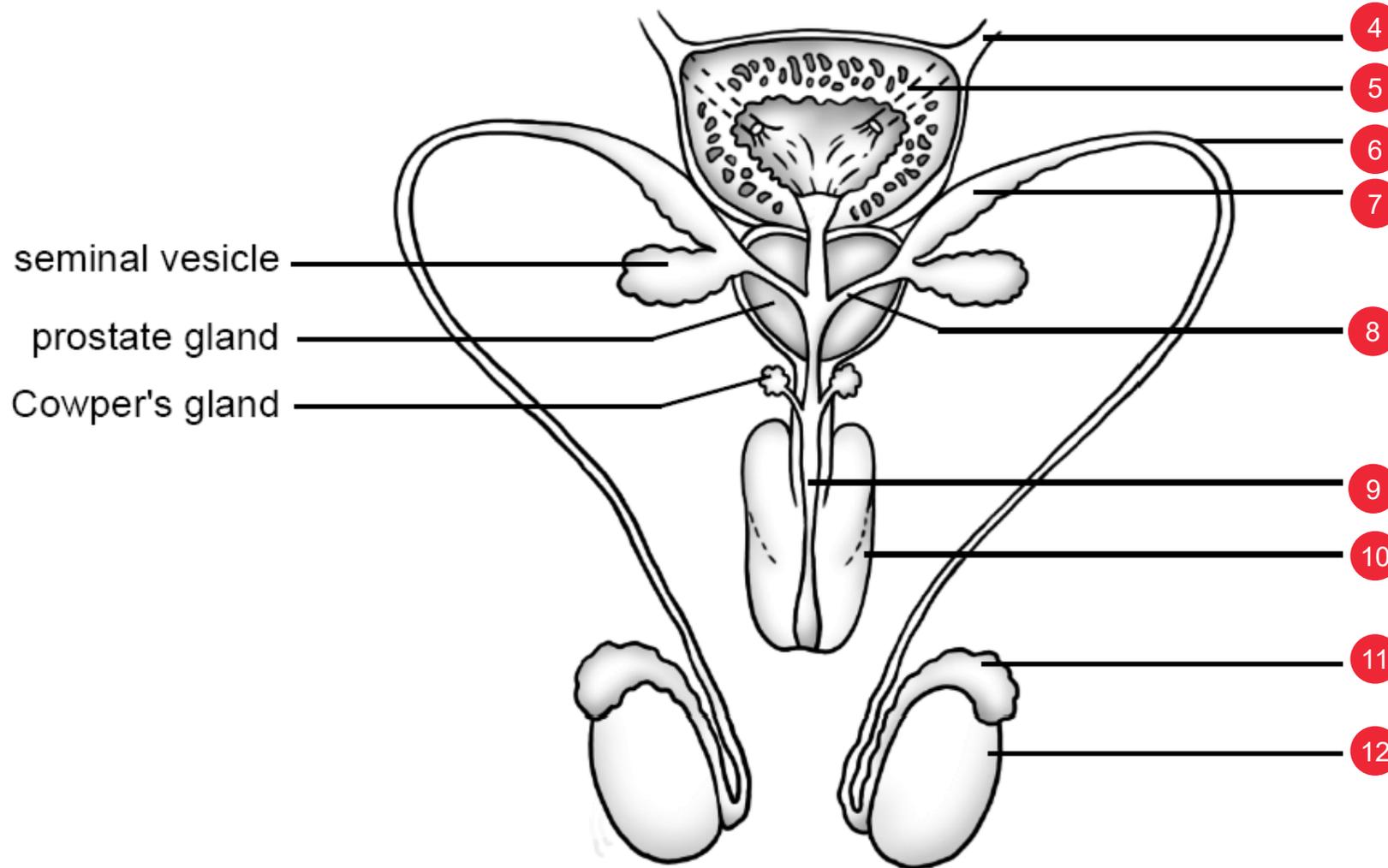
Provide labels for the male reproductive system.



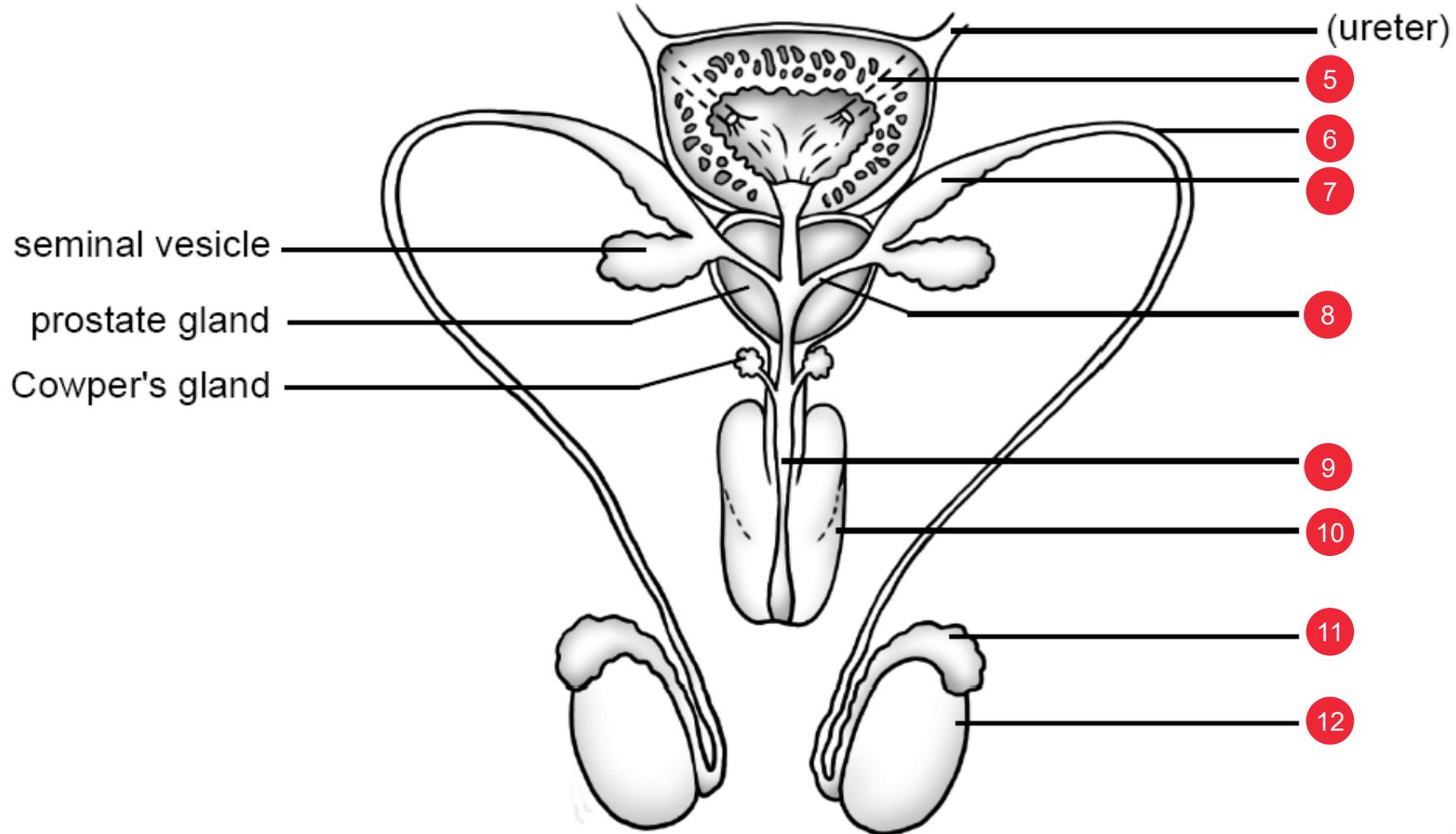
Provide labels for the male reproductive system.



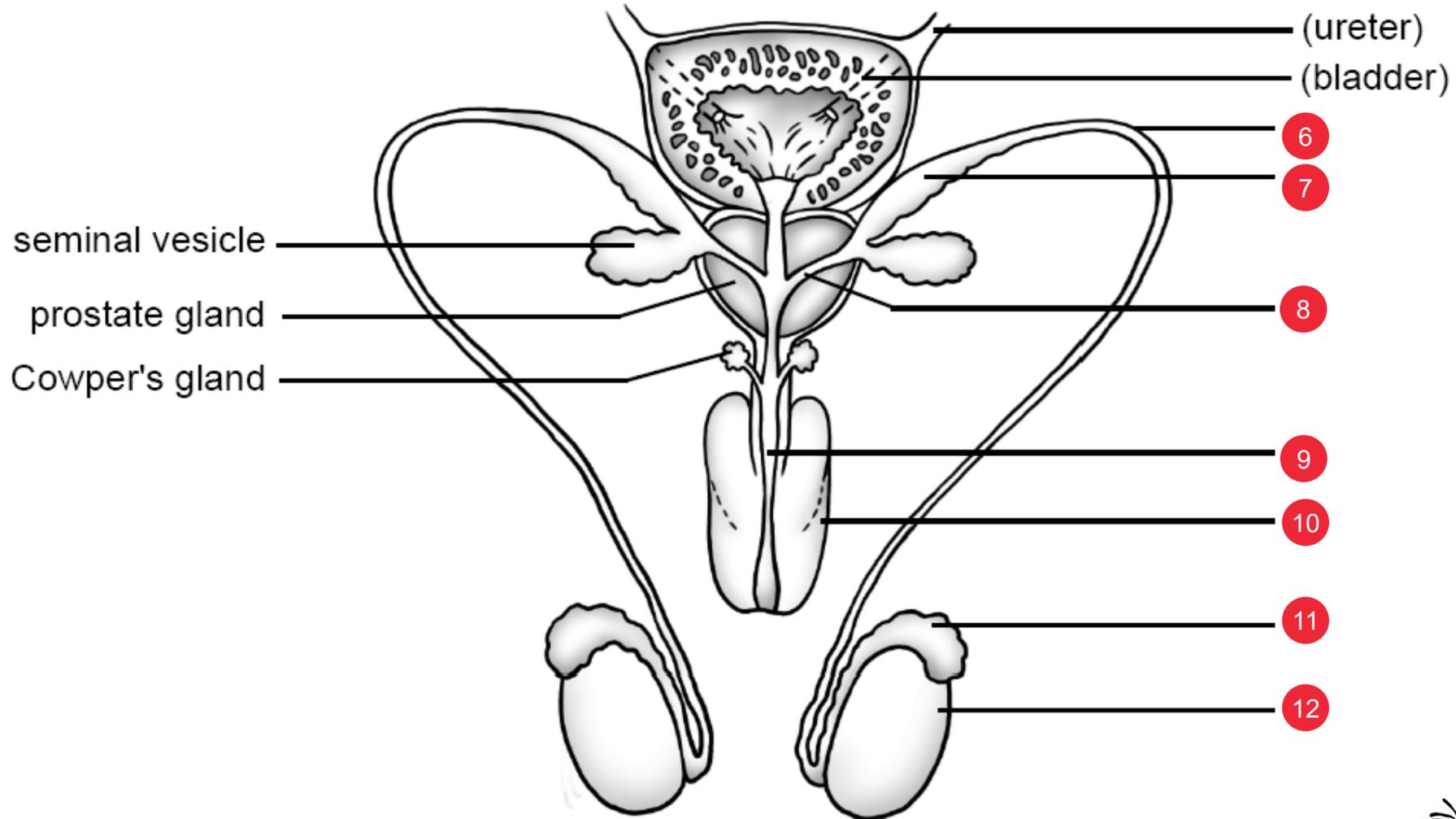
Provide labels for the male reproductive system.



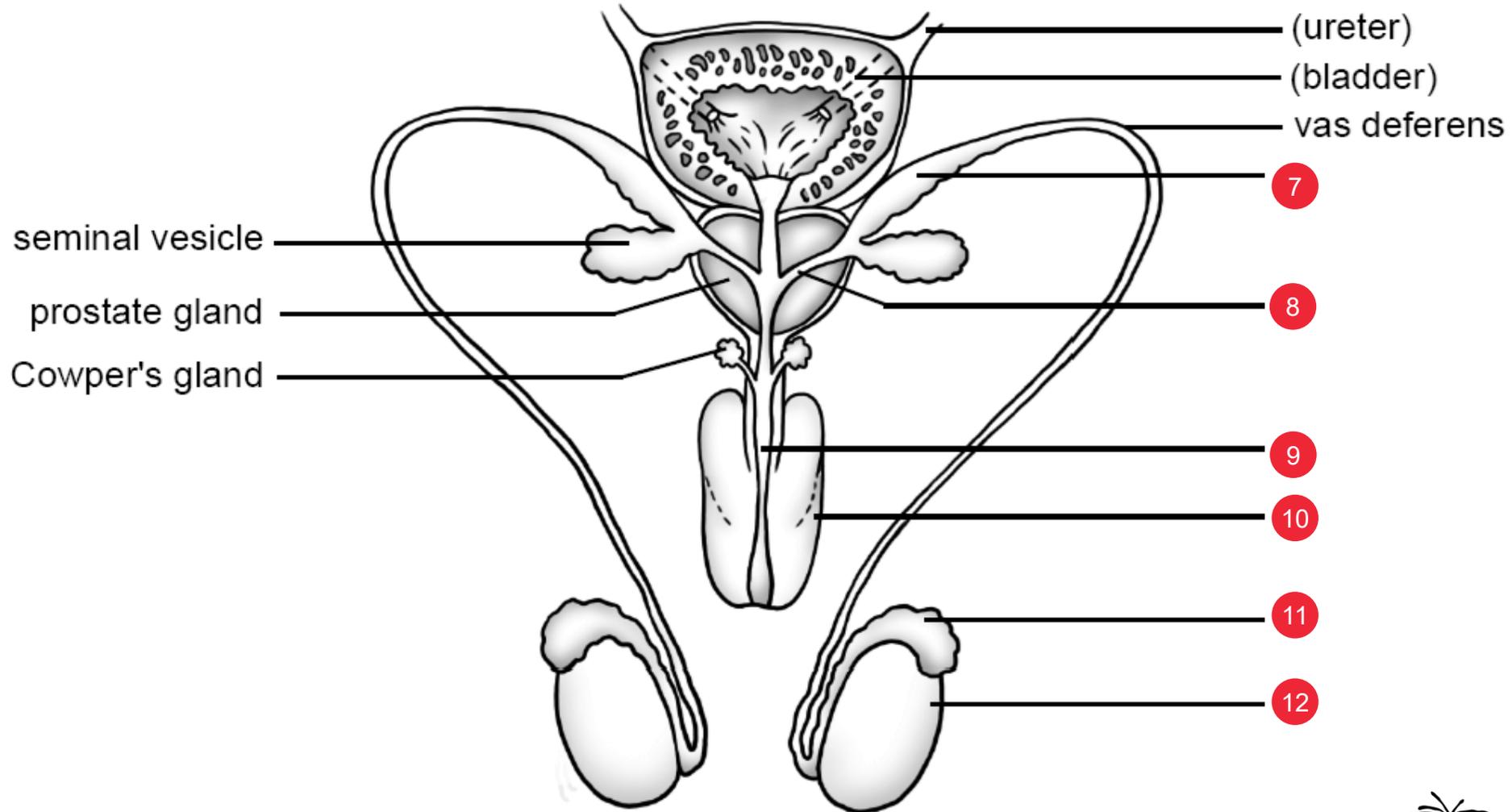
Provide labels for the male reproductive system.



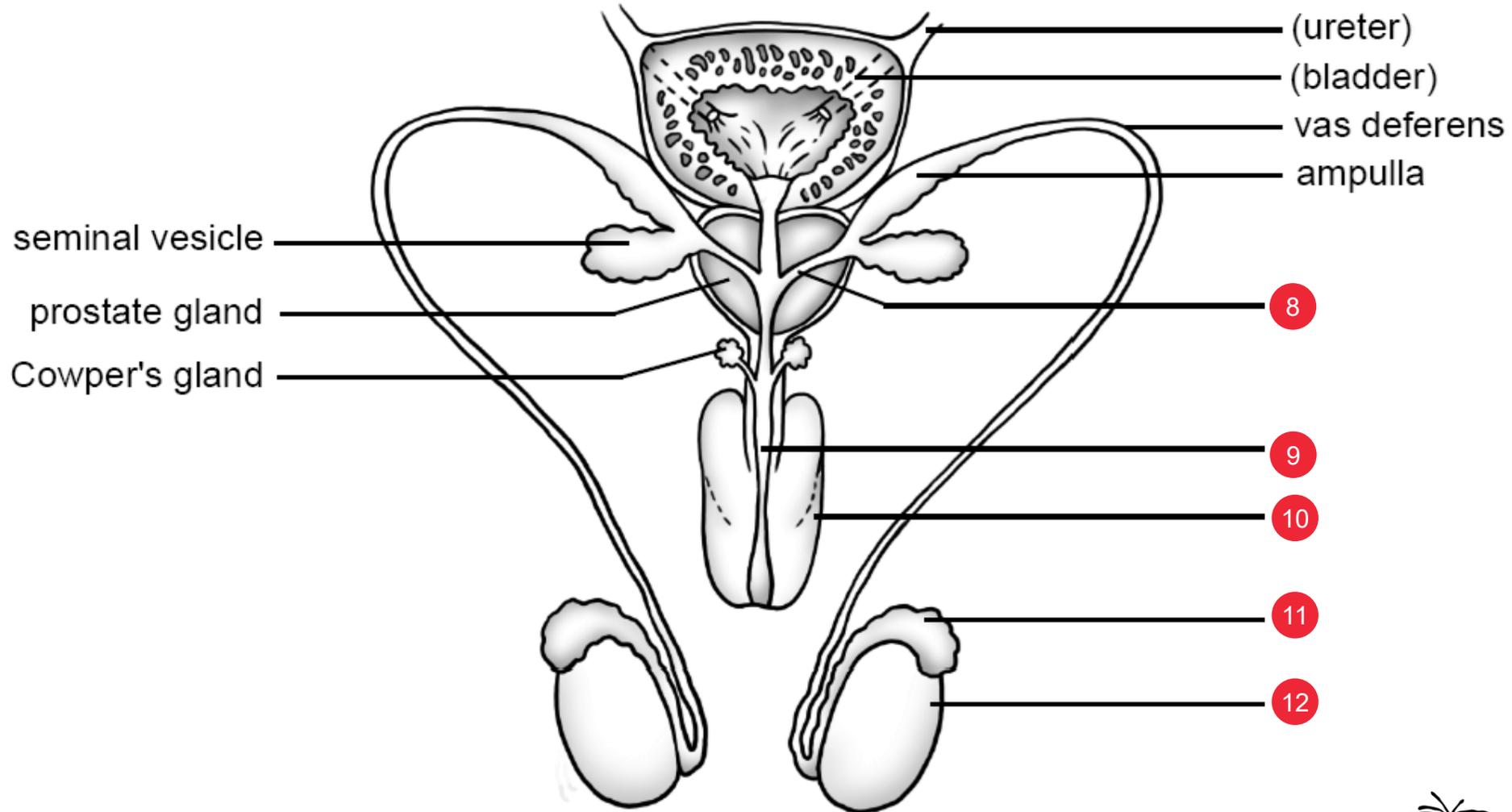
Provide labels for the male reproductive system.



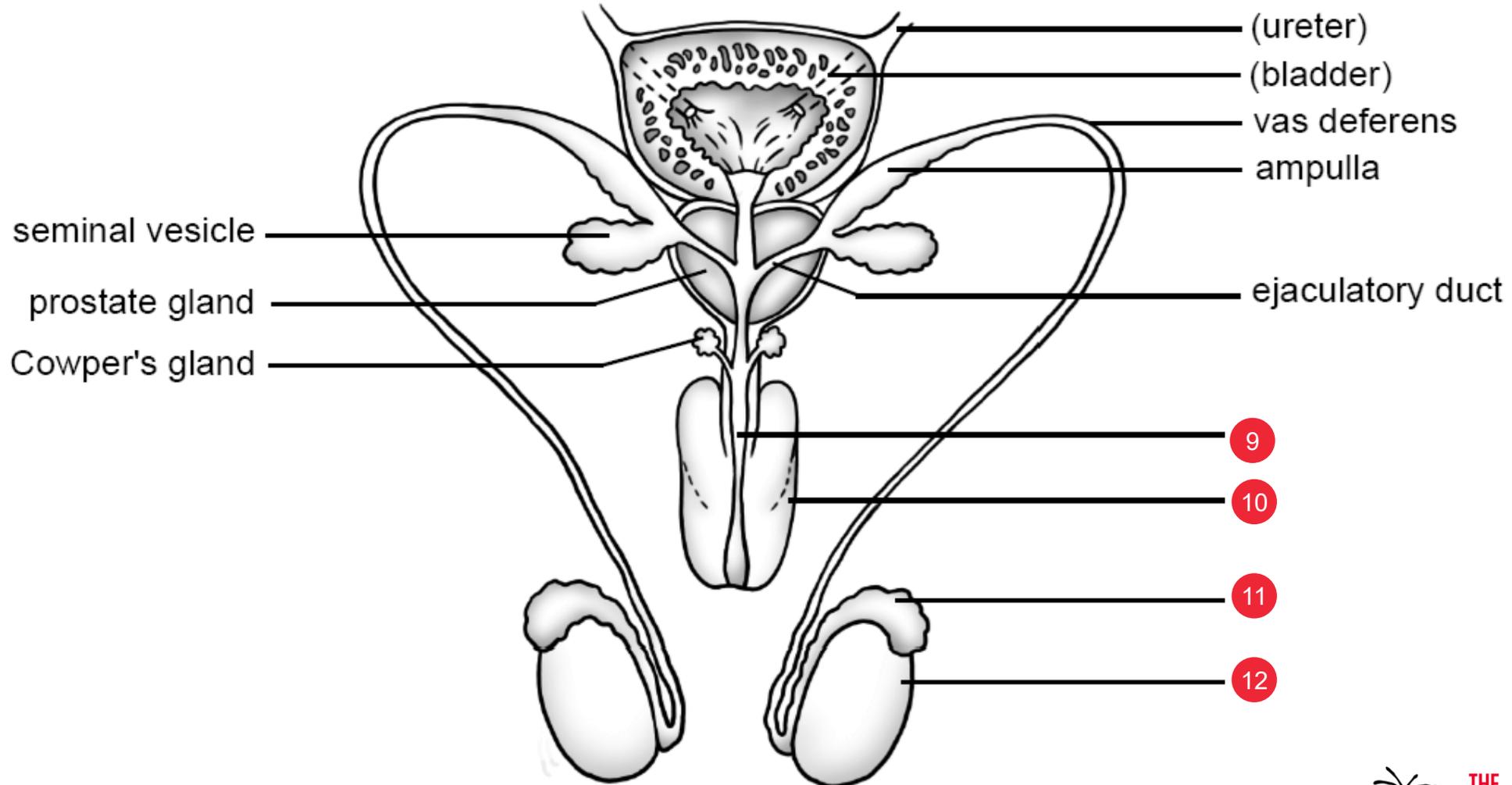
Provide labels for the male reproductive system.



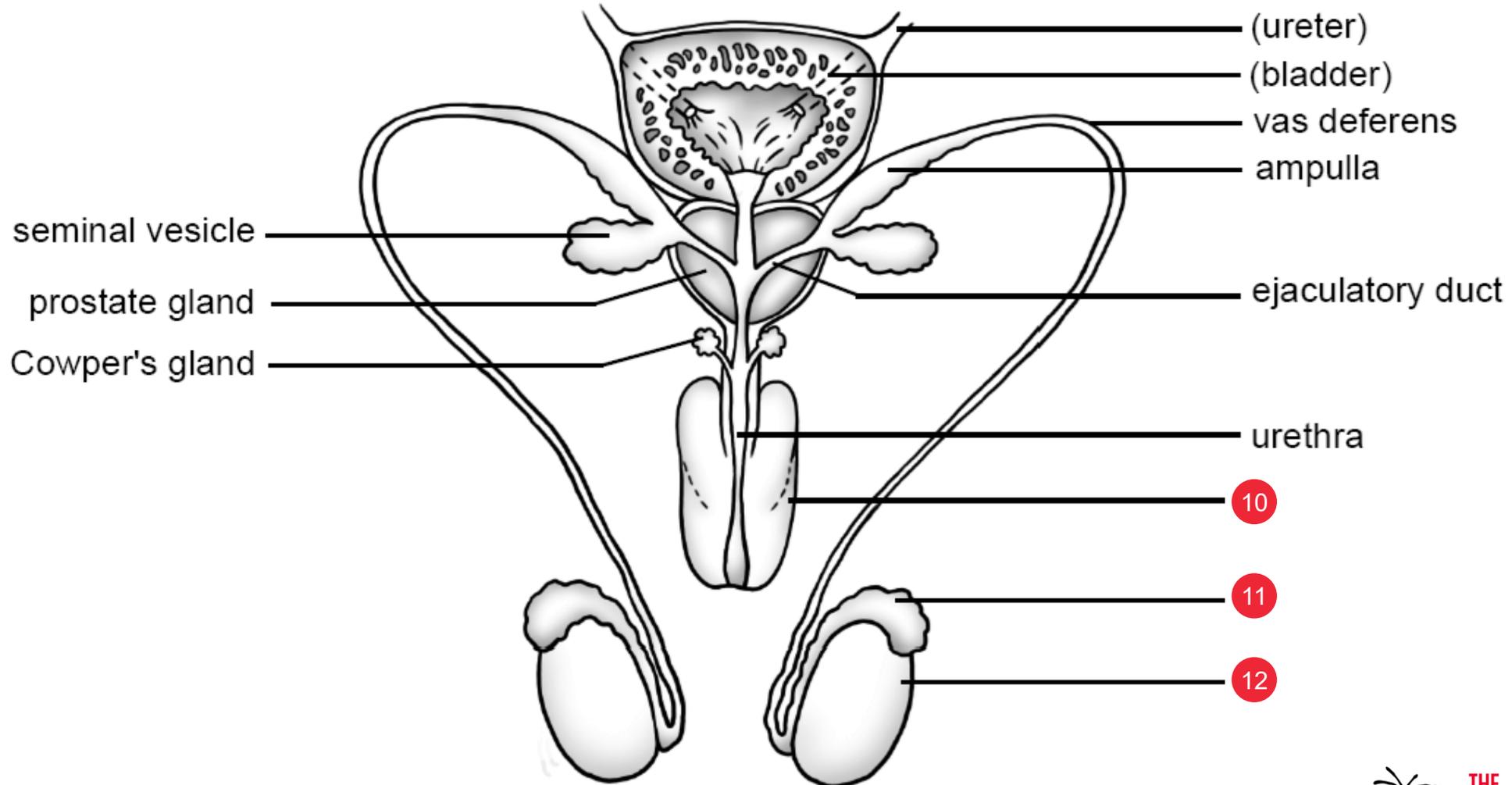
Provide labels for the male reproductive system.



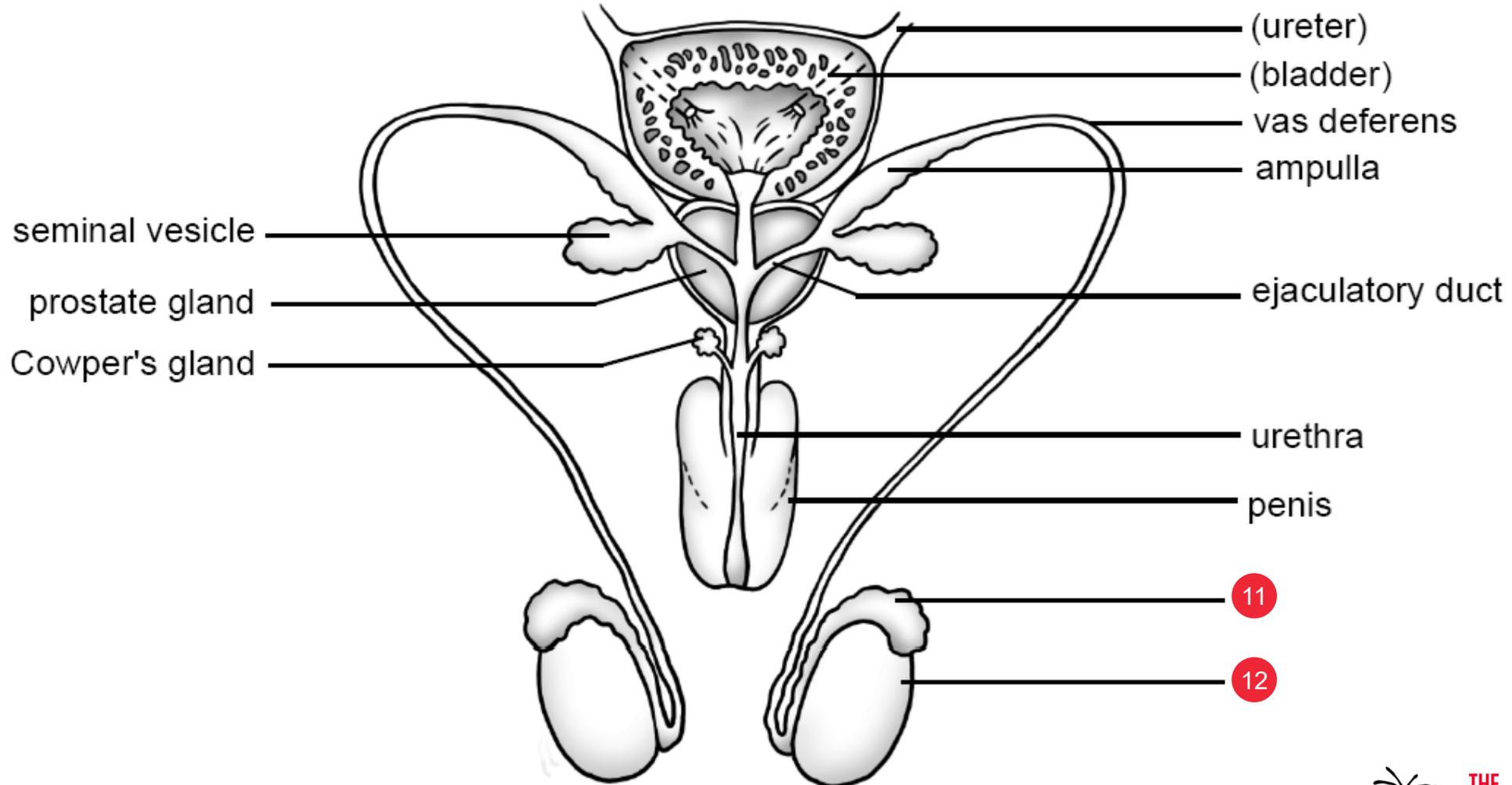
Provide labels for the male reproductive system.



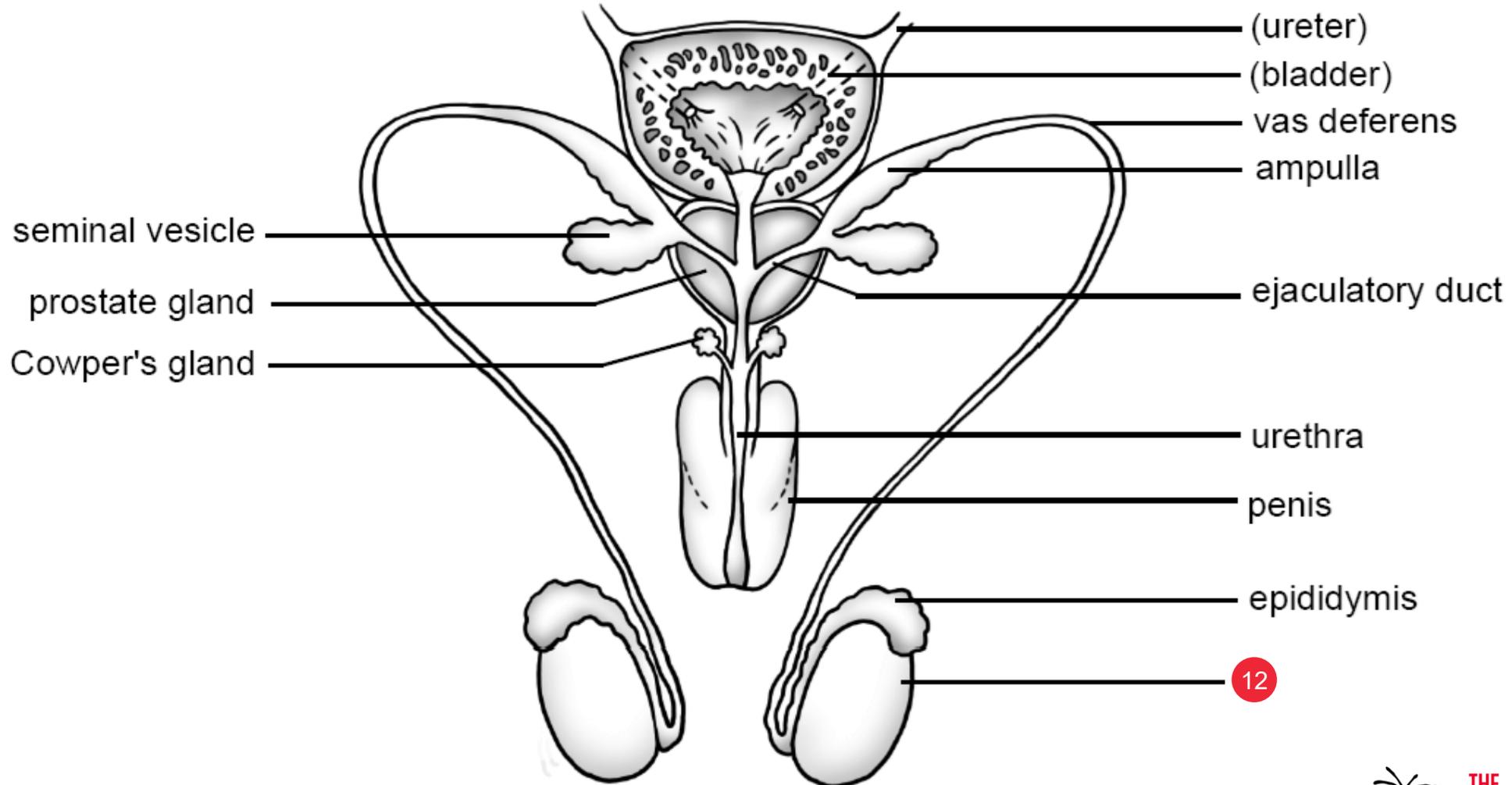
Provide labels for the male reproductive system.



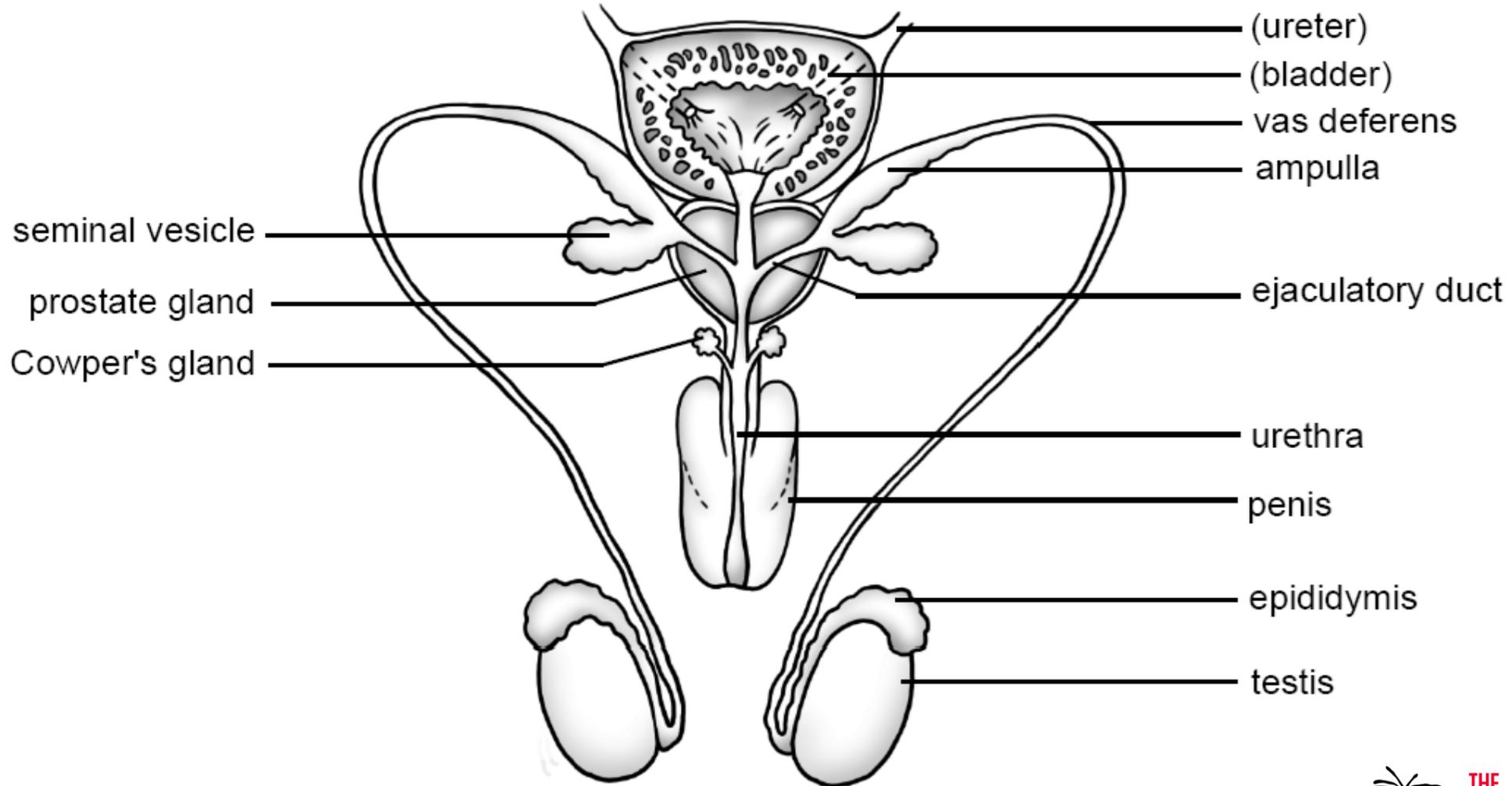
Provide labels for the male reproductive system.



Provide labels for the male reproductive system.



Provide labels for the male reproductive system.



Identify the structures in the male reproductive system that perform the following functions:

1. Ensures the testes are kept at 2 – 3°C lower than body temperature.
2. The primary sex organs in males.
3. Cells in the testes that provide food for the developing sperm.
4. Transports the sperm from the epididymis to the urethra.
5. Transports urine and semen to the exterior.
6. Secretions from this gland acts as a lubricant for sperm motility.
7. Smooth muscle fibres contract forcing semen to the exterior.
8. Secretions of this gland contain fructose that provides energy for the sperm to swim.
9. Is responsible for transferring sperm into the vagina during sexual intercourse.
10. Temporarily stores sperm until they are mature.
11. Organ that produces sperm and secretes testosterone.
12. Secretions from this gland are a milky white and alkaline to neutralise the pH of the vagina.



**A structure may  
appear more than  
once.**



Identify the structures in the male reproductive system that perform the following functions:

1. Scrotum

2. The primary sex organs in males.
3. Cells in the testes that provide food for the developing sperm.
4. Transports the sperm from the epididymis to the urethra.
5. Transports urine and semen to the exterior.
6. Secretions from this gland acts as a lubricant for sperm motility.
7. Smooth muscle fibres contract forcing semen to the exterior.
8. Secretions of this gland contain fructose that provides energy for the sperm to swim.
9. Is responsible for transferring sperm into the vagina during sexual intercourse.
10. Temporarily stores sperm until they are mature.
11. Organ that produces sperm and secretes testosterone.
12. Secretions from this gland are a milky white and alkaline to neutralise the pH of the vagina.



**A structure may appear more than once.**



Identify the structures in the male reproductive system that perform the following functions:

1. Scrotum

2. Testes

3. Cells in the testes that provide food for the developing sperm.
4. Transports the sperm from the epididymis to the urethra.
5. Transports urine and semen to the exterior.
6. Secretions from this gland acts as a lubricant for sperm motility.
7. Smooth muscle fibres contract forcing semen to the exterior.
8. Secretions of this gland contain fructose that provides energy for the sperm to swim.
9. Is responsible for transferring sperm into the vagina during sexual intercourse.
10. Temporarily stores sperm until they are mature.
11. Organ that produces sperm and secretes testosterone.
12. Secretions from this gland are a milky white and alkaline to neutralise the pH of the vagina.



**A structure may  
appear more than  
once.**



Identify the structures in the male reproductive system that perform the following functions:

1. Scrotum

2. Testes

3. Sertoli (cells)

4. Transports the sperm from the epididymis to the urethra.

5. Transports urine and semen to the exterior.

6. Secretions from this gland acts as a lubricant for sperm motility.

7. Smooth muscle fibres contract forcing semen to the exterior.

8. Secretions of this gland contain fructose that provides energy for the sperm to swim.

9. Is responsible for transferring sperm into the vagina during sexual intercourse.

10. Temporarily stores sperm until they are mature.

11. Organ that produces sperm and secretes testosterone.

12. Secretions from this gland are a milky white and alkaline to neutralise the pH of the vagina.



**A structure may  
appear more than  
once.**



**THE  
ANSWER  
SERIES** Your Key to Exam Success

Identify the structures in the male reproductive system that perform the following functions:

1. Scrotum
2. Testes
3. Sertoli (cells)
4. Vas deferens
5. Transports urine and semen to the exterior.
6. Secretions from this gland acts as a lubricant for sperm motility.
7. Smooth muscle fibres contract forcing semen to the exterior.
8. Secretions of this gland contain fructose that provides energy for the sperm to swim.
9. Is responsible for transferring sperm into the vagina during sexual intercourse.
10. Temporarily stores sperm until they are mature.
11. Organ that produces sperm and secretes testosterone.
12. Secretions from this gland are a milky white and alkaline to neutralise the pH of the vagina.



**A structure may  
appear more than  
once.**



Identify the structures in the male reproductive system that perform the following functions:

1. Scrotum
2. Testes
3. Sertoli (cells)
4. Vas deferens
5. Urethra
6. Secretions from this gland acts as a lubricant for sperm motility.
7. Smooth muscle fibres contract forcing semen to the exterior.
8. Secretions of this gland contain fructose that provides energy for the sperm to swim.
9. Is responsible for transferring sperm into the vagina during sexual intercourse.
10. Temporarily stores sperm until they are mature.
11. Organ that produces sperm and secretes testosterone.
12. Secretions from this gland are a milky white and alkaline to neutralise the pH of the vagina.



**A structure may  
appear more than  
once.**



Identify the structures in the male reproductive system that perform the following functions:

1. Scrotum
2. Testes
3. Sertoli (cells)
4. Vas deferens
5. Urethra
6. Prostate gland / seminal vesicles / Cowper's glands
7. Smooth muscle fibres contract forcing semen to the exterior.
8. Secretions of this gland contain fructose that provides energy for the sperm to swim.
9. Is responsible for transferring sperm into the vagina during sexual intercourse.
10. Temporarily stores sperm until they are mature.
11. Organ that produces sperm and secretes testosterone.
12. Secretions from this gland are a milky white and alkaline to neutralise the pH of the vagina.



**A structure may appear more than once.**



Identify the structures in the male reproductive system that perform the following functions:

1. Scrotum
2. Testes
3. Sertoli (cells)
4. Vas deferens
5. Urethra
6. Prostate gland / seminal vesicles / Cowper's glands
7. Ejaculatory duct
8. Secretions of this gland contain fructose that provides energy for the sperm to swim.
9. Is responsible for transferring sperm into the vagina during sexual intercourse.
10. Temporarily stores sperm until they are mature.
11. Organ that produces sperm and secretes testosterone.
12. Secretions from this gland are a milky white and alkaline to neutralise the pH of the vagina.



**A structure may appear more than once.**



Identify the structures in the male reproductive system that perform the following functions:

1. Scrotum
2. Testes
3. Sertoli (cells)
4. Vas deferens
5. Urethra
6. Prostate gland / seminal vesicles / Cowper's glands
7. Ejaculatory duct
8. Seminal vesicle
9. Is responsible for transferring sperm into the vagina during sexual intercourse.
10. Temporarily stores sperm until they are mature.
11. Organ that produces sperm and secretes testosterone.
12. Secretions from this gland are a milky white and alkaline to neutralise the pH of the vagina.



**A structure may appear more than once.**



Identify the structures in the male reproductive system that perform the following functions:

1. Scrotum
2. Testes
3. Sertoli (cells)
4. Vas deferens
5. Urethra
6. Prostate gland / seminal vesicles / Cowper's glands
7. Ejaculatory duct
8. Seminal vesicle
9. Penis
10. Temporarily stores sperm until they are mature.
11. Organ that produces sperm and secretes testosterone.
12. Secretions from this gland are a milky white and alkaline to neutralise the pH of the vagina.



**A structure may appear more than once.**



Identify the structures in the male reproductive system that perform the following functions:

1. Scrotum
2. Testes
3. Sertoli (cells)
4. Vas deferens
5. Urethra
6. Prostate gland / seminal vesicles / Cowper's glands
7. Ejaculatory duct
8. Seminal vesicle
9. Penis
10. Epididymis
11. Organ that produces sperm and secretes testosterone.
12. Secretions from this gland are a milky white and alkaline to neutralise the pH of the vagina.



**A structure may  
appear more than  
once.**



Identify the structures in the male reproductive system that perform the following functions:

1. Scrotum
2. Testes
3. Sertoli (cells)
4. Vas deferens
5. Urethra
6. Prostate gland / seminal vesicles / Cowper's glands
7. Ejaculatory duct
8. Seminal vesicle
9. Penis
10. Epididymis
11. Testis/testes
12. Secretions from this gland are a milky white and alkaline to neutralise the pH of the vagina.



**A structure may  
appear more than  
once.**



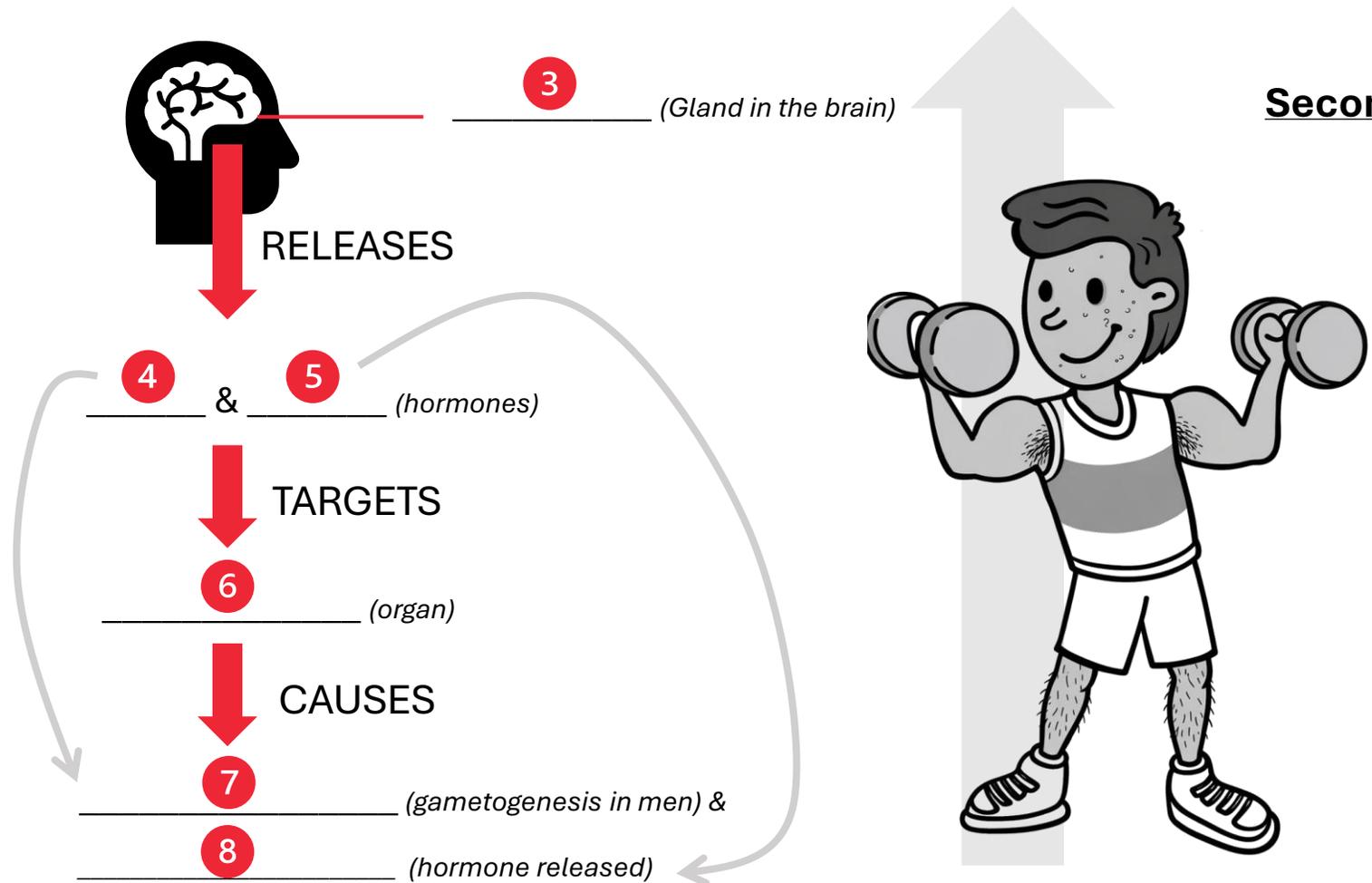
Identify the structures in the male reproductive system that perform the following functions:

1. Scrotum
2. Testes
3. Sertoli (cells)
4. Vas deferens
5. Urethra
6. Prostate gland / seminal vesicles / Cowper's glands
7. Ejaculatory duct
8. Seminal vesicle
9. Penis
10. Epididymis
11. Testes
12. Prostate gland



# Understand the changes in the **male body** during puberty:

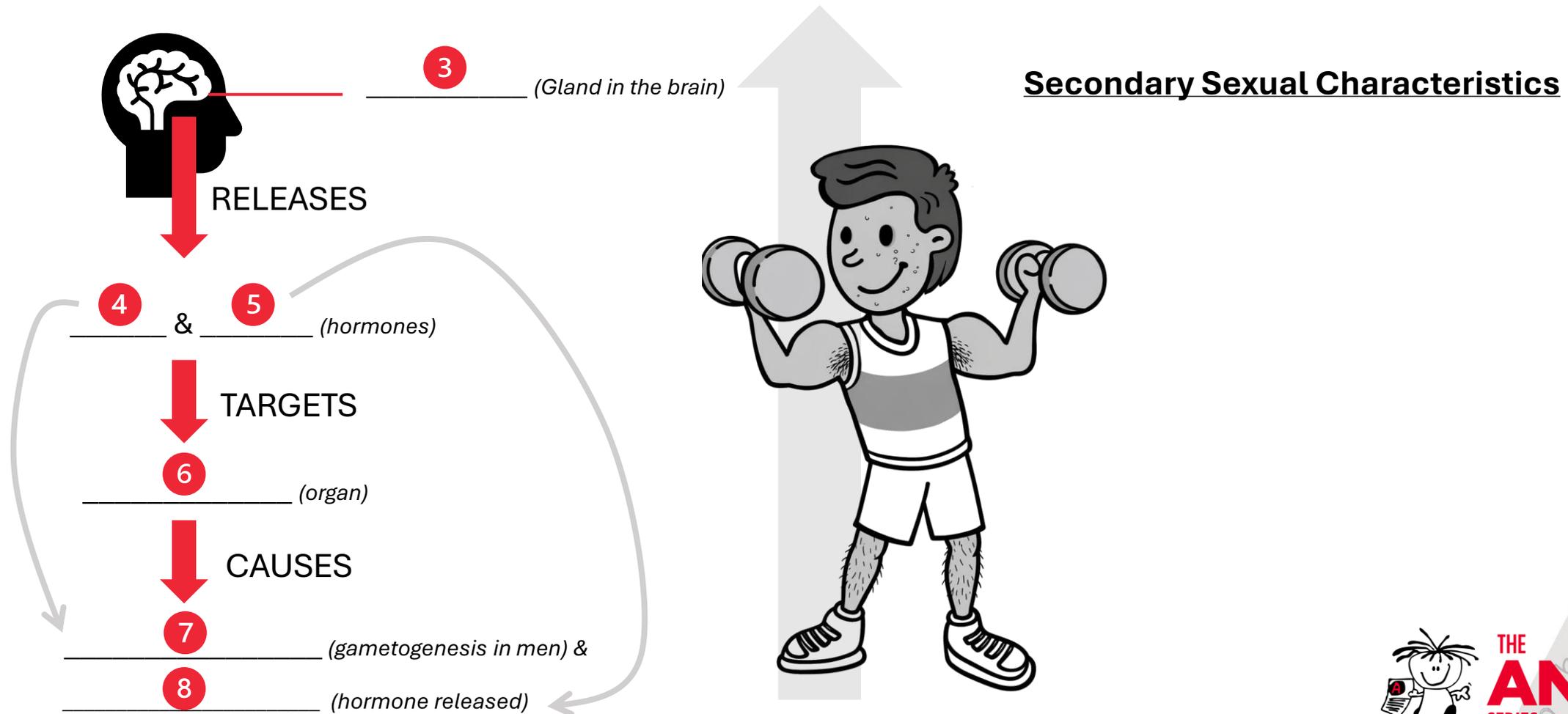
The TWO main functions of puberty is: \_\_\_\_\_ <sup>1</sup> \_\_\_\_\_ & \_\_\_\_\_ <sup>2</sup> \_\_\_\_\_



## Secondary Sexual Characteristics

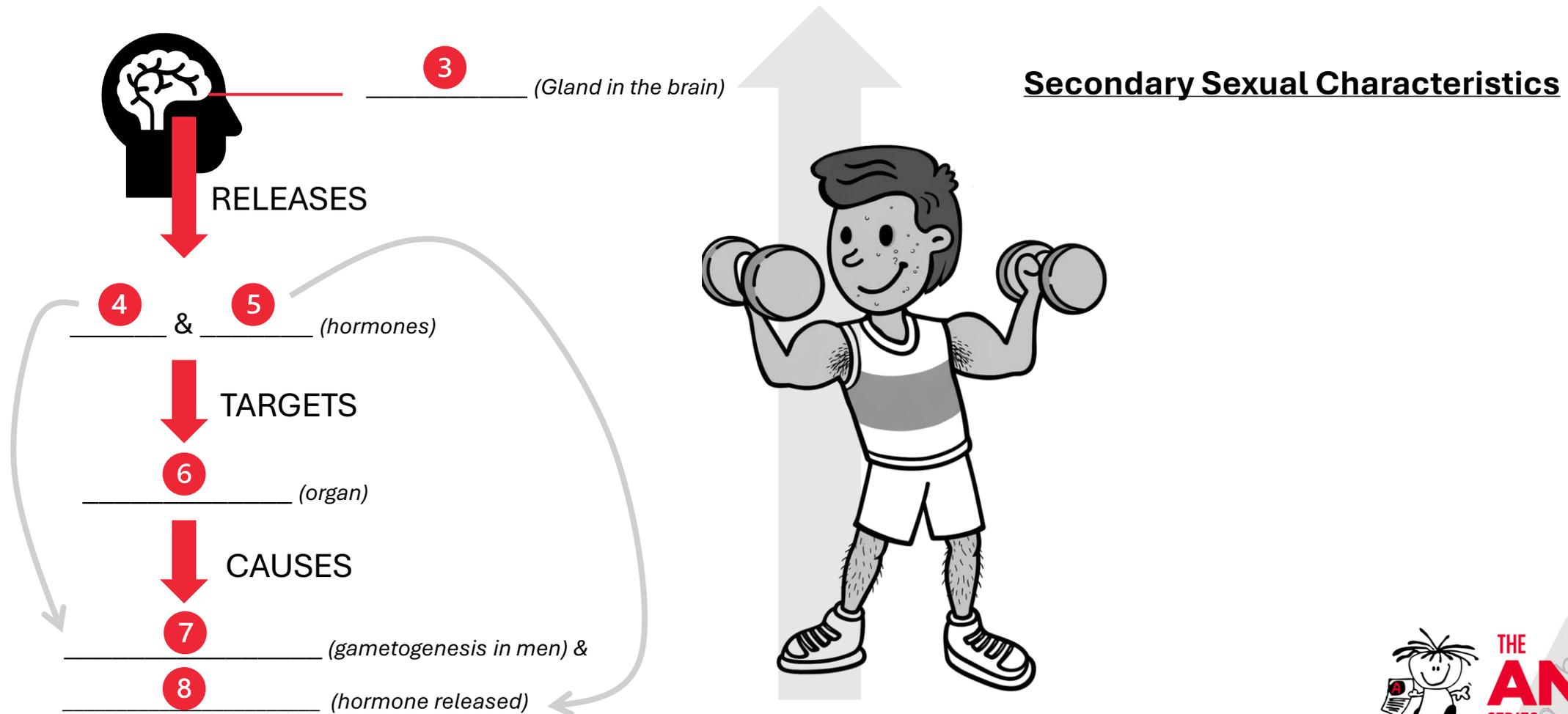
# Understand the changes in the **male body** during puberty:

The TWO main functions of puberty is: maturation of sex organs & 2



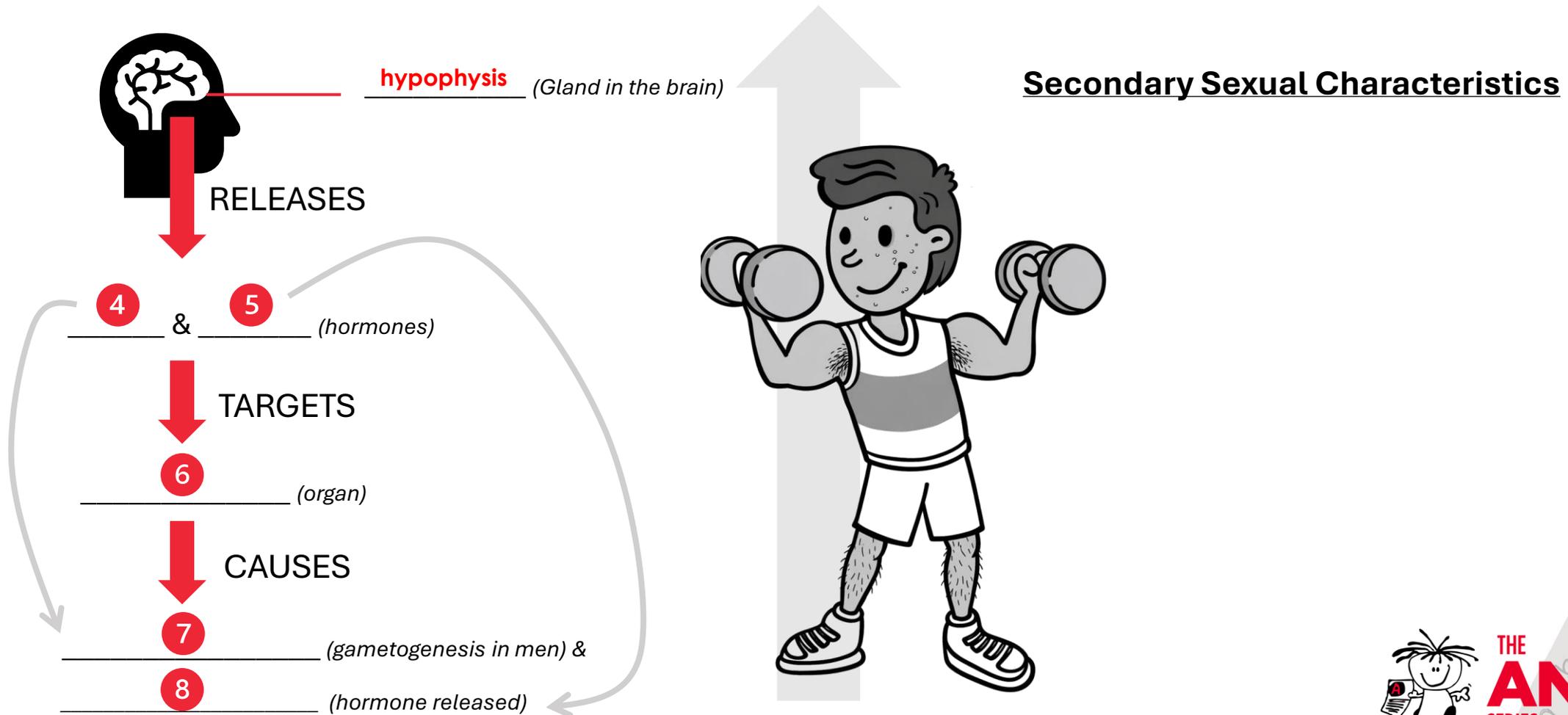
# Understand the changes in the **male body** during puberty:

The TWO main functions of puberty is: maturation of sex organs & gametogenesis



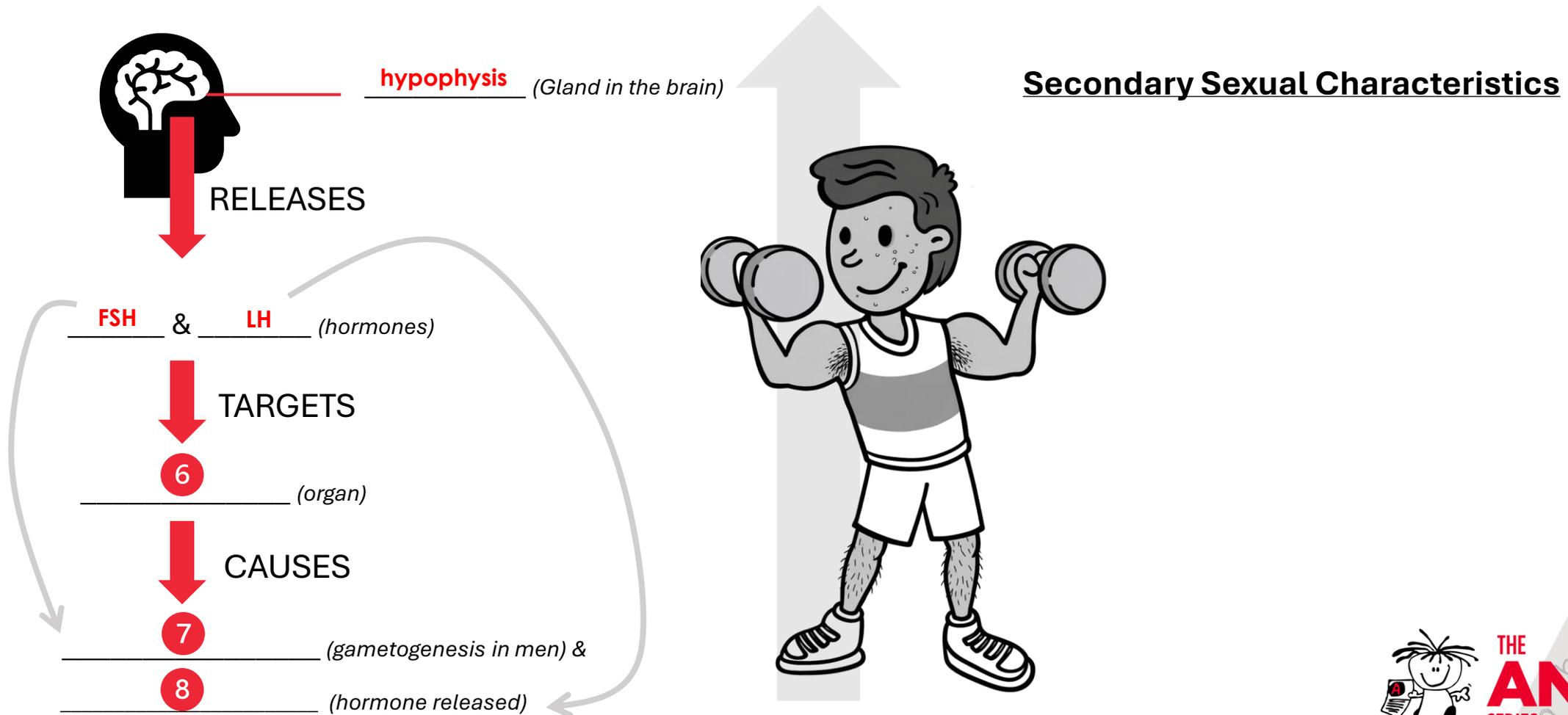
# Understand the changes in the **male body** during puberty:

The TWO main functions of puberty is: maturation of sex organs & gametogenesis



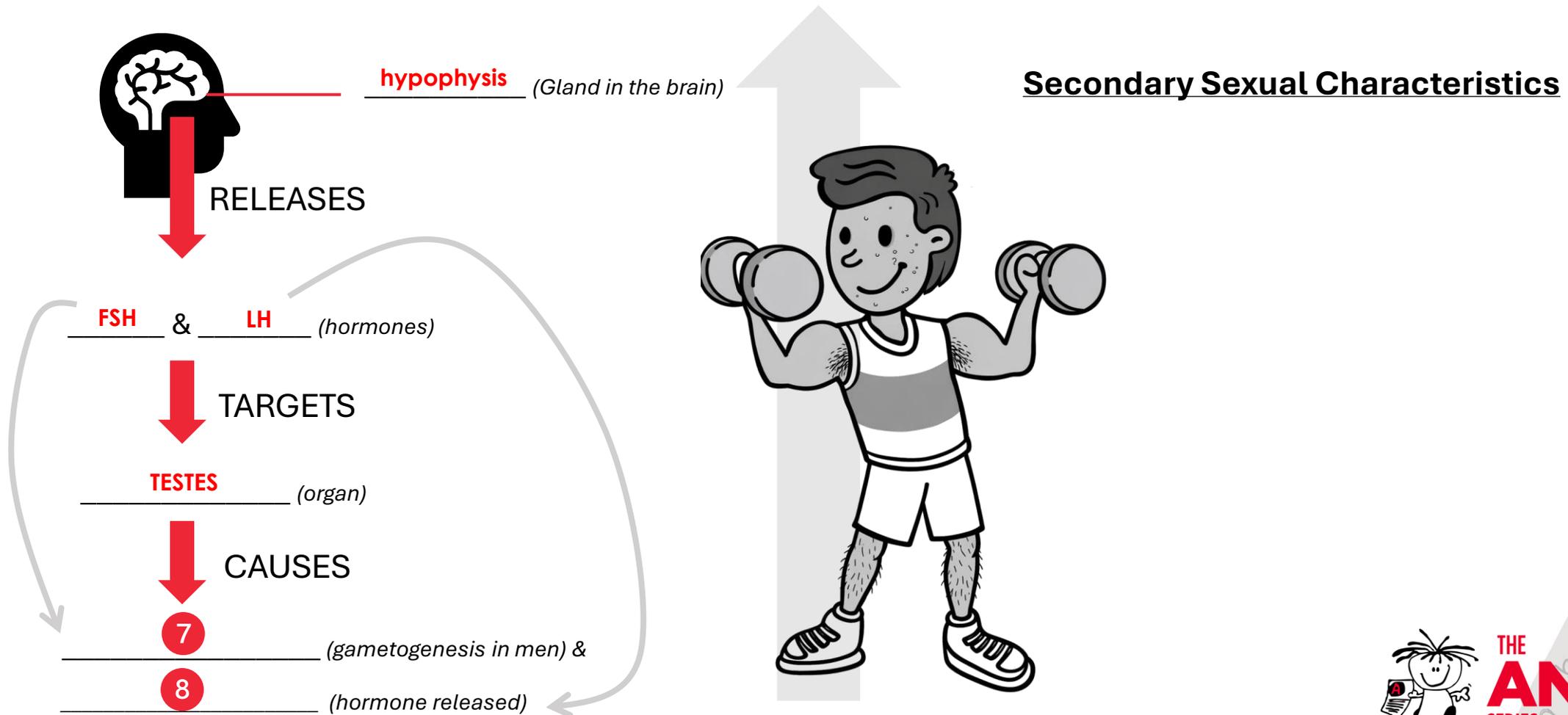
# Understand the changes in the **male body** during puberty:

The TWO main functions of puberty is: maturation of sex organs & gametogenesis



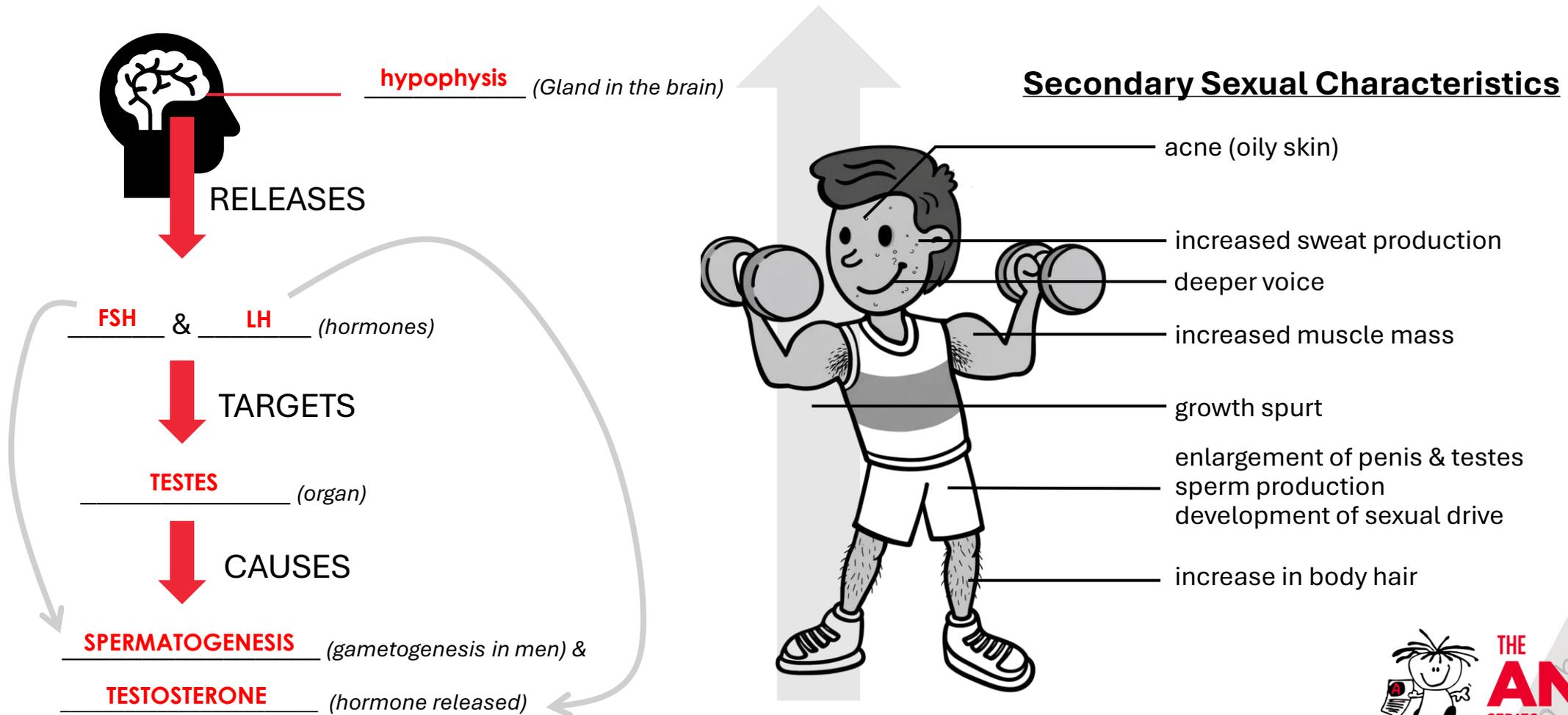
# Understand the changes in the **male body** during puberty:

The TWO main functions of puberty is: maturation of sex organs & gametogenesis



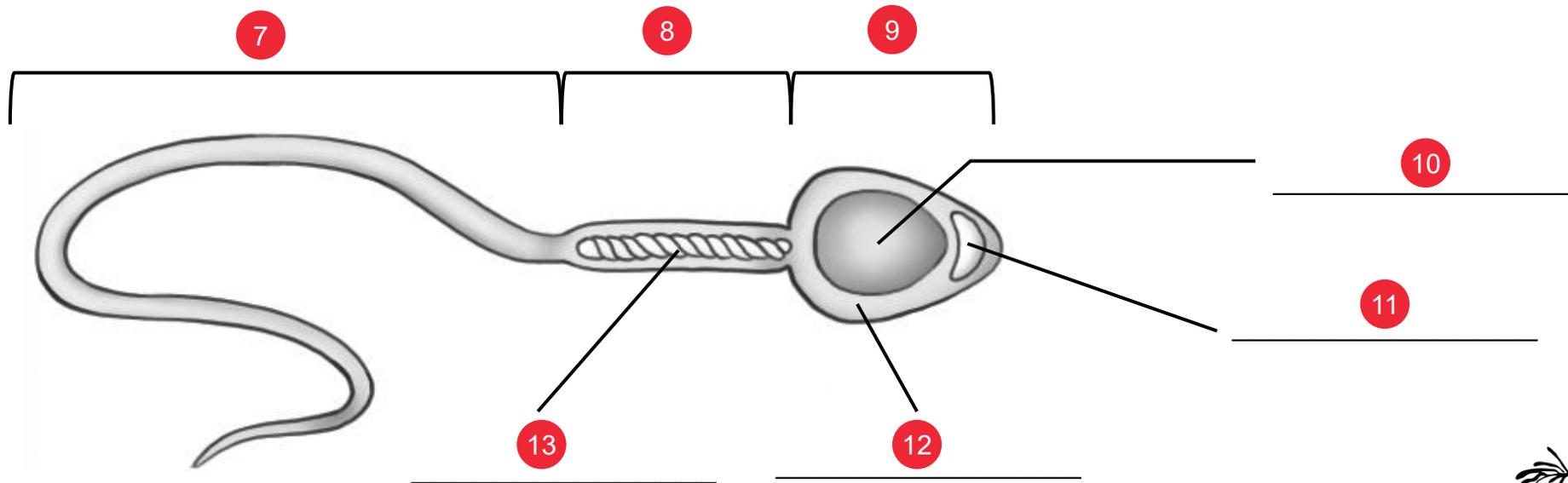
# Understand the changes in the **male body** during puberty:

The TWO main functions of puberty is: maturation of sex organs & gametogenesis



# Complete the steps of **Spermatogenesis** and label the **sperm**:

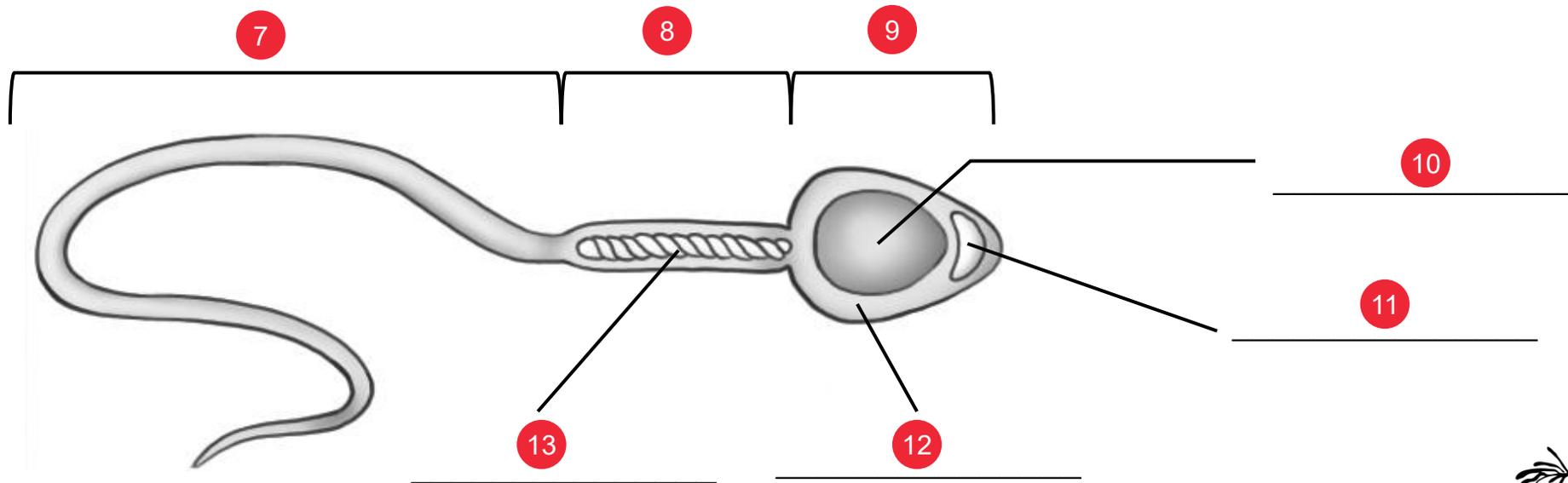
- Spermatogenesis occurs in the \_\_\_\_\_ **1**
- under the influence of \_\_\_\_\_ **2**
- \_\_\_\_\_ **3** cells in the \_\_\_\_\_ **4** tubules
- undergo \_\_\_\_\_ **5** to produce \_\_\_\_\_ **6** haploid sperm cells





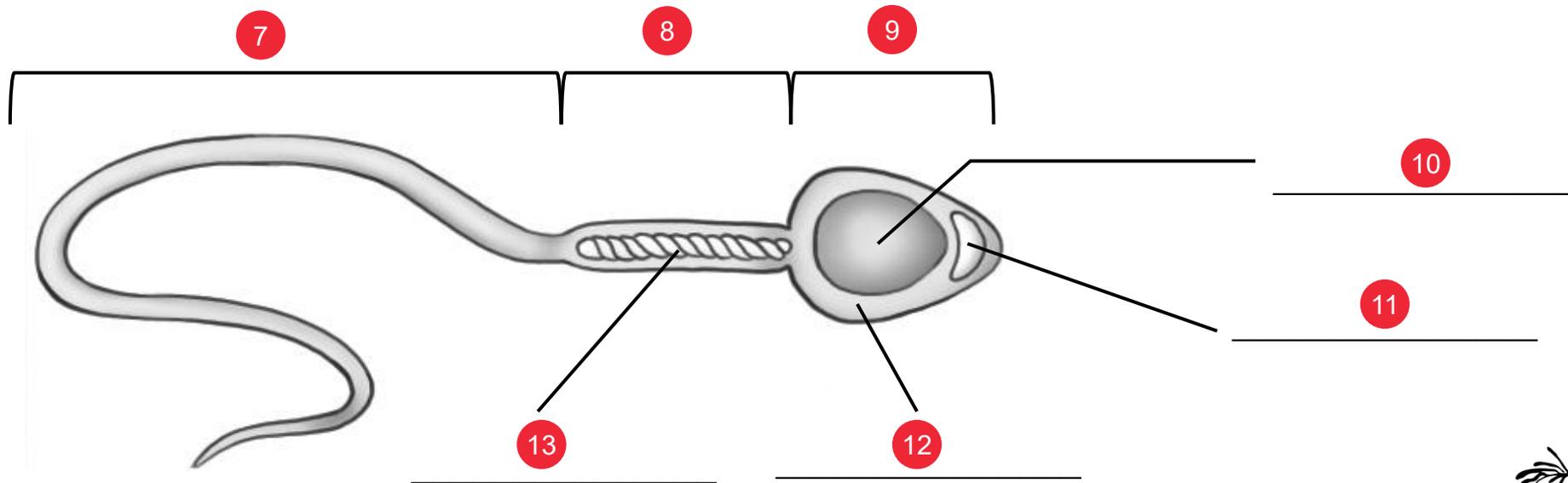
# Complete the steps of **Spermatogenesis** and label the **sperm**:

- Spermatogenesis occurs in the           **testes**
- under the influence of           **testosterone**
- **3**       cells in the       **4**       tubules
- undergo       **5**       to produce       **6**       haploid sperm cells



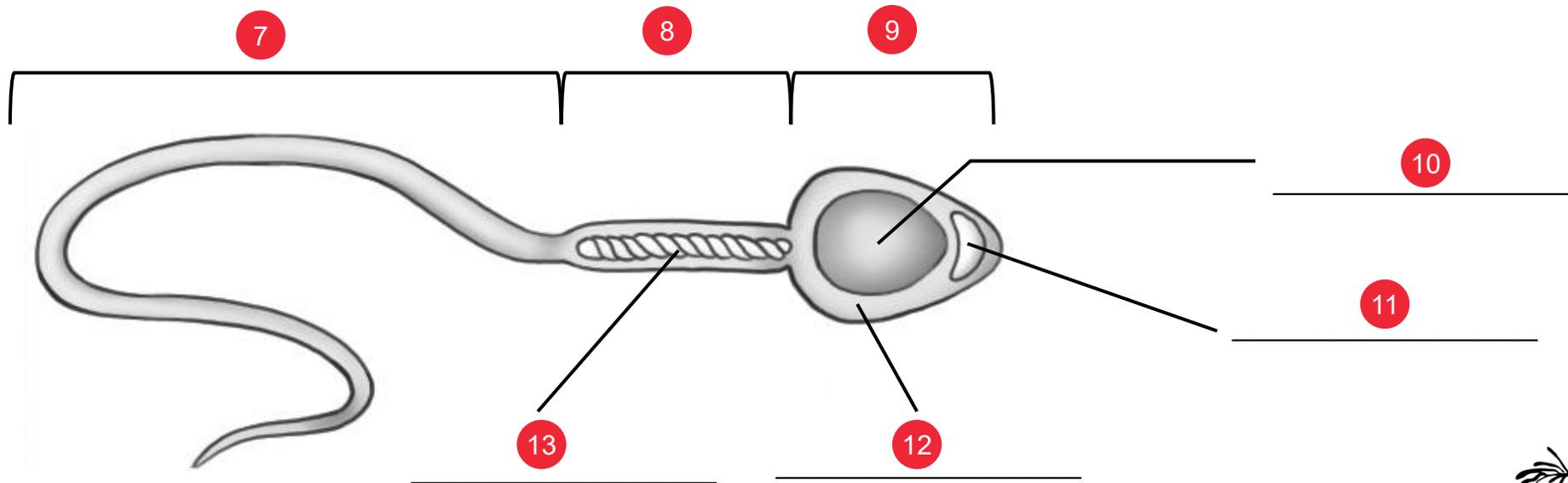
# Complete the steps of **Spermatogenesis** and label the **sperm**:

- Spermatogenesis occurs in the           **testes**
- under the influence of           **testosterone**
- **diploid**           cells in the           **seminiferous**           tubules
- undergo           **5**           to produce           **6**           haploid sperm cells



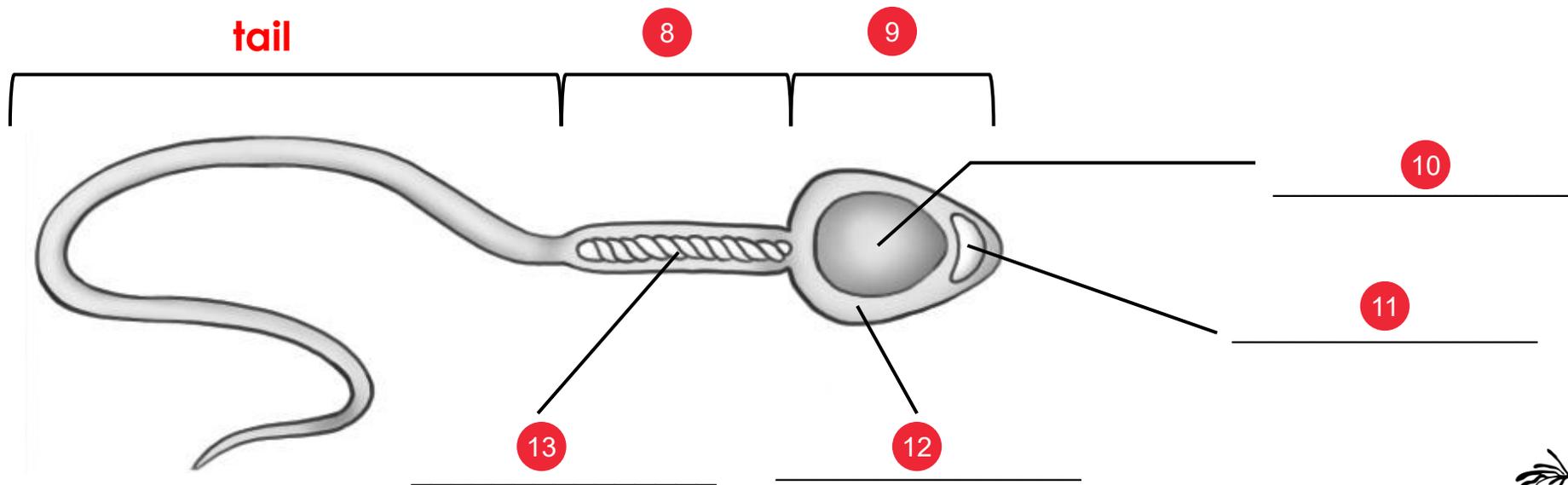
# Complete the steps of **Spermatogenesis** and label the **sperm**:

- Spermatogenesis occurs in the           **testes**
- under the influence of           **testosterone**
- **diploid**           cells in the           **seminiferous**           tubules
- undergo           **meiosis**           to produce           **4**           haploid sperm cells



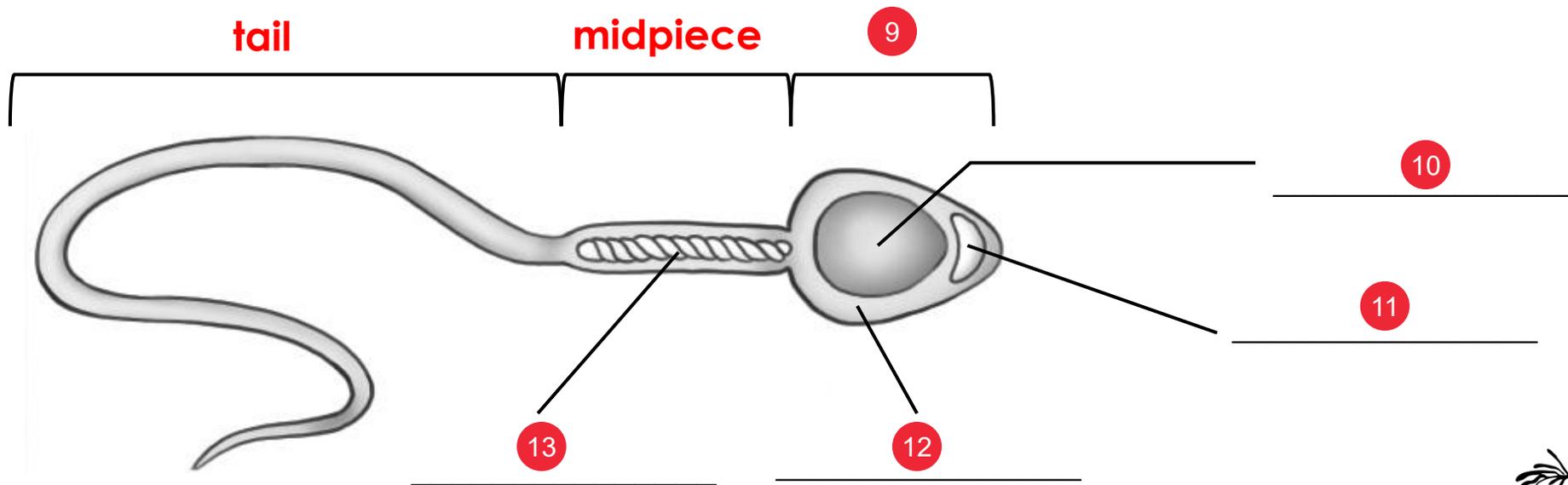
# Complete the steps of **Spermatogenesis** and label the **sperm**:

- Spermatogenesis occurs in the           **testes**
- under the influence of           **testosterone**
- **diploid**           cells in the           **seminiferous**           tubules
- undergo           **meiosis**           to produce           **4**           haploid sperm cells



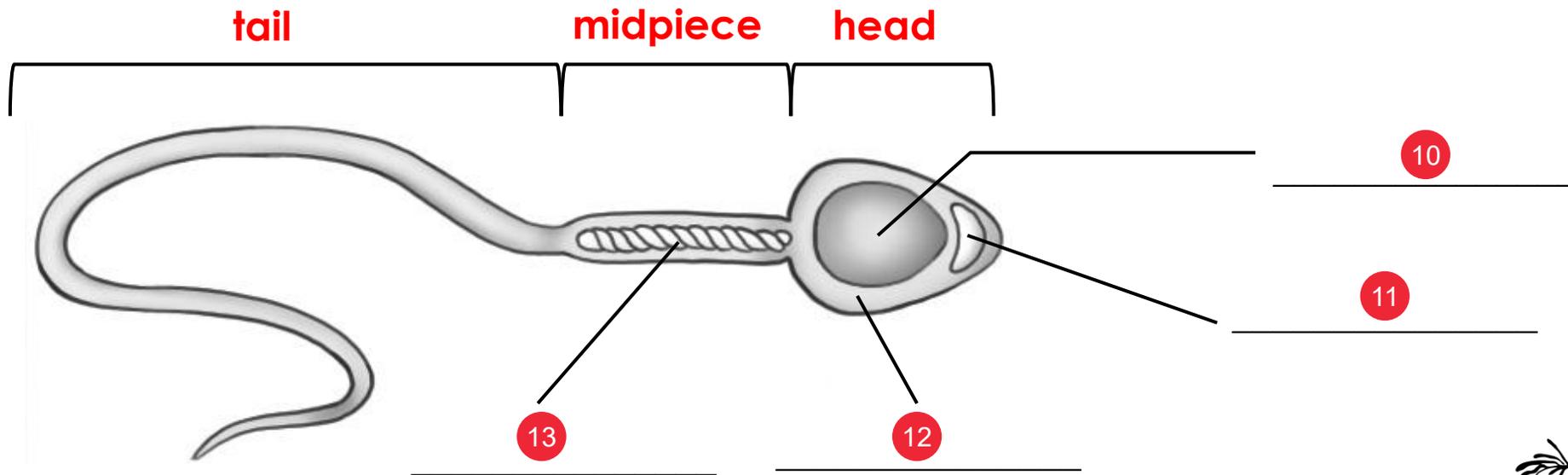
# Complete the steps of **Spermatogenesis** and label the **sperm**:

- Spermatogenesis occurs in the           **testes**
- under the influence of           **testosterone**
- **diploid**           cells in the           **seminiferous**           tubules
- undergo           **meiosis**           to produce           **4**           haploid sperm cells



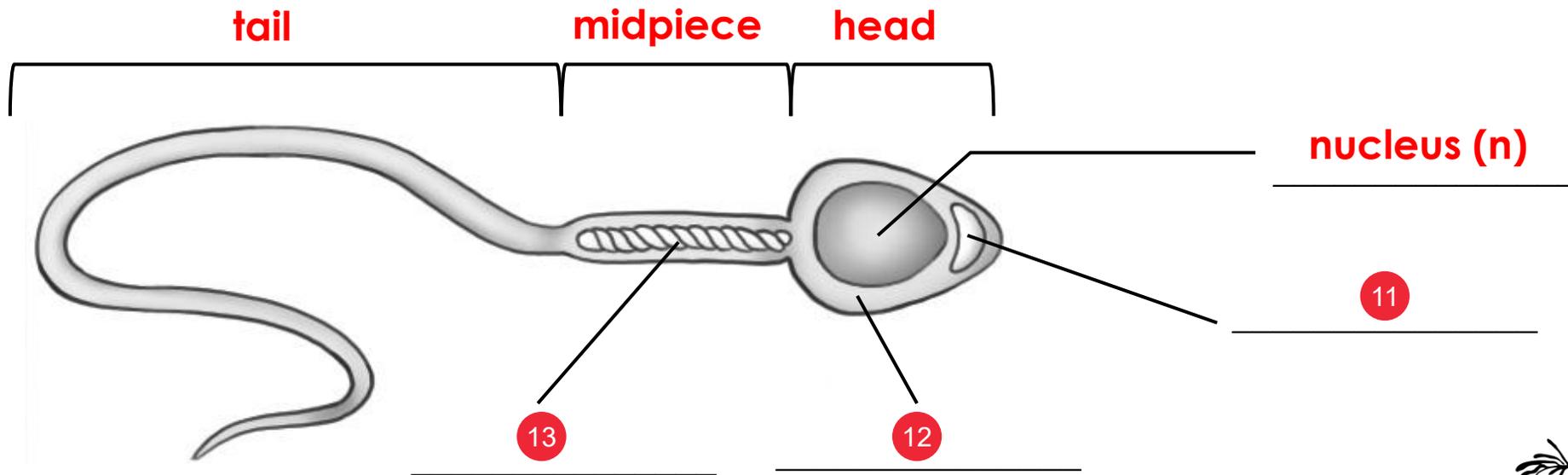
# Complete the steps of **Spermatogenesis** and label the **sperm**:

- Spermatogenesis occurs in the           **testes**
- under the influence of           **testosterone**
- **diploid**           cells in the           **seminiferous**           tubules
- undergo           **meiosis**           to produce           **4**           haploid sperm cells



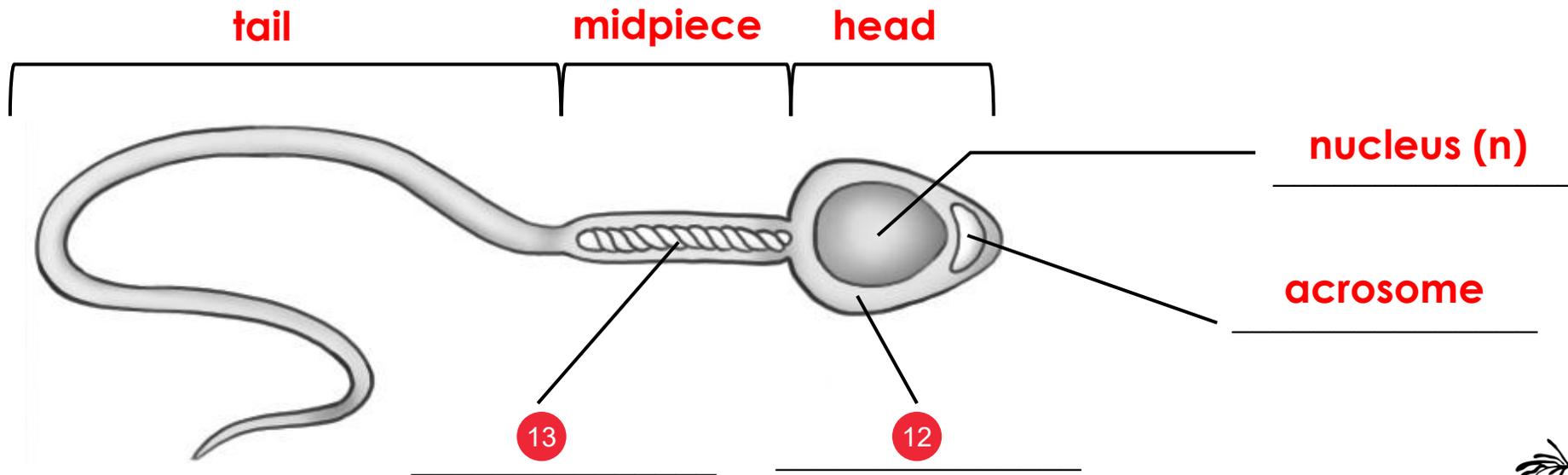
# Complete the steps of **Spermatogenesis** and label the **sperm**:

- Spermatogenesis occurs in the           **testes**
- under the influence of           **testosterone**
- **diploid**           cells in the           **seminiferous**           tubules
- undergo           **meiosis**           to produce           **4**           haploid sperm cells



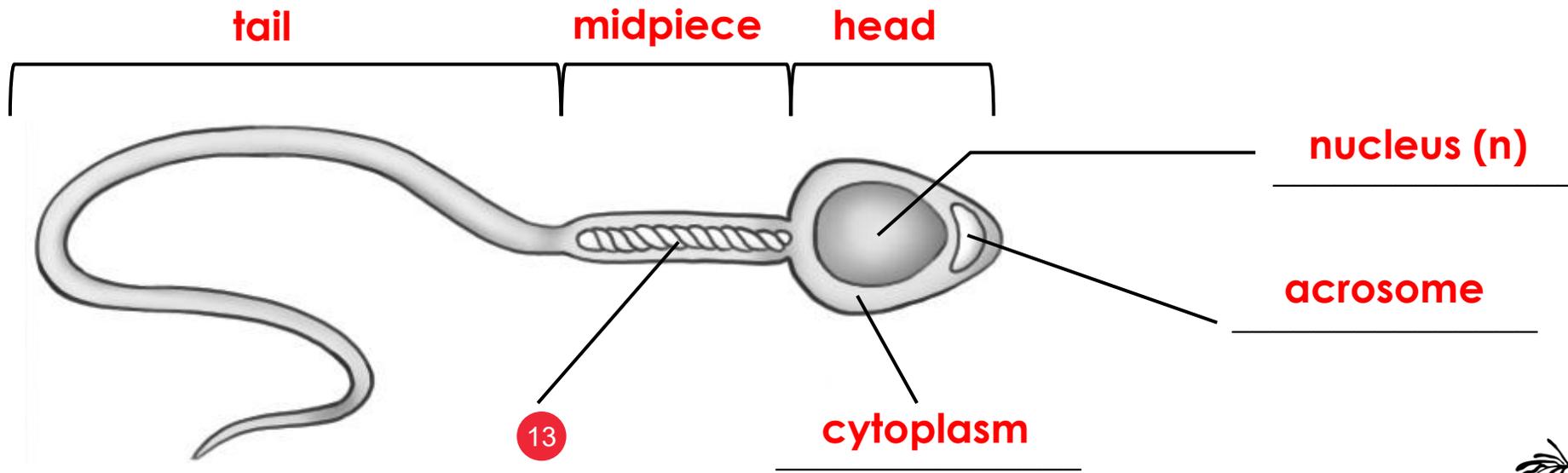
# Complete the steps of **Spermatogenesis** and label the **sperm**:

- Spermatogenesis occurs in the           **testes**
- under the influence of           **testosterone**
- **diploid**           cells in the           **seminiferous**           tubules
- undergo           **meiosis**           to produce           **4**           haploid sperm cells



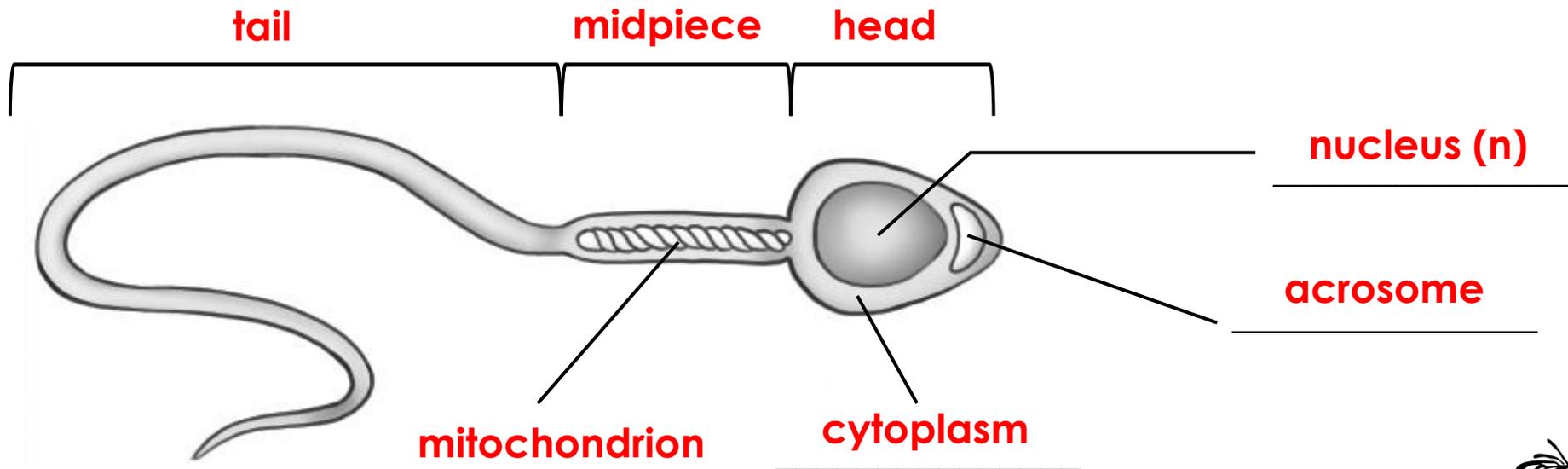
# Complete the steps of **Spermatogenesis** and label the **sperm**:

- Spermatogenesis occurs in the           **testes**
- under the influence of           **testosterone**
- **diploid**           cells in the           **seminiferous**           tubules
- undergo           **meiosis**           to produce           **4**           haploid sperm cells

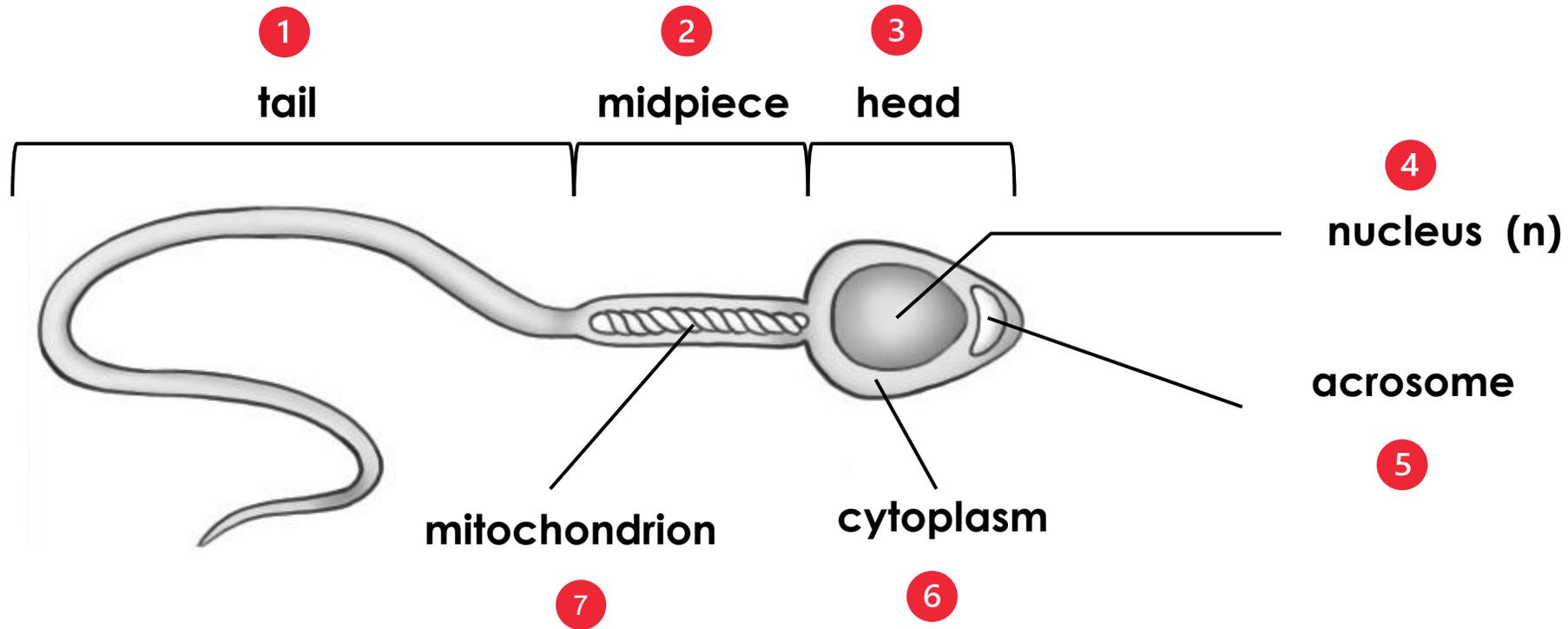


# Complete the steps of **Spermatogenesis** and label the **sperm**:

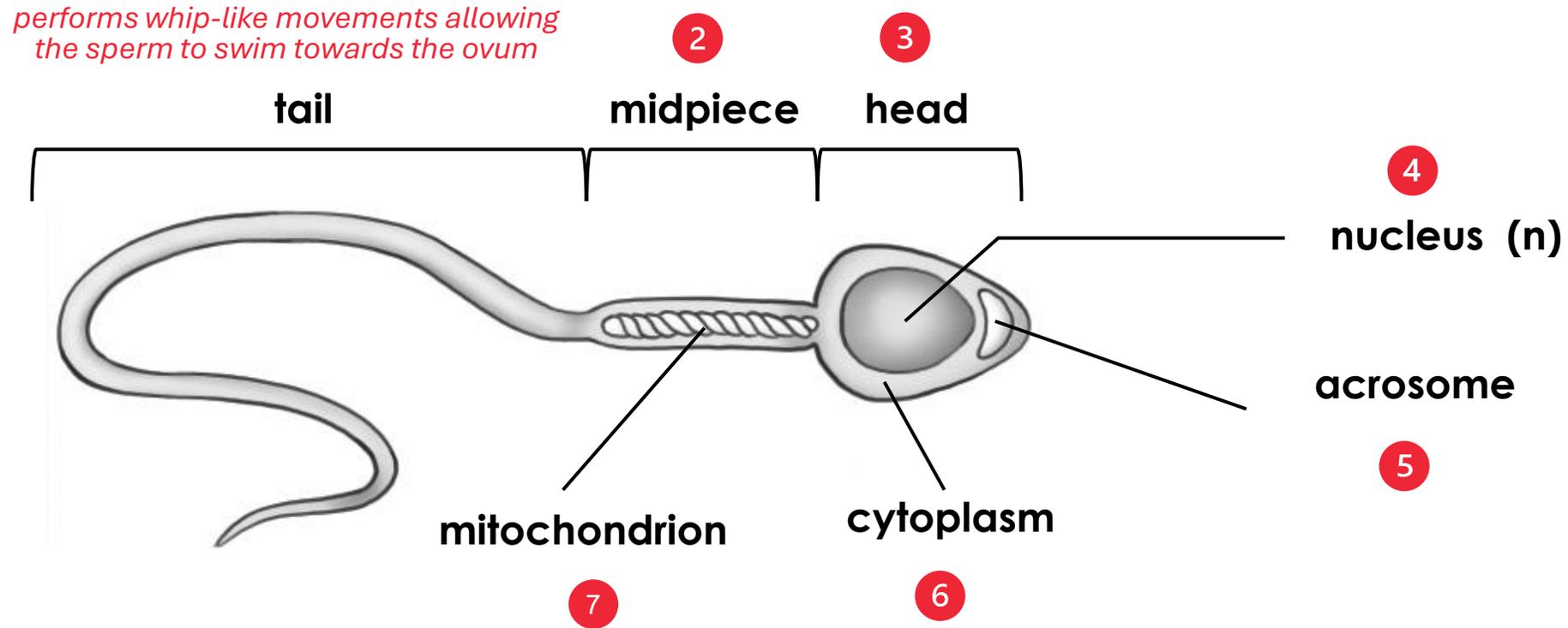
- Spermatogenesis occurs in the testes
- under the influence of testosterone
- diploid cells in the seminiferous tubules
- undergo meiosis to produce 4 haploid sperm cells



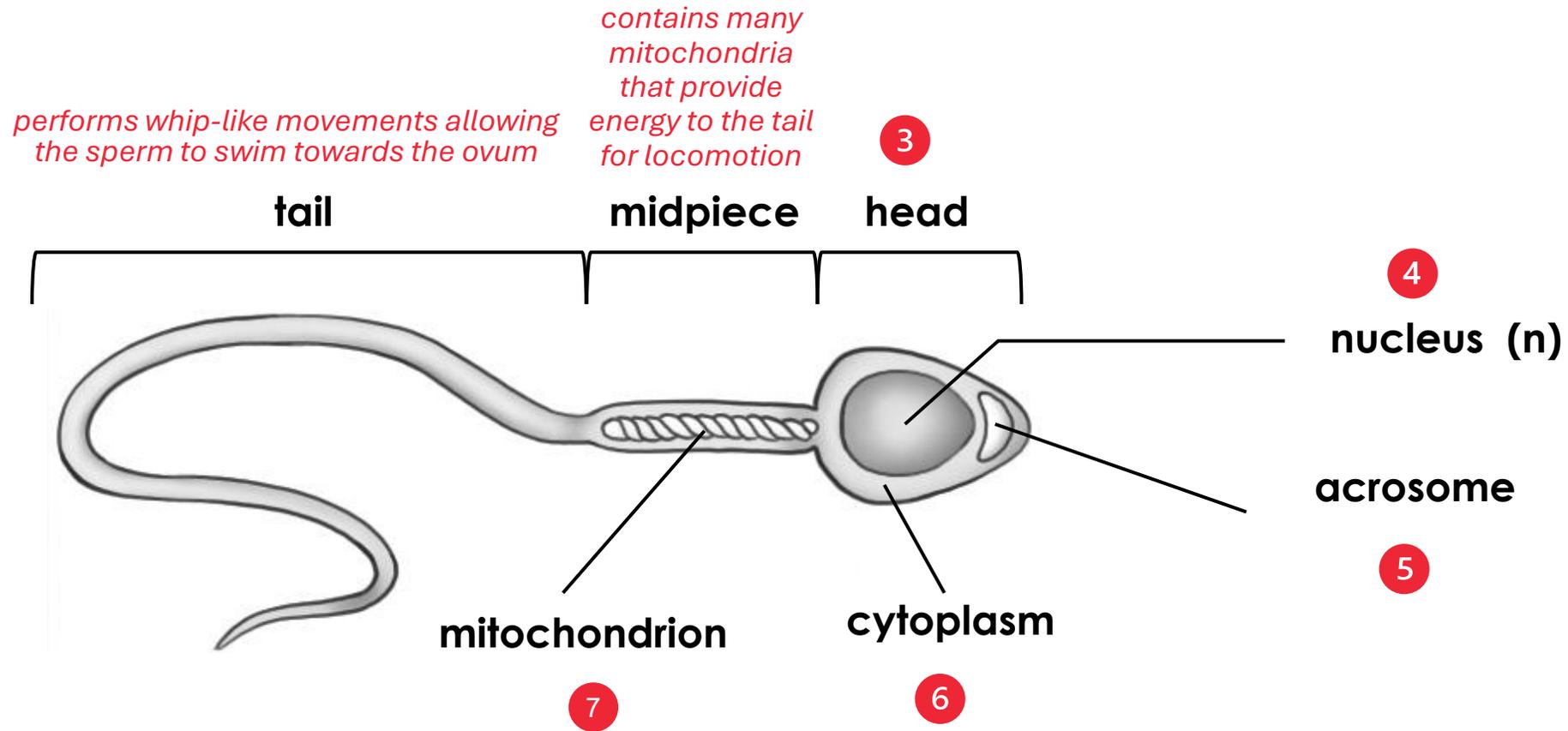
What are the **functions/adaptations** of the different parts of a **sperm**?



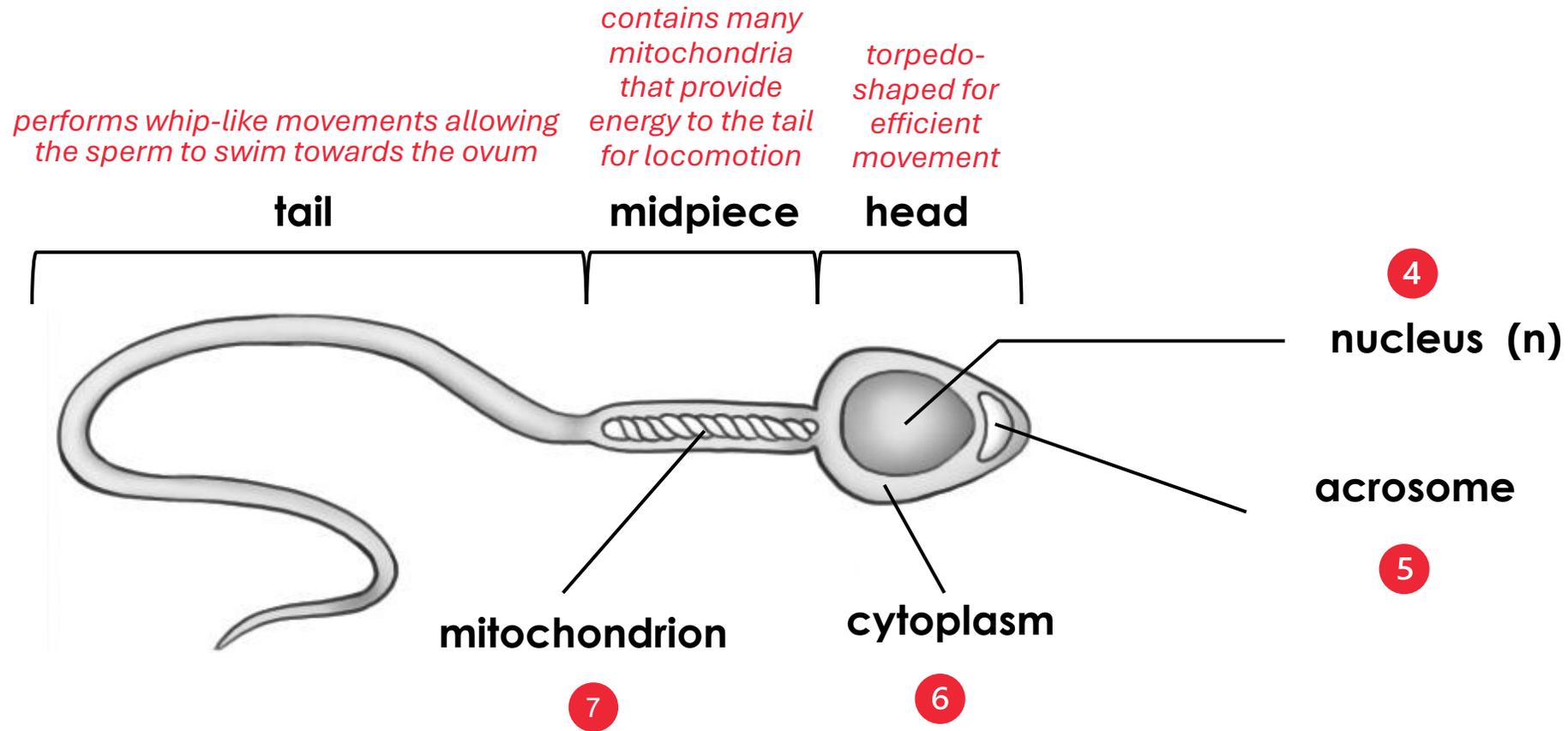
What are the **functions/adaptations** of the different parts of a **sperm**?



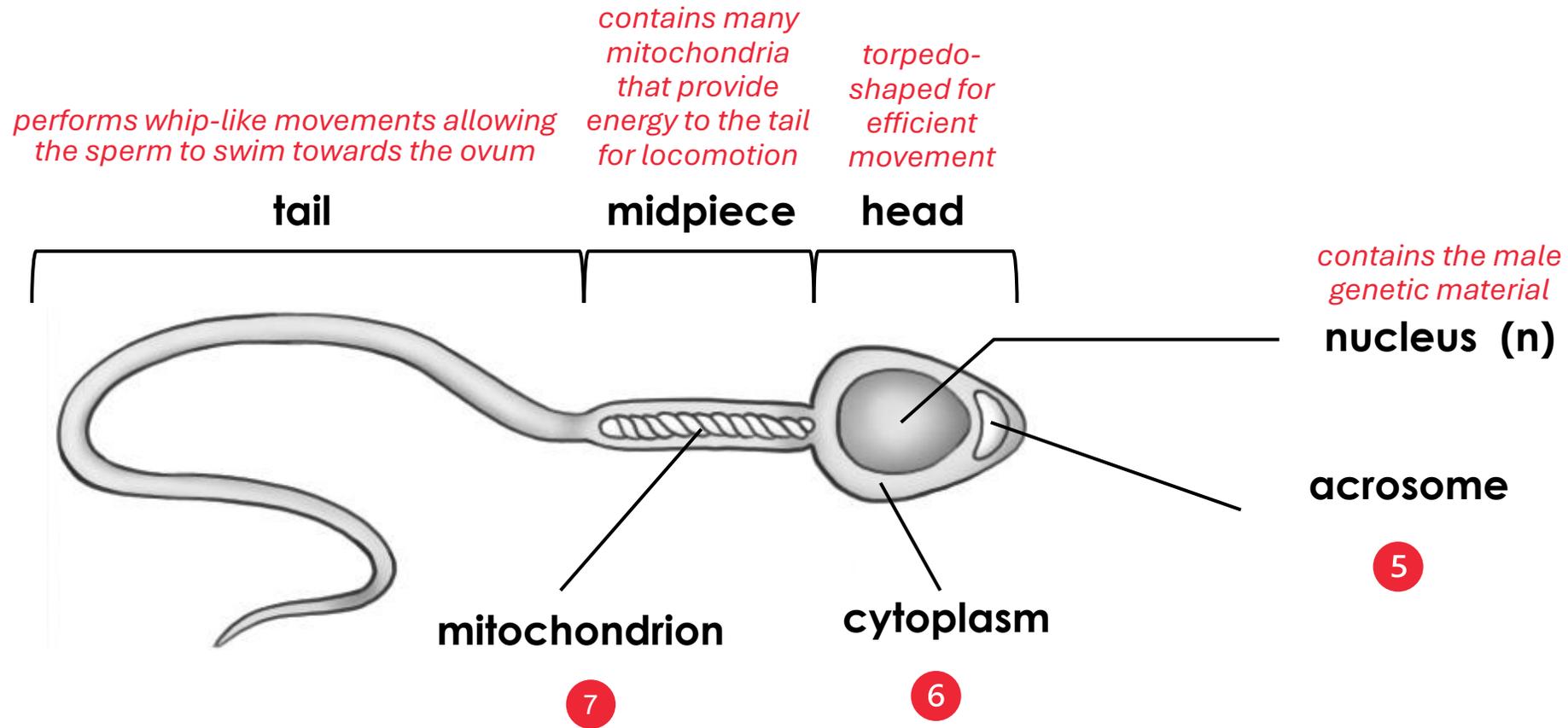
What are the **functions/adaptations** of the different parts of a **sperm**?



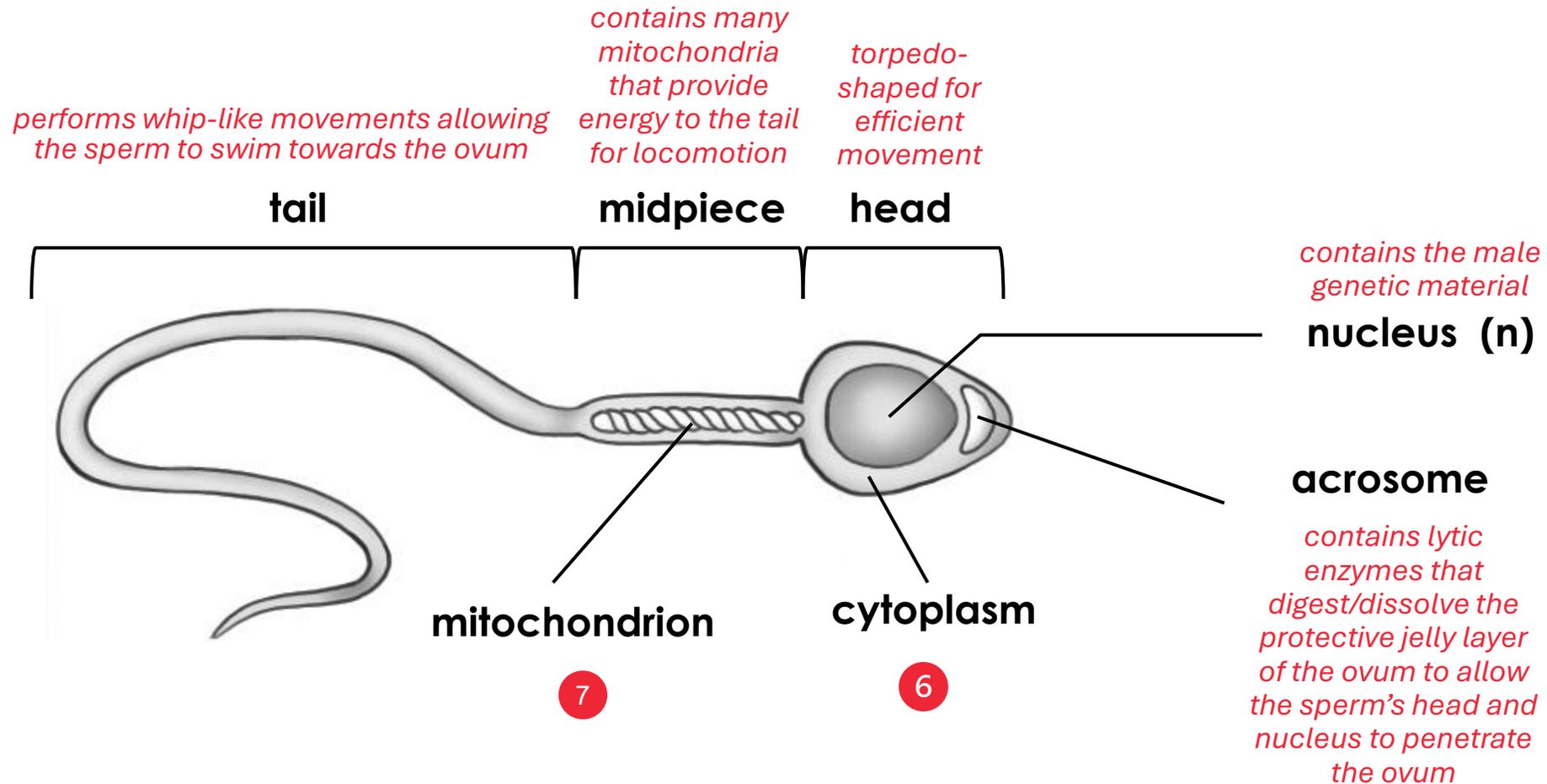
What are the **functions/adaptations** of the different parts of a **sperm**?



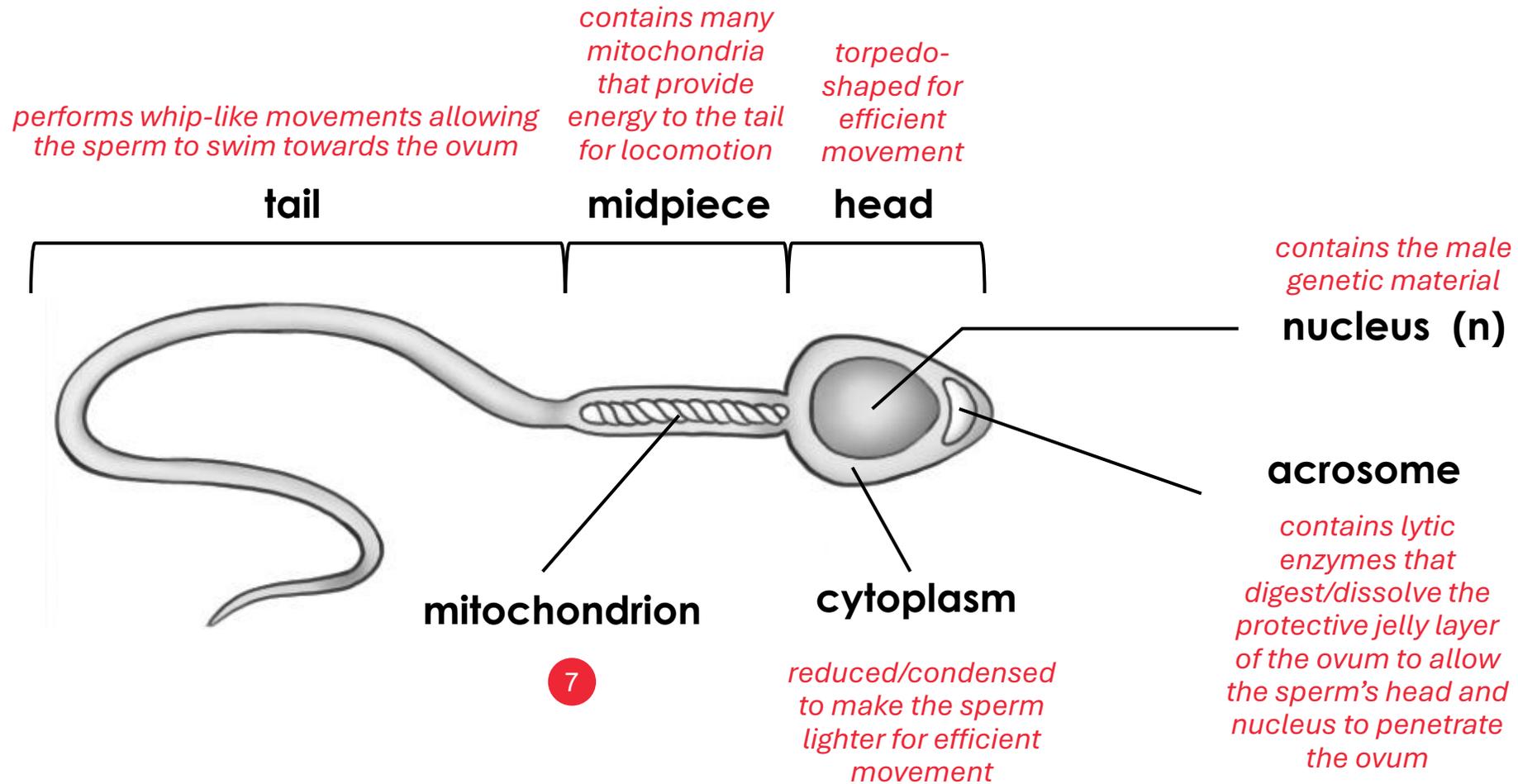
What are the **functions/adaptations** of the different parts of a **sperm**?



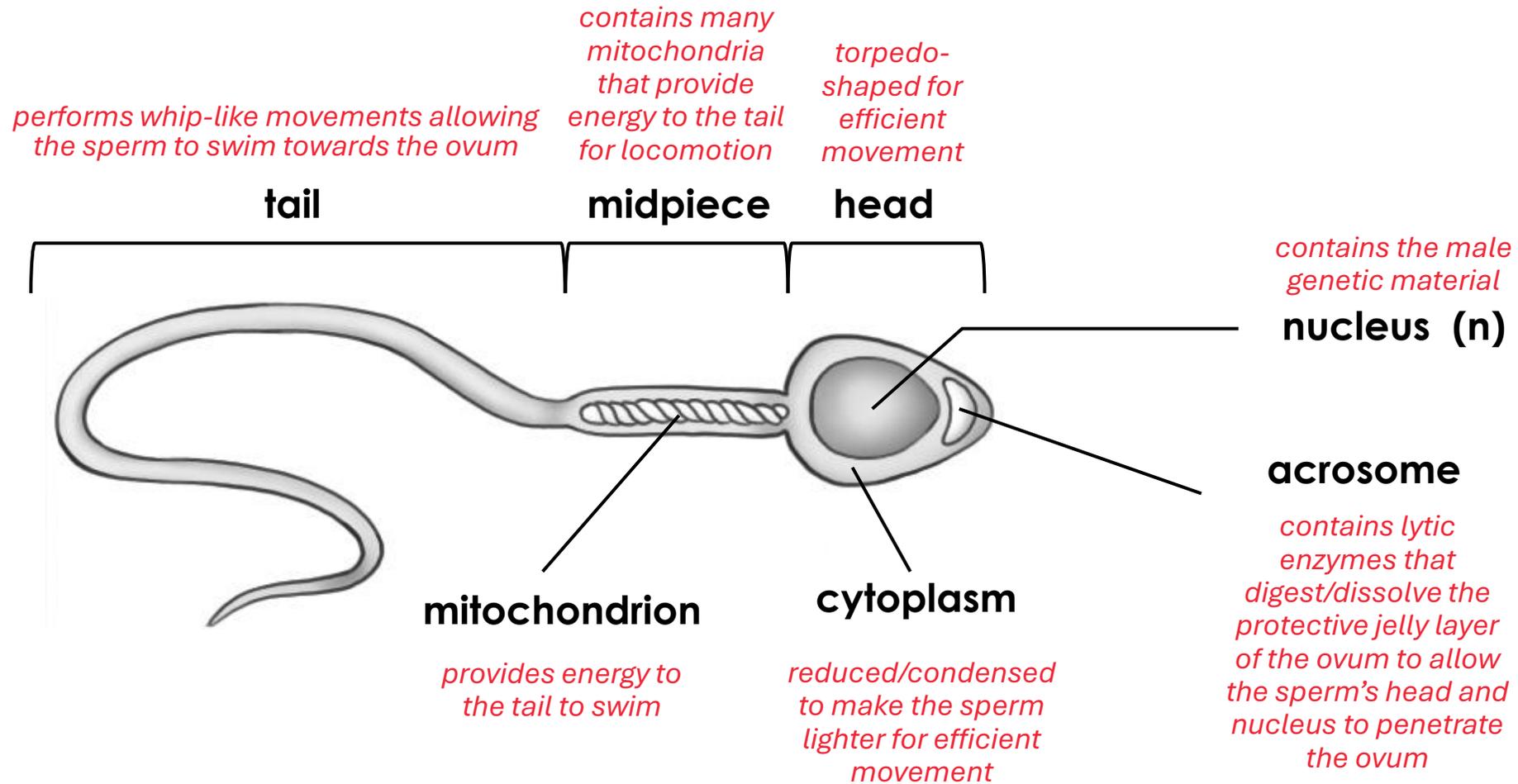
What are the **functions/adaptations** of the different parts of a **sperm**?



# What are the **functions/adaptations** of the different parts of a **sperm**?

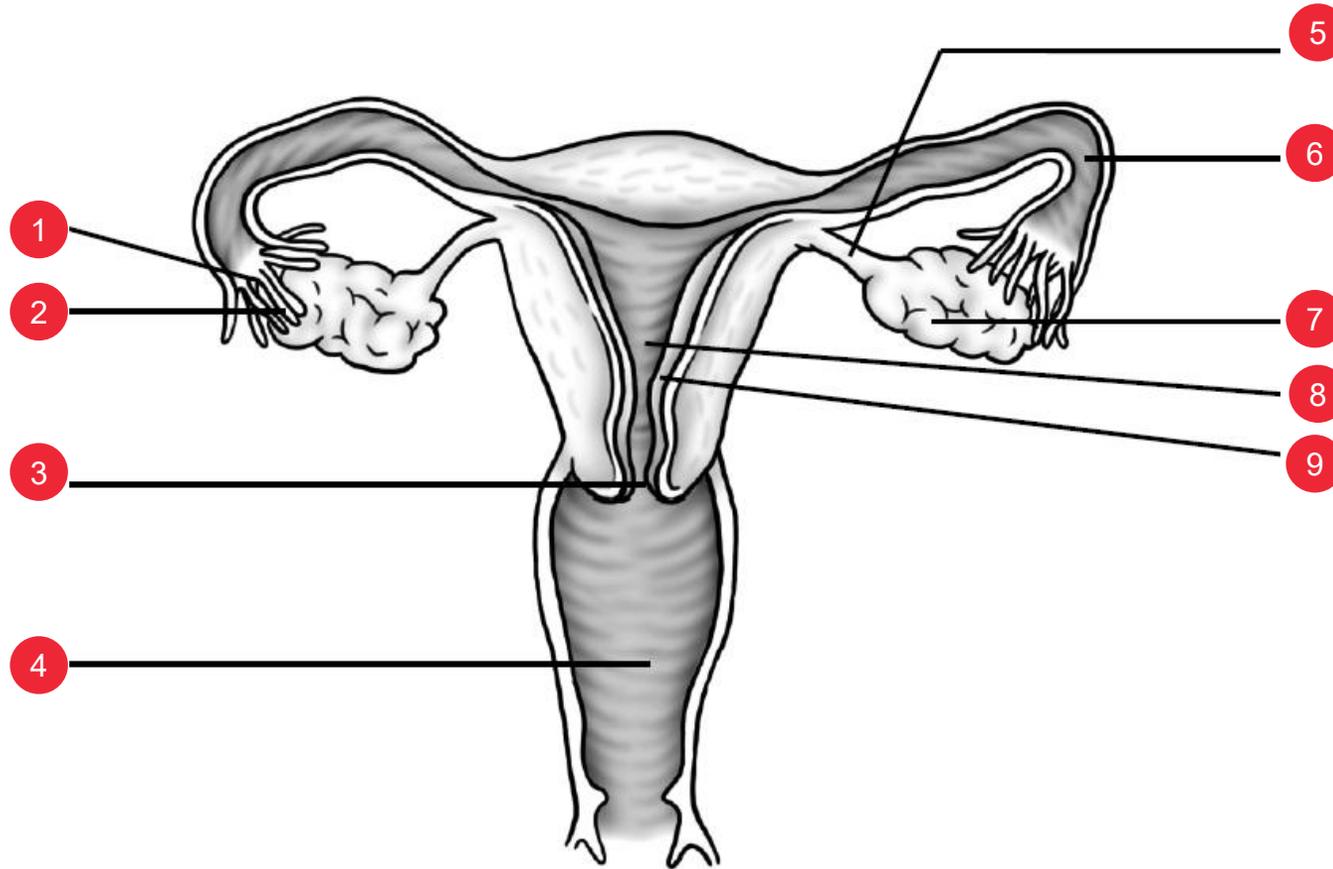


# What are the **functions/adaptations** of the different parts of a **sperm**?

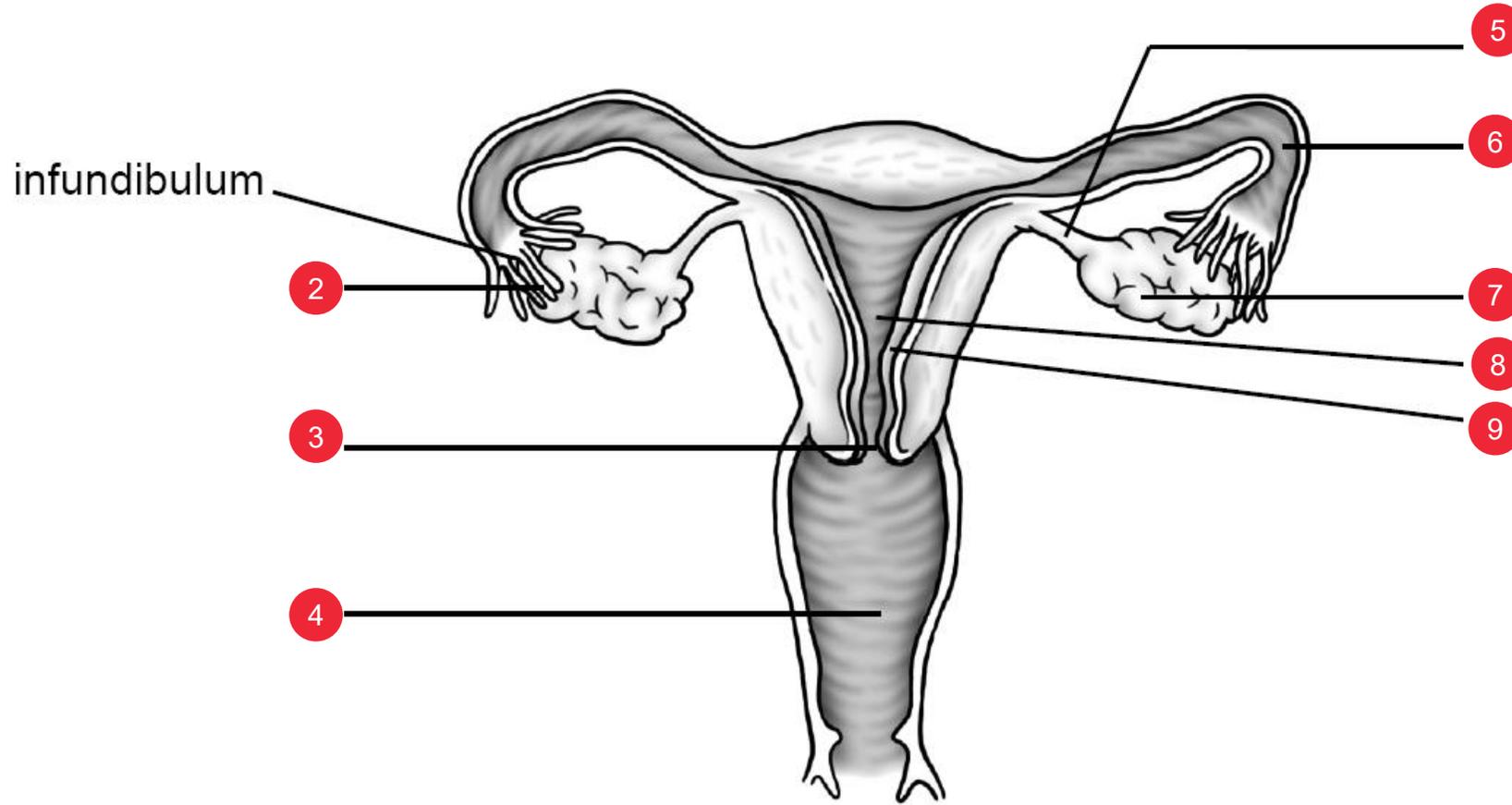


# FEMALE REPRODUCTIVE SYSTEM

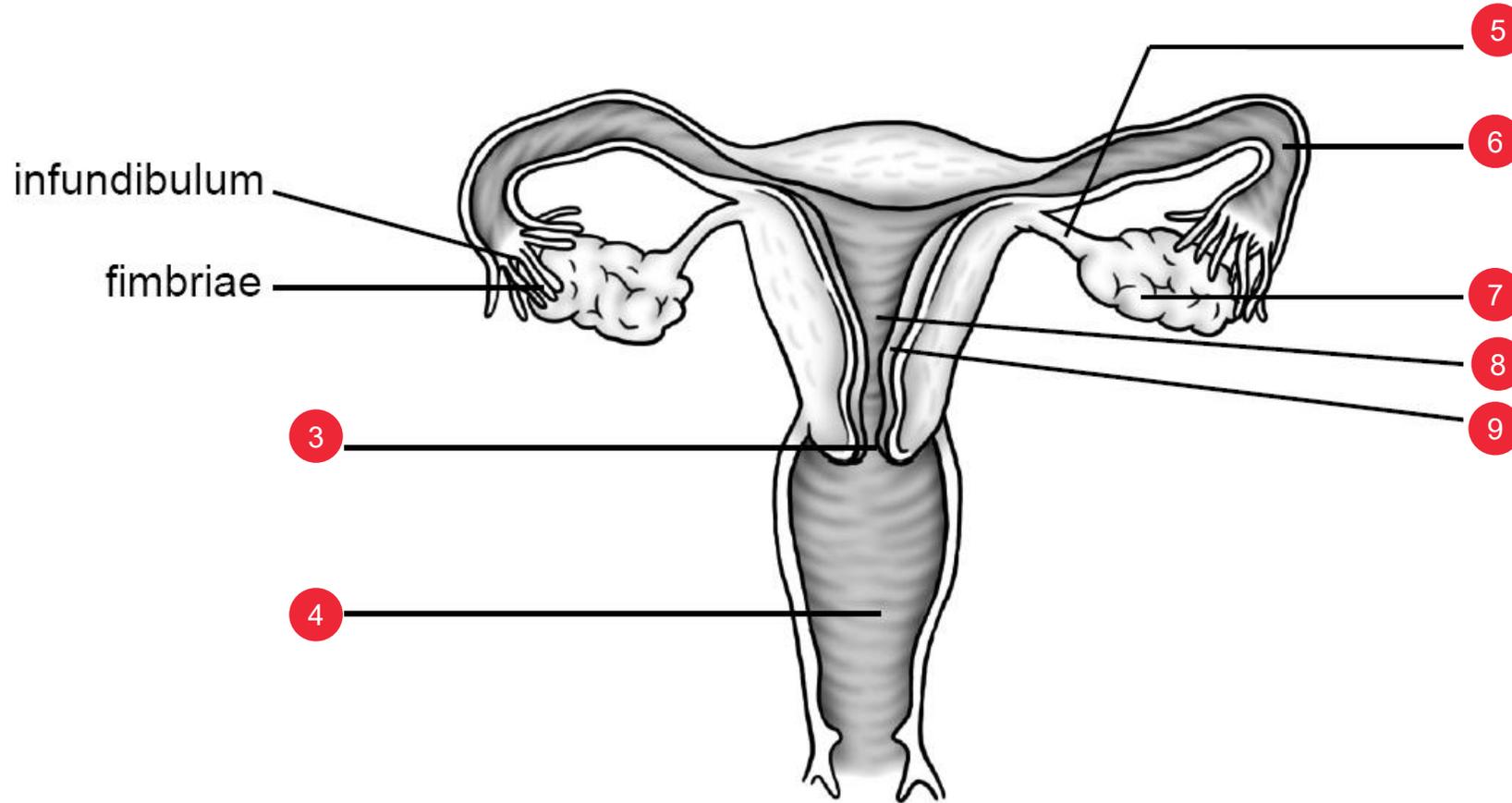
Provide labels for the female reproductive system.



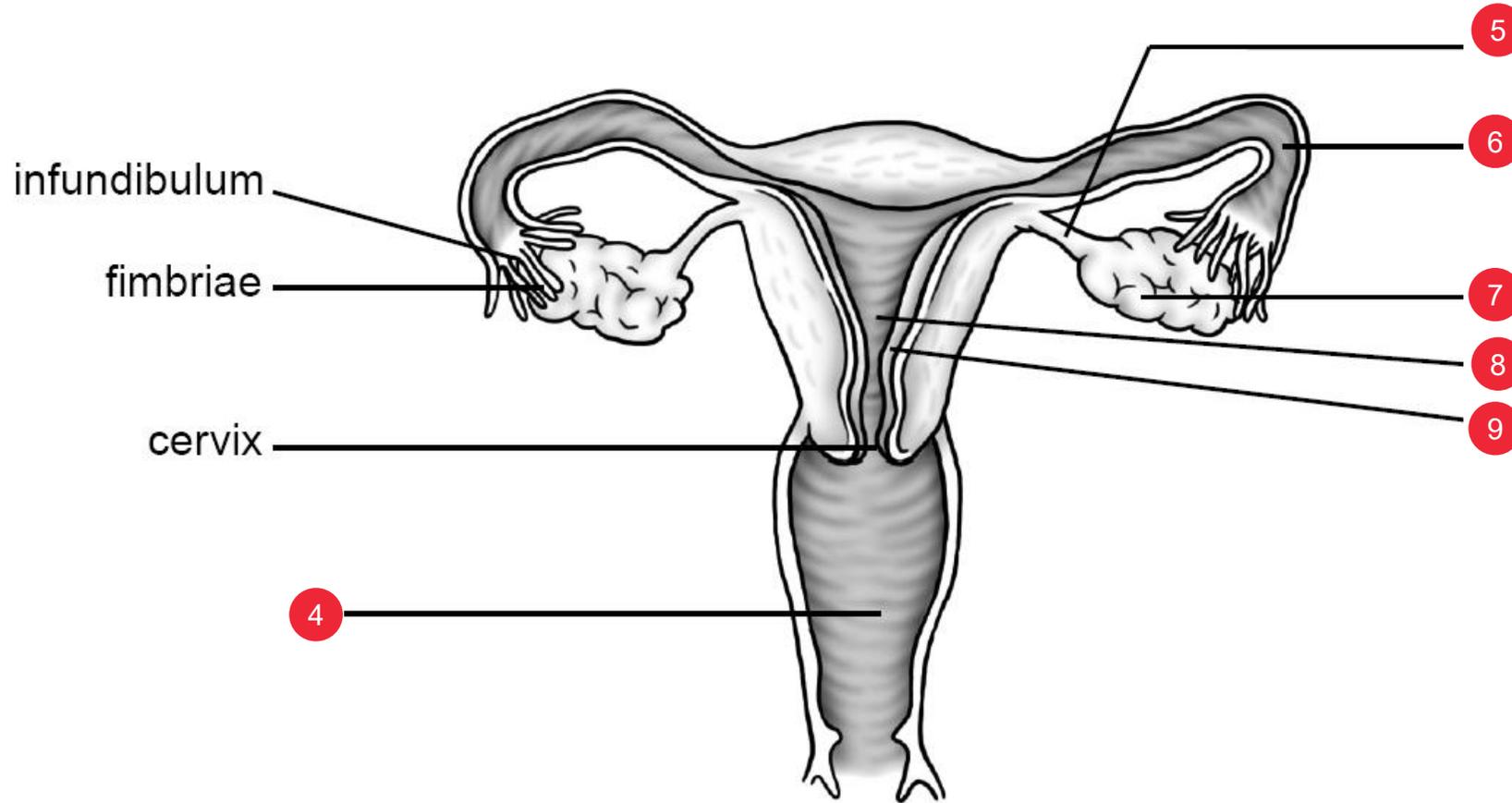
Provide labels for the female reproductive system.



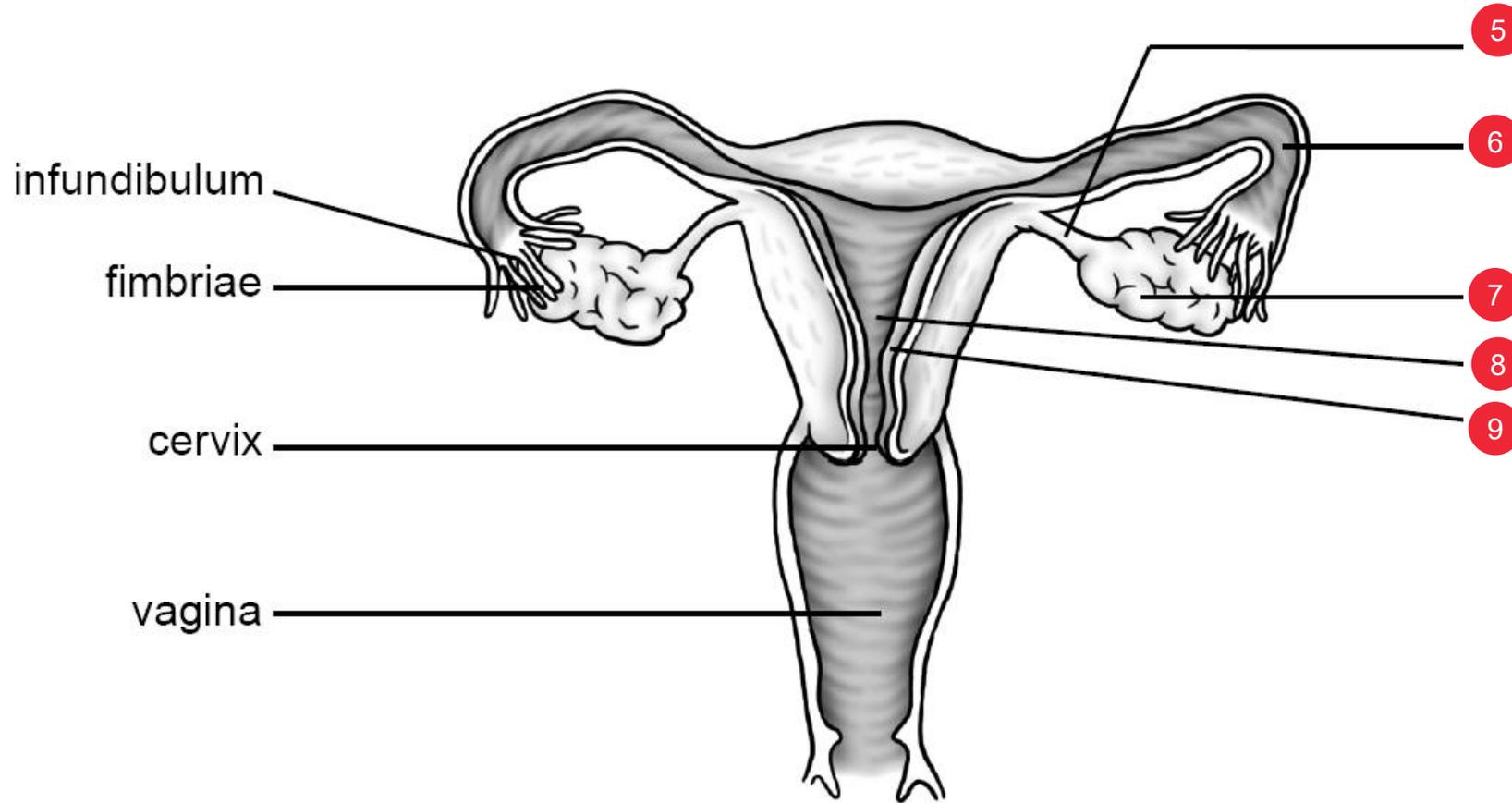
Provide labels for the female reproductive system.



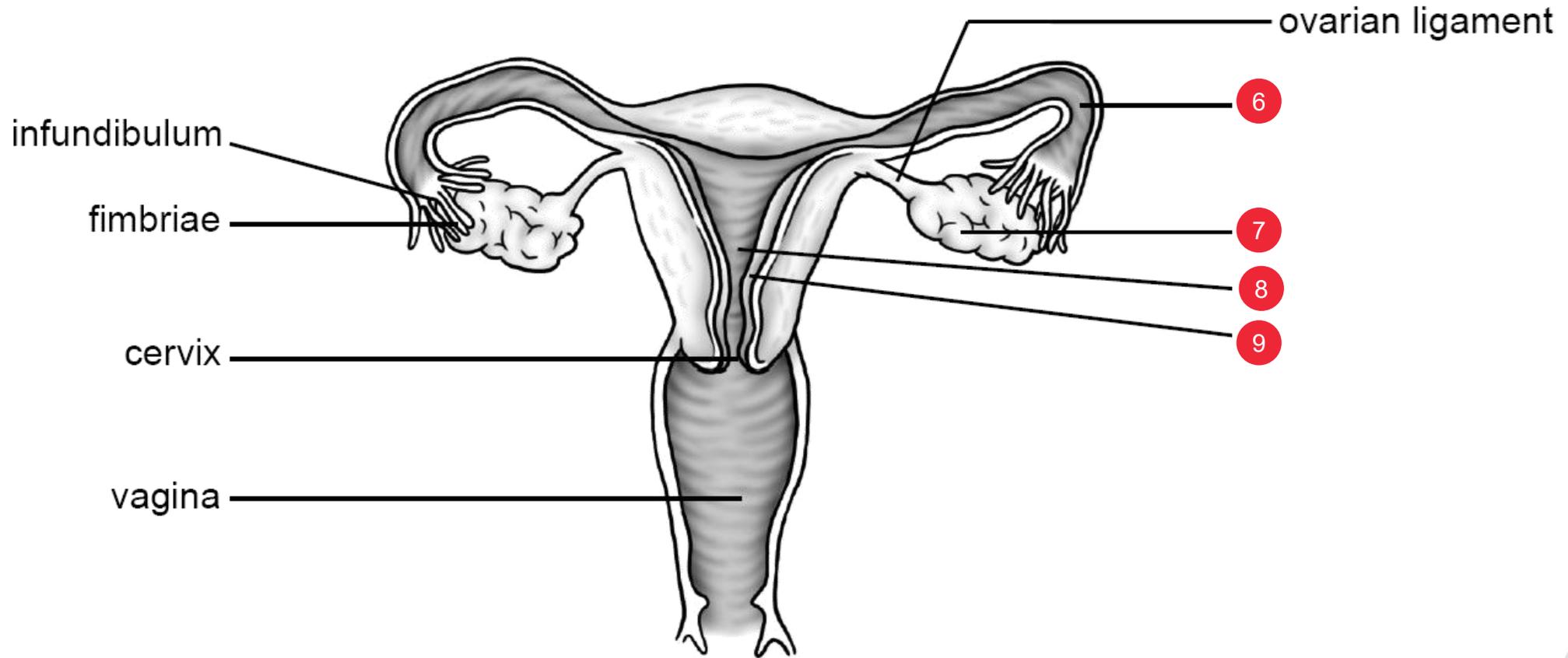
Provide labels for the female reproductive system.



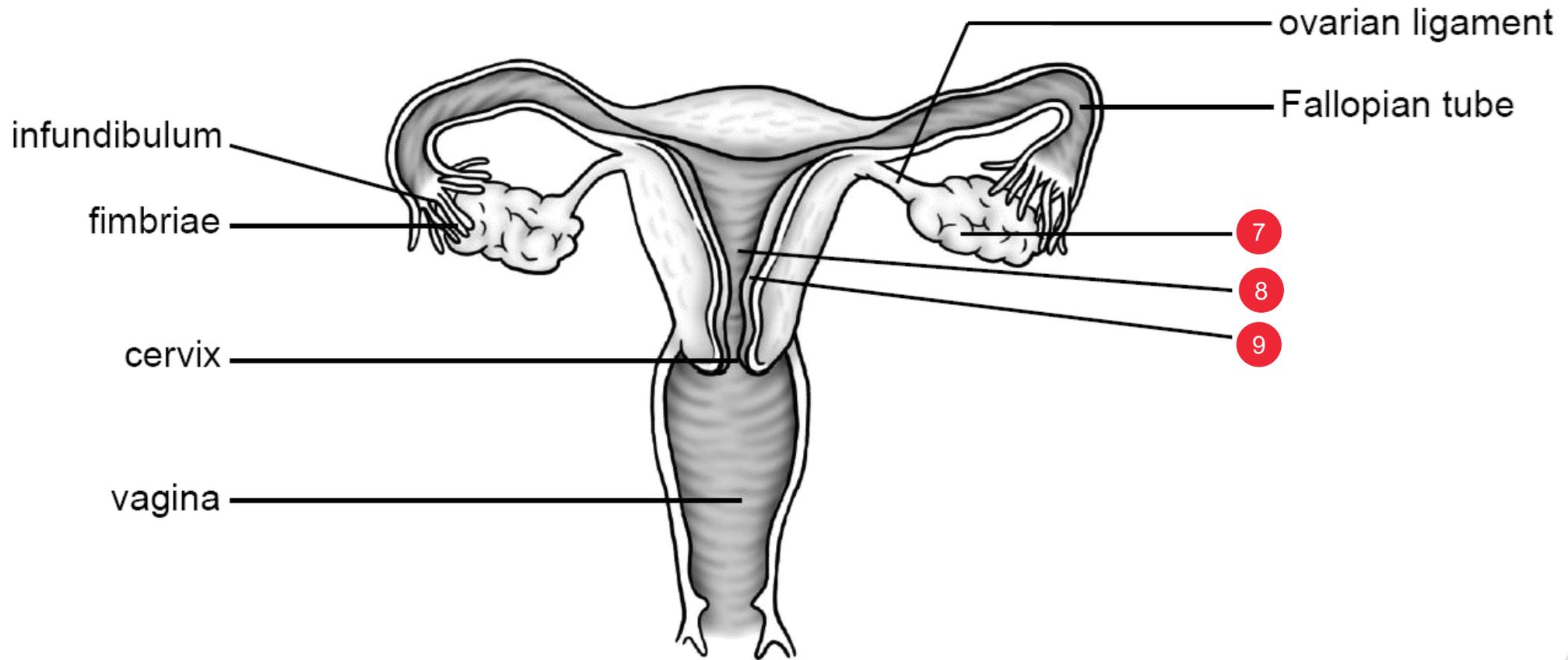
Provide labels for the female reproductive system.



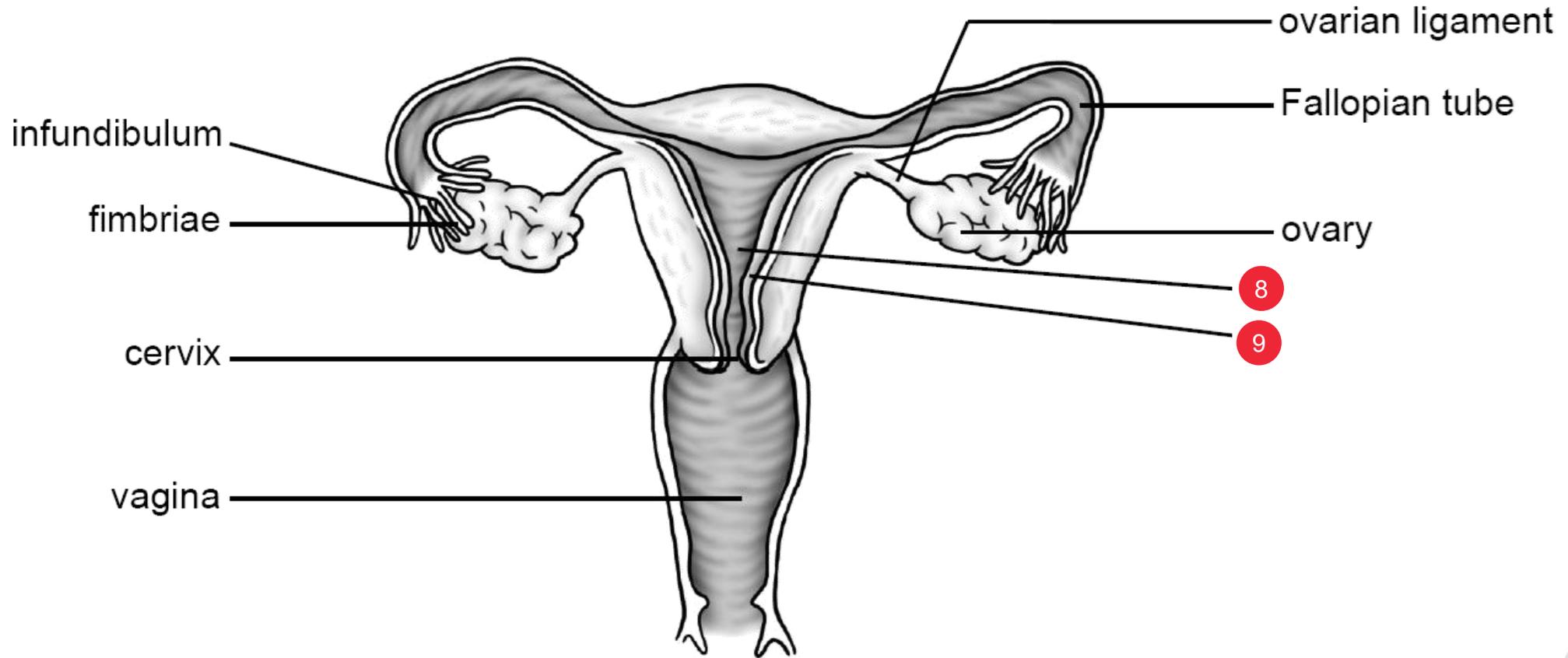
Provide labels for the female reproductive system.



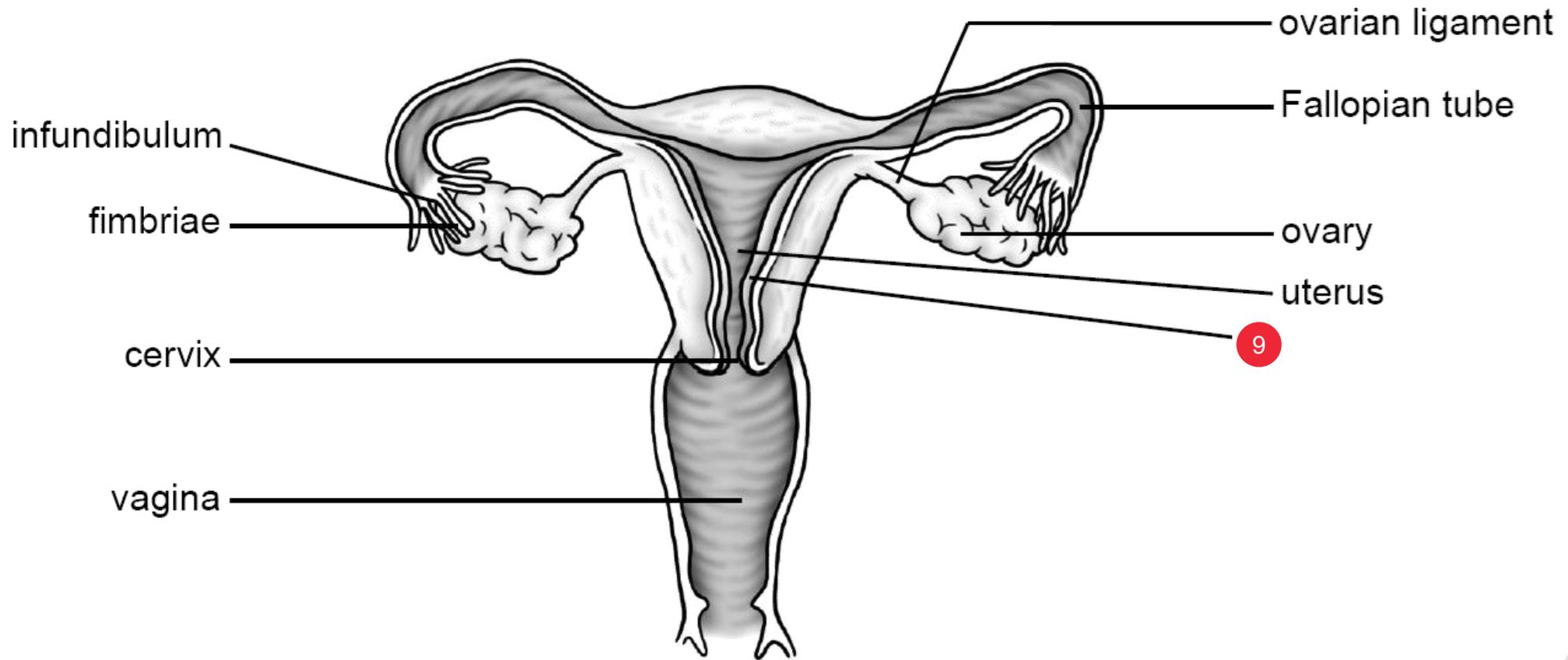
Provide labels for the female reproductive system.



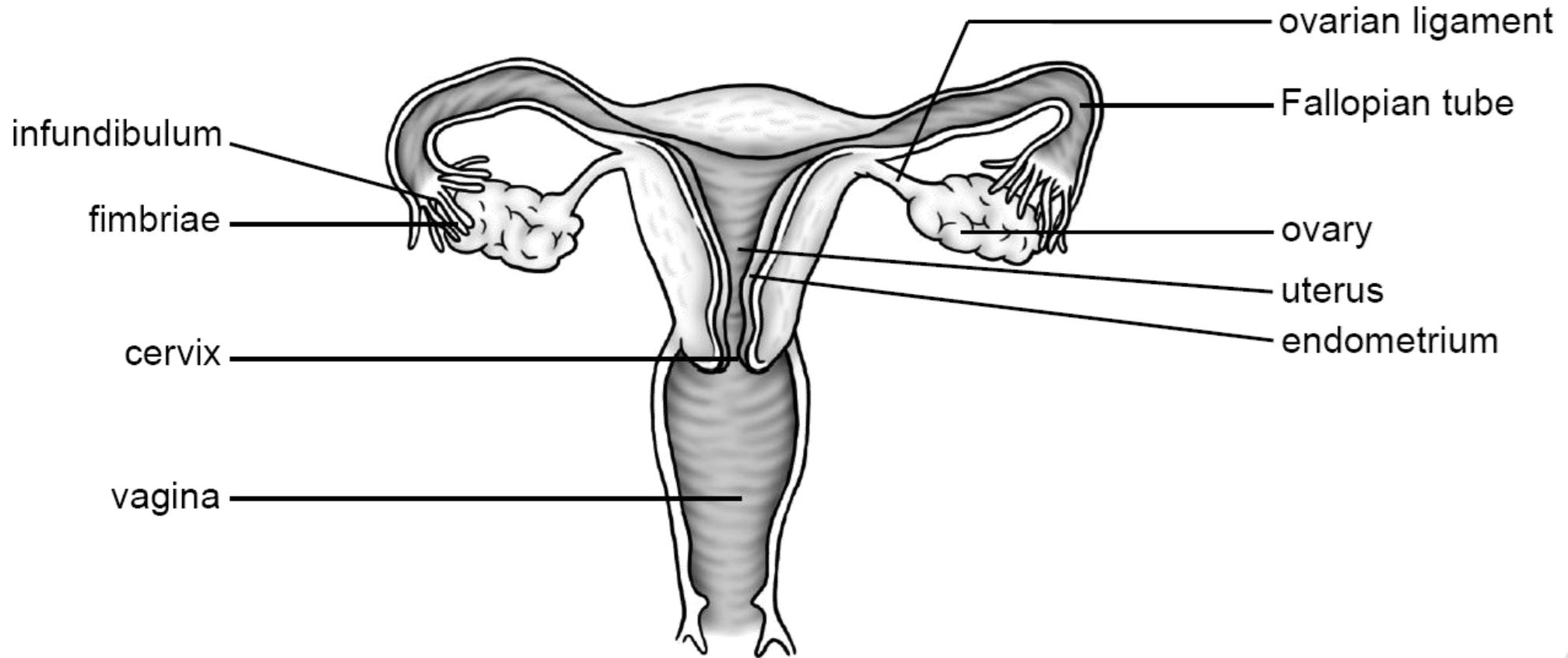
Provide labels for the female reproductive system.



Provide labels for the female reproductive system.



Provide labels for the female reproductive system.



Identify the structures in the female reproductive system that perform the following functions:

1. Forms the birth canal to deliver the baby.
2. The primary sex organs in females.
3. Transport the ovum / developing zygote towards the uterus.
4. Protects and nourishes the developing embryo.
5. Produce ova and release oestrogen and progesterone.
6. Is the site of fertilisation.
7. Is the site of implantation.
8. Receives the penis and semen during sexual intercourse.
9. Performs powerful contractions to push the foetus out during birth.



**A structure may appear more than once.**



Identify the structures in the female reproductive system that perform the following functions:

1. Vagina

2. The primary sex organs in females.
3. Transport the ovum / developing zygote towards the uterus.
4. Protects and nourishes the developing embryo.
5. Produce ova and release oestrogen and progesterone.
6. Is the site of fertilisation.
7. Is the site of implantation.
8. Receives the penis and semen during sexual intercourse.
9. Performs powerful contractions to push the foetus out during birth.



**A structure may appear more than once.**



Identify the structures in the female reproductive system that perform the following functions:

1. Vagina
2. Ovaries
3. Transport the ovum / developing zygote towards the uterus.
4. Protects and nourishes the developing embryo.
5. Produce ova and release oestrogen and progesterone.
6. Is the site of fertilisation.
7. Is the site of implantation.
8. Receives the penis and semen during sexual intercourse.
9. Performs powerful contractions to push the foetus out during birth.



**A structure may appear more than once.**



Identify the structures in the female reproductive system that perform the following functions:

1. Vagina
2. Ovaries
3. Fallopian tubes
4. Protects and nourishes the developing embryo.
5. Produce ova and release oestrogen and progesterone.
6. Is the site of fertilisation.
7. Is the site of implantation.
8. Receives the penis and semen during sexual intercourse.
9. Performs powerful contractions to push the foetus out during birth.



**A structure may appear more than once.**



Identify the structures in the female reproductive system that perform the following functions:

1. Vagina
2. Ovaries
3. Fallopian tubes
4. Uterus
5. Produce ova and release oestrogen and progesterone.
6. Is the site of fertilisation.
7. Is the site of implantation.
8. Receives the penis and semen during sexual intercourse.
9. Performs powerful contractions to push the foetus out during birth.



**A structure may appear more than once.**



Identify the structures in the female reproductive system that perform the following functions:

1. Vagina
2. Ovaries
3. Fallopian tubes
4. Uterus
5. Ovaries
6. Is the site of fertilisation.
7. Is the site of implantation.
8. Receives the penis and semen during sexual intercourse.
9. Performs powerful contractions to push the foetus out during birth.



**A structure may  
appear more than  
once.**



**THE  
ANSWER  
SERIES** *Your Key to Exam Success*

Identify the structures in the female reproductive system that perform the following functions:

1. Vagina
2. Ovaries
3. Fallopian tubes
4. Uterus
5. Ovaries
6. Fallopian tubes
7. Is the site of implantation.
8. Receives the penis and semen during sexual intercourse.
9. Performs powerful contractions to push the foetus out during birth.



**A structure may appear more than once.**



Identify the structures in the female reproductive system that perform the following functions:

1. Vagina
2. Ovaries
3. Fallopian tubes
4. Uterus
5. Ovaries
6. Fallopian tubes
7. Uterus
8. Receives the penis and semen during sexual intercourse.
9. Performs powerful contractions to push the foetus out during birth.



**A structure may appear more than once.**



Identify the structures in the female reproductive system that perform the following functions:

1. Vagina
2. Ovaries
3. Fallopian tubes
4. Uterus
5. Ovaries
6. Fallopian tubes
7. Uterus
8. Vagina
9. Performs powerful contractions to push the foetus out during birth.



**A structure may  
appear more than  
once.**



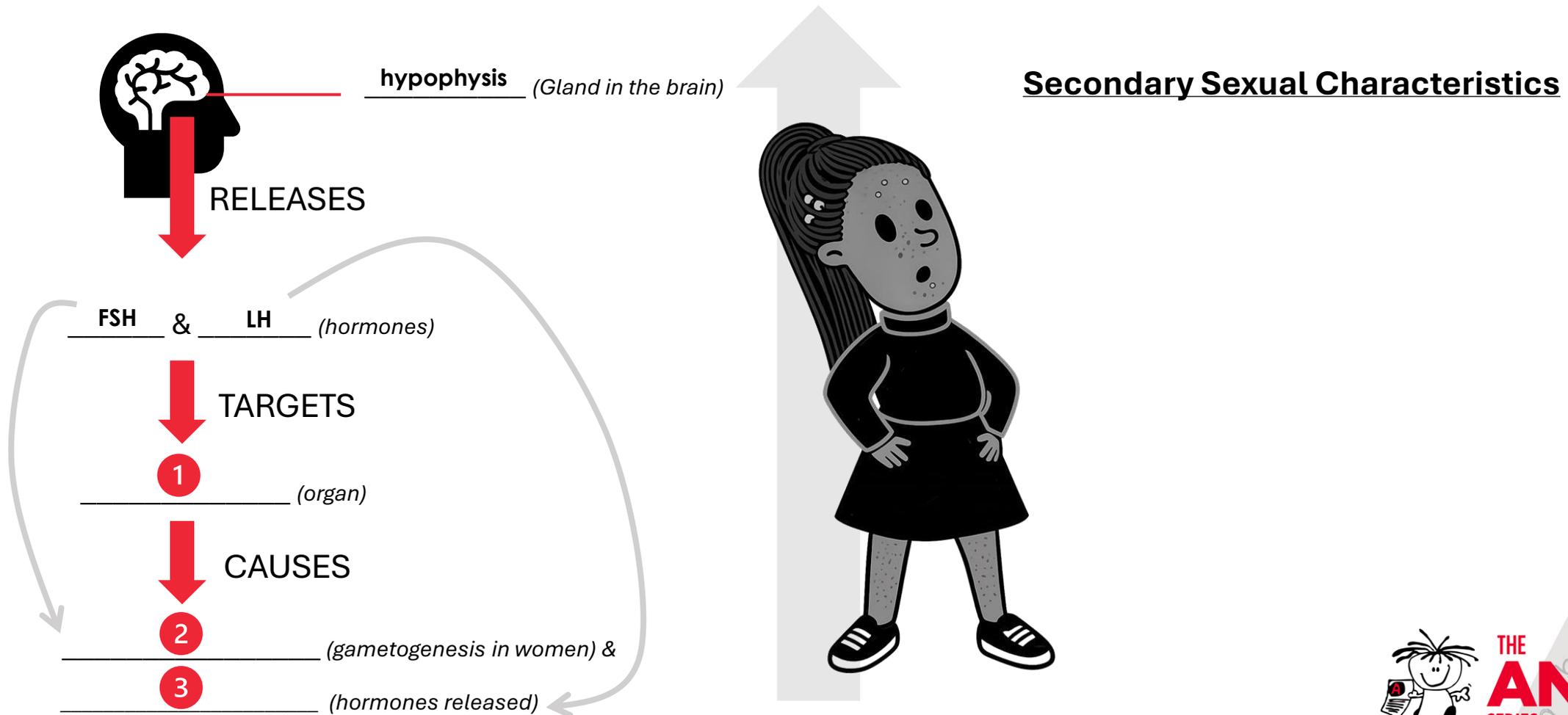
Identify the structures in the female reproductive system that perform the following functions:

1. Vagina
2. Ovaries
3. Fallopian tubes
4. Uterus
5. Ovaries
6. Fallopian tubes
7. Uterus
8. Vagina
9. Uterus



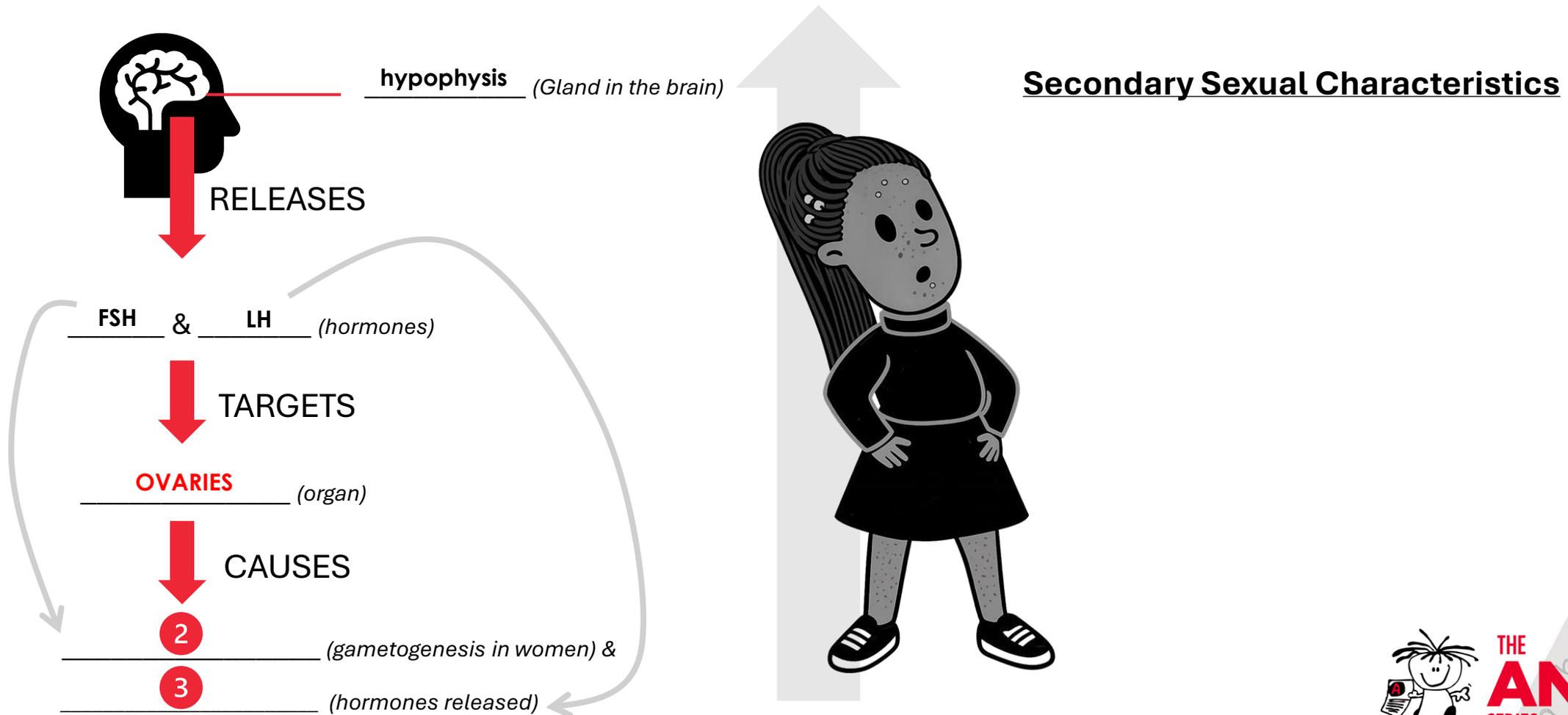
# Understand the changes in the **female body** during puberty:

The TWO main functions of puberty is: maturation of sex organs & gametogenesis



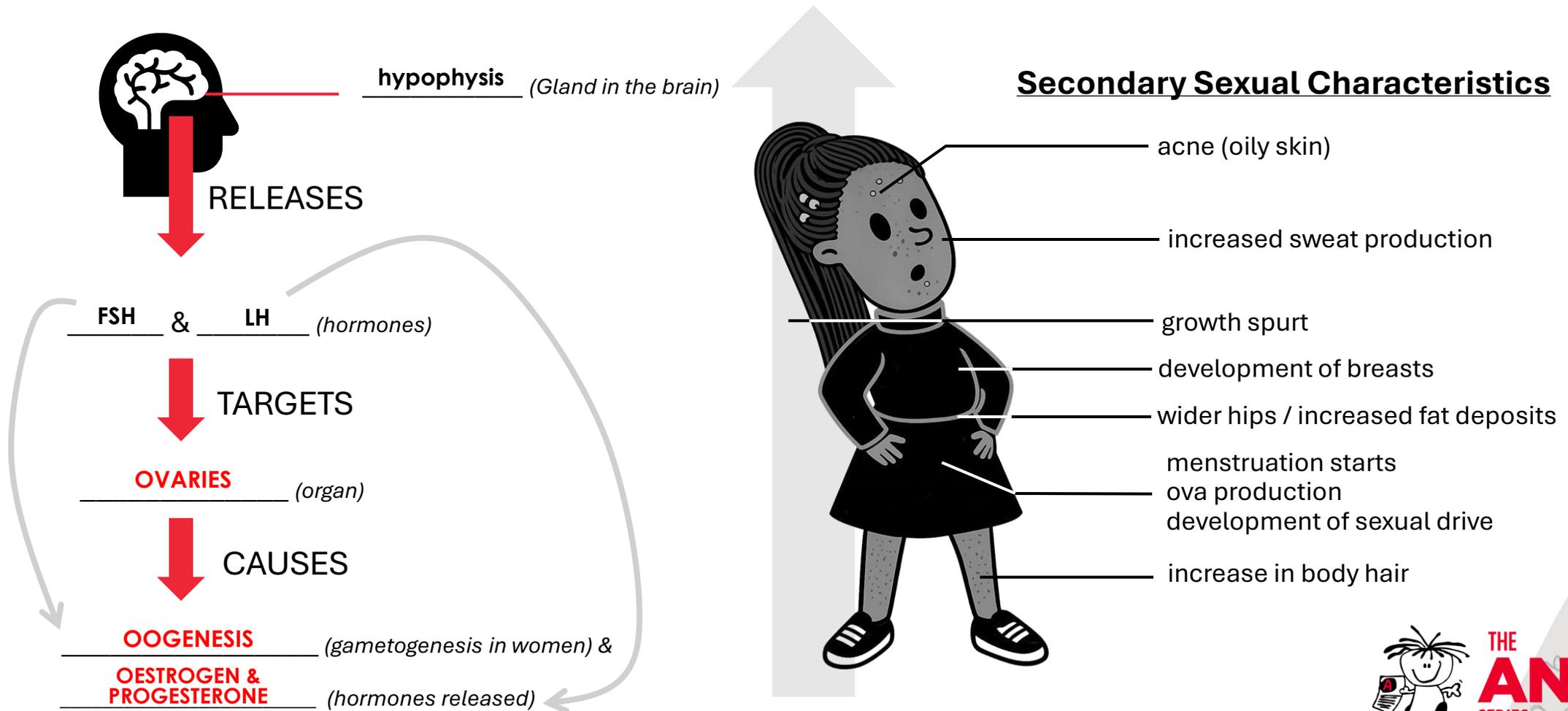
# Understand the changes in the **female body** during puberty:

The TWO main functions of puberty is: maturation of sex organs & gametogenesis



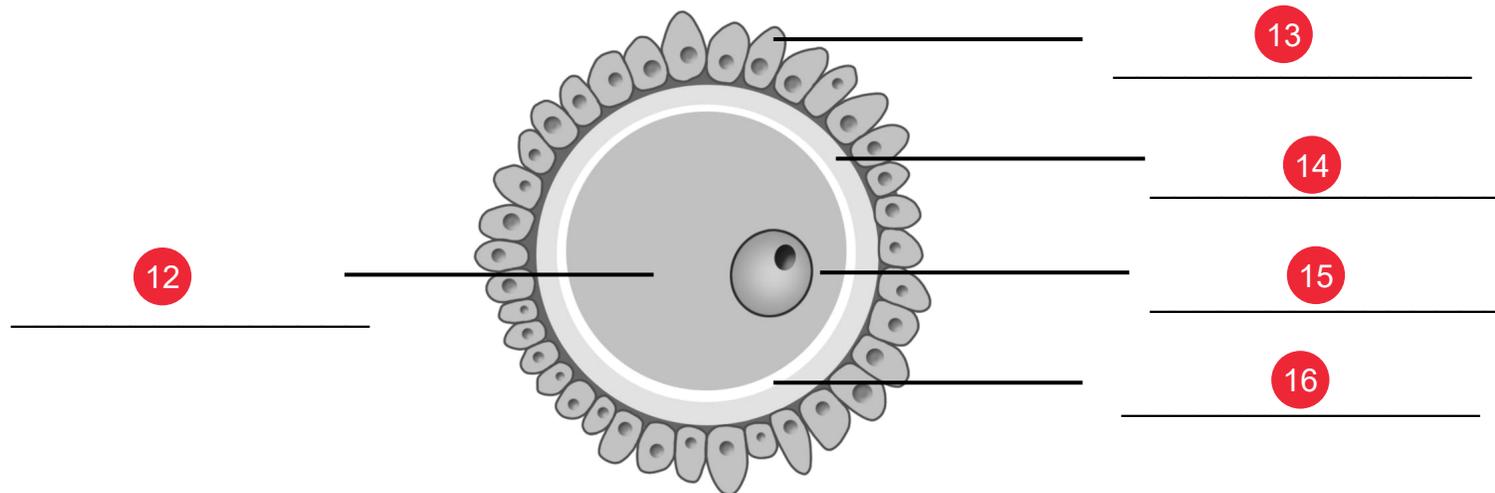
# Understand the changes in the **female body** during puberty:

The TWO main functions of puberty is: maturation of sex organs & gametogenesis



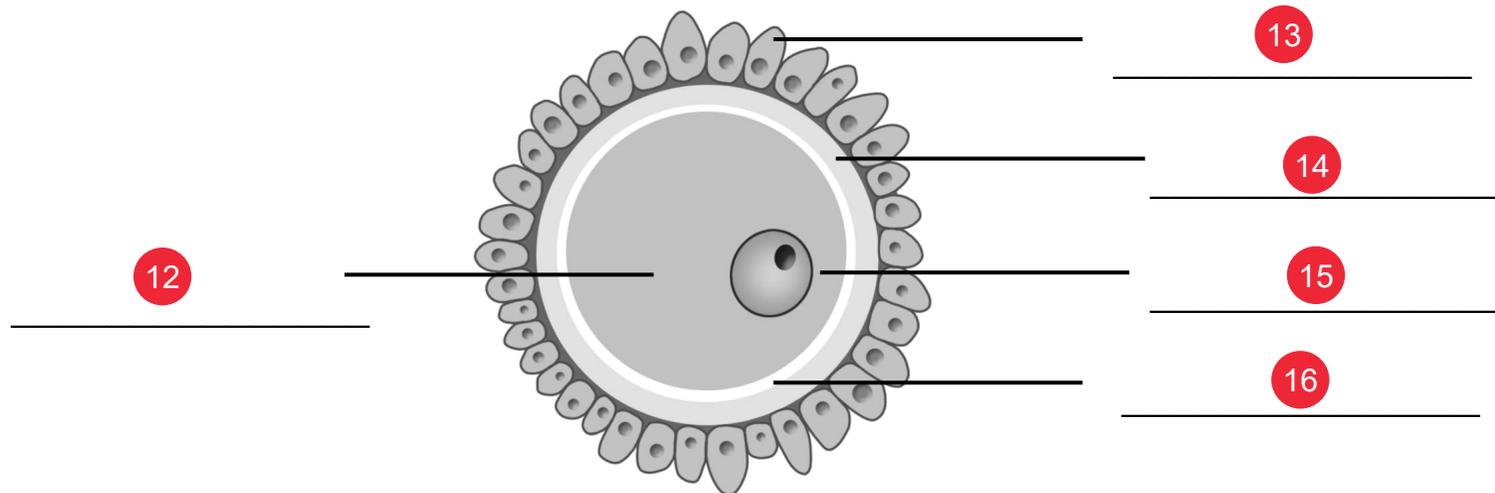
# Complete the steps of **Oogenesis** and label the **ovum**:

- Oogenesis occurs in a **1** \_\_\_\_\_ cycle in the **2** \_\_\_\_\_
- **3** \_\_\_\_\_ cells in the ovaries
- undergo **4** \_\_\_\_\_ to produce numerous **5** \_\_\_\_\_
- every month, **6** \_\_\_\_\_ stimulates one cell inside a follicle to enlarge
- and complete **7** \_\_\_\_\_ to produce **8** \_\_\_\_\_ cells
- only **9** \_\_\_\_\_ of the 4 cells survives to form a large, mature **10** \_\_\_\_\_; **11** \_\_\_\_\_



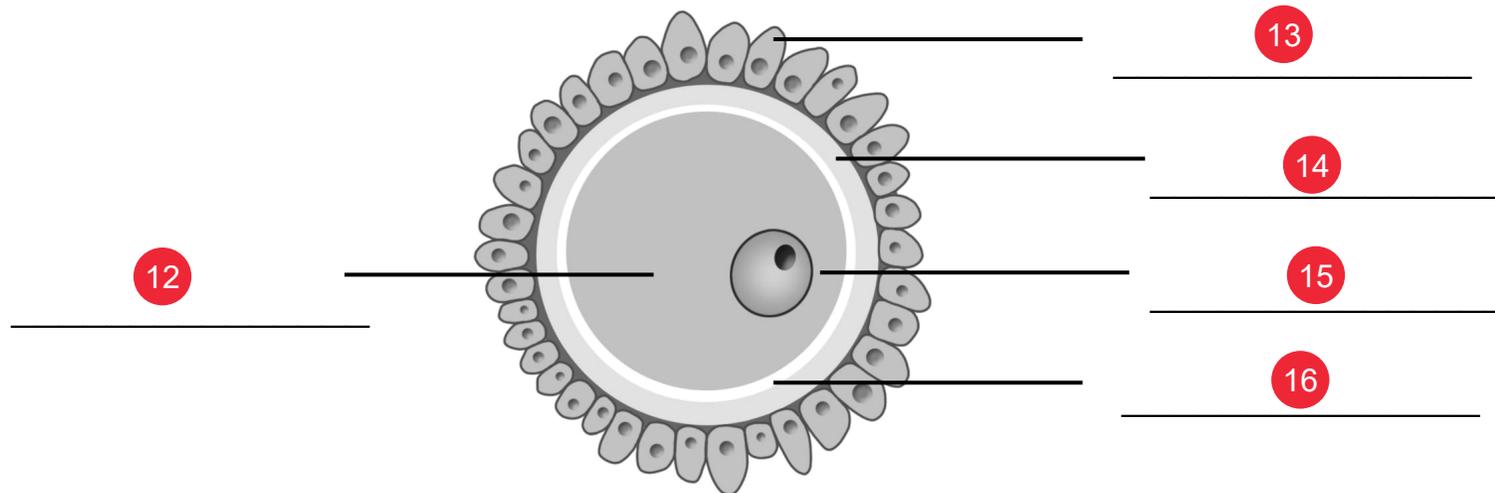
# Complete the steps of **Oogenesis** and label the **ovum**:

- Oogenesis occurs in a **monthly** cycle in the **ovaries**
- **3** cells in the ovaries
- undergo **4** to produce numerous **5**
- every month, **6** stimulates one cell inside a follicle to enlarge
- and complete **7** to produce **8** cells
- only **9** of the 4 cells survives to form a large, mature **10**; **11**



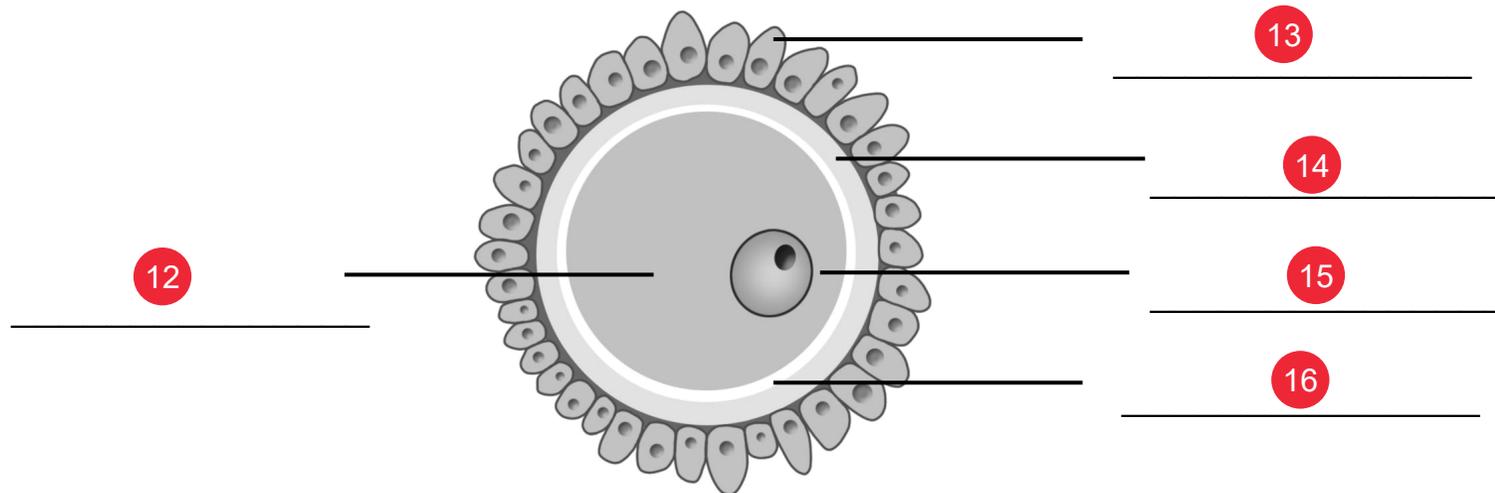
# Complete the steps of **Oogenesis** and label the **ovum**:

- Oogenesis occurs in a **monthly** cycle in the **ovaries**
- **diploid** cells in the ovaries
- undergo **4** \_\_\_\_\_ to produce numerous **5** \_\_\_\_\_
- every month, **6** \_\_\_\_\_ stimulates one cell inside a follicle to enlarge
- and complete **7** \_\_\_\_\_ to produce **8** \_\_\_\_\_ cells
- only **9** \_\_\_\_\_ of the 4 cells survives to form a large, mature **10** \_\_\_\_\_; **11** \_\_\_\_\_



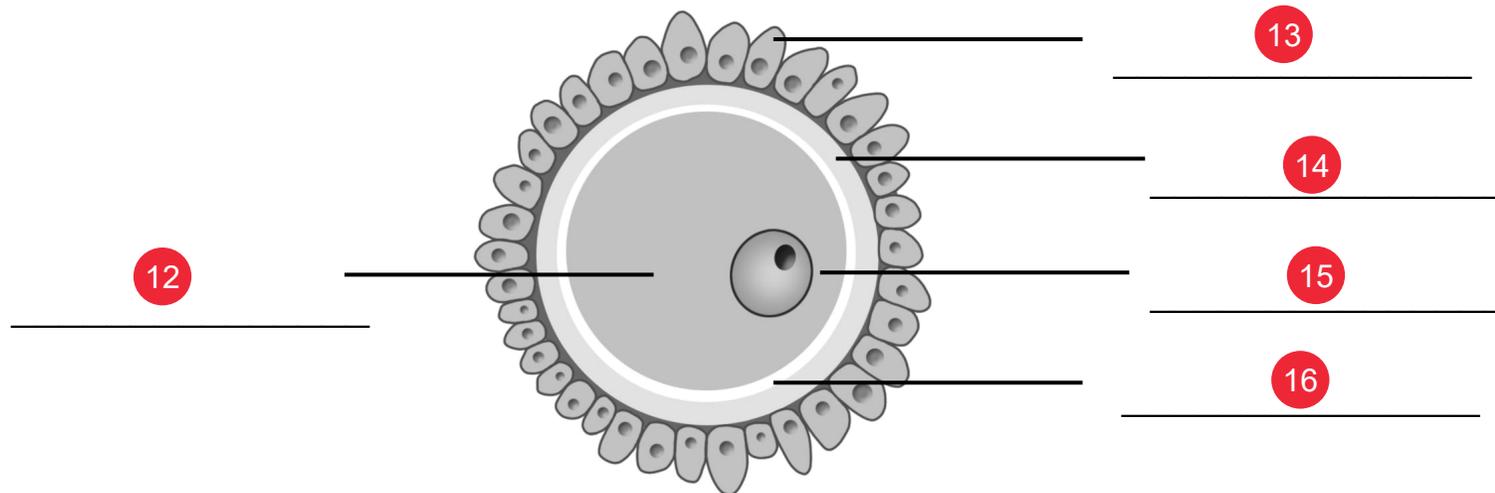
# Complete the steps of **Oogenesis** and label the **ovum**:

- Oogenesis occurs in a **monthly** cycle in the **ovaries**
- **diploid** cells in the ovaries
- undergo **mitosis** to produce numerous **follicles**
- every month, **6** stimulates one cell inside a follicle to enlarge
- and complete **7** to produce **8** cells
- only **9** of the 4 cells survives to form a large, mature **10**; **11**



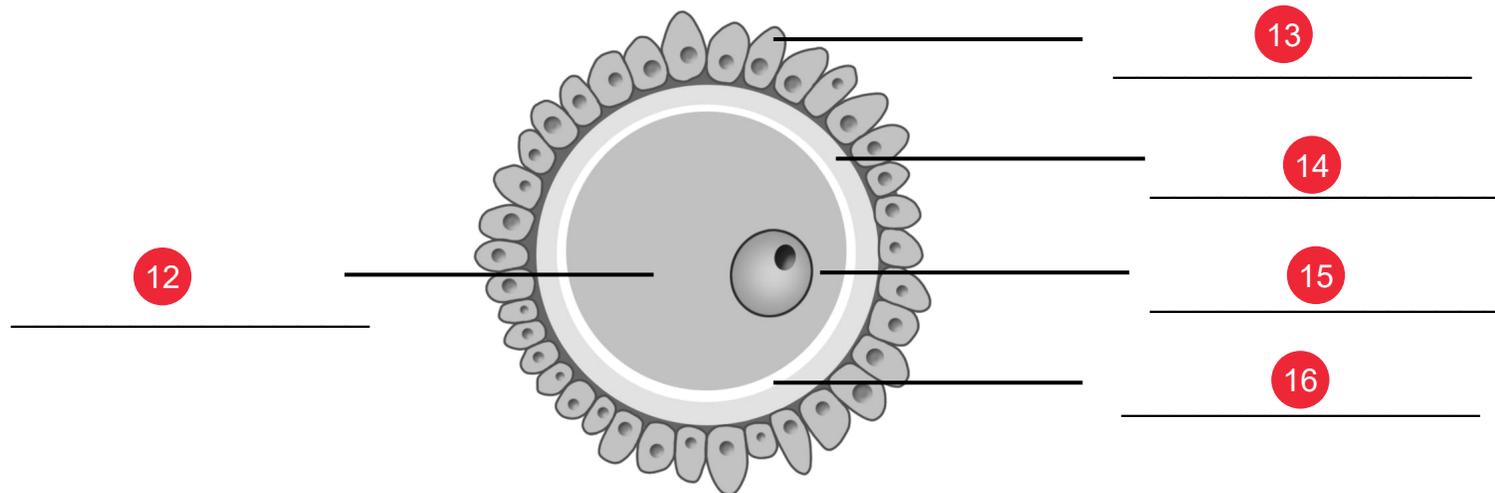
# Complete the steps of **Oogenesis** and label the **ovum**:

- Oogenesis occurs in a **monthly** cycle in the **ovaries**
- **diploid** cells in the ovaries
- undergo **mitosis** to produce numerous **follicles**
- every month, **FSH** stimulates one cell inside a follicle to enlarge
- and complete **7** to produce **8** cells
- only **9** of the 4 cells survives to form a large, mature **10**; **11**



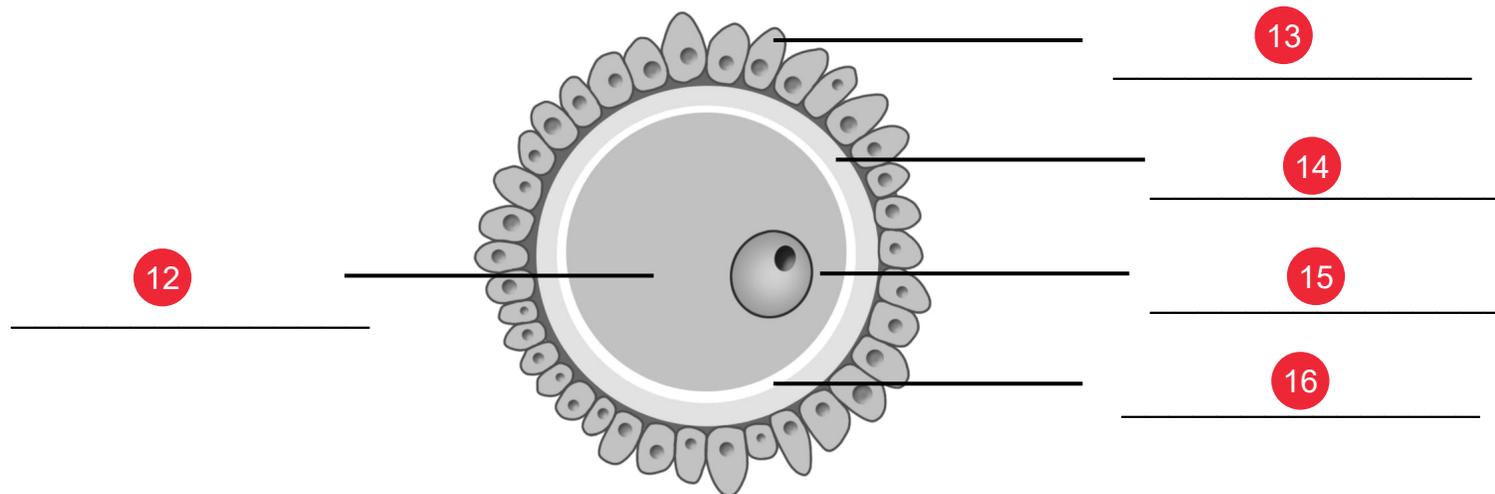
# Complete the steps of **Oogenesis** and label the **ovum**:

- Oogenesis occurs in a **monthly** cycle in the **ovaries**
- **diploid** cells in the ovaries
- undergo **mitosis** to produce numerous **follicles**
- every month, **FSH** stimulates one cell inside a follicle to enlarge
- and complete **meiosis** to produce **4** cells
- only **9** of the 4 cells survives to form a large, mature **10**; **11**



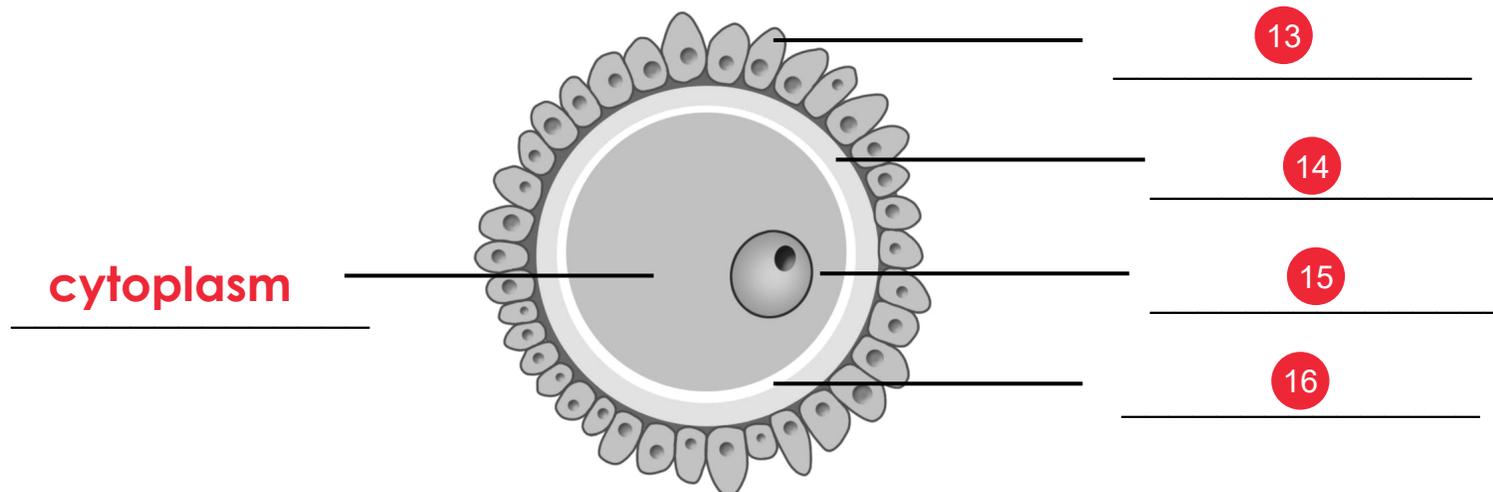
# Complete the steps of **Oogenesis** and label the **ovum**:

- Oogenesis occurs in a **monthly** cycle in the **ovaries**
- **diploid** cells in the ovaries
- undergo **mitosis** to produce numerous **follicles**
- every month, **FSH** stimulates one cell inside a follicle to enlarge
- and complete **meiosis** to produce **4** cells
- only **1** of the 4 cells survives to form a large, mature **haploid**; **ovum**



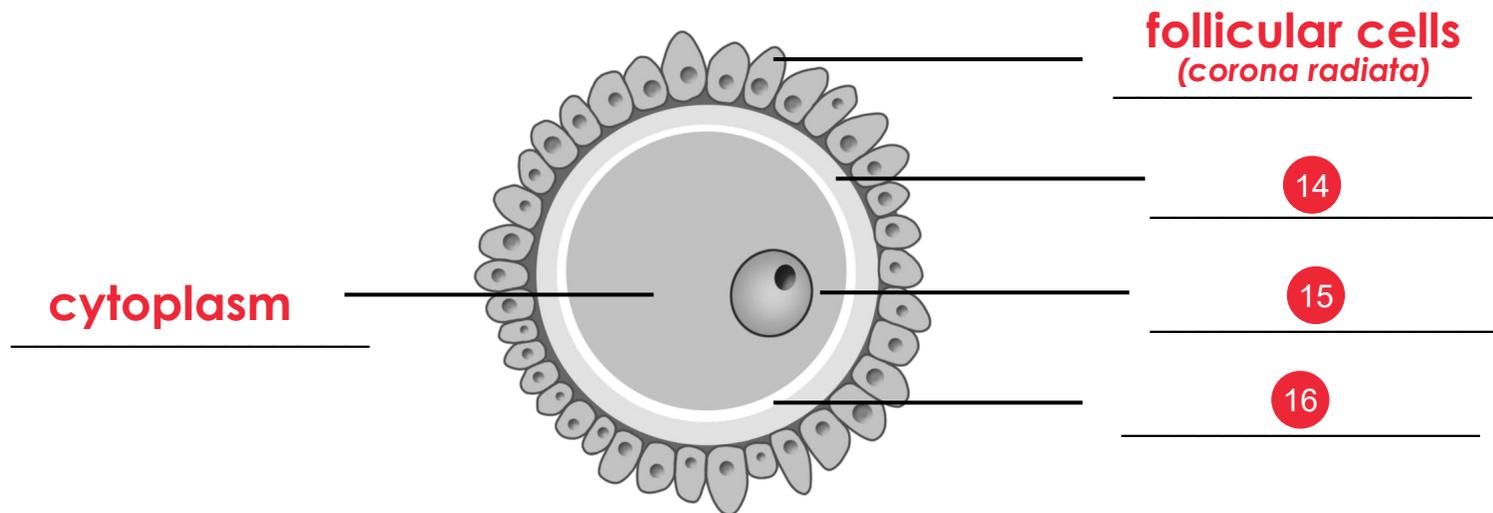
# Complete the steps of **Oogenesis** and label the **ovum**:

- Oogenesis occurs in a **monthly** cycle in the **ovaries**
- **diploid** cells in the ovaries
- undergo **mitosis** to produce numerous **follicles**
- every month, **FSH** stimulates one cell inside a follicle to enlarge
- and complete **meiosis** to produce **4** cells
- only **1** of the 4 cells survives to form a large, mature **haploid**; **ovum**



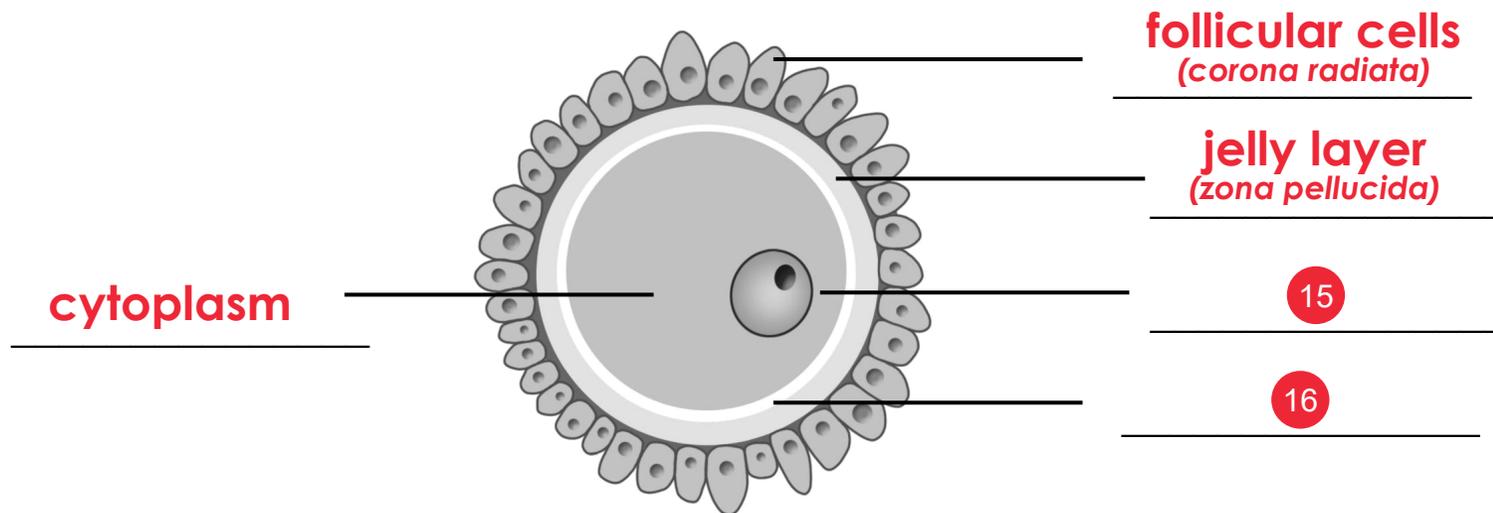
# Complete the steps of **Oogenesis** and label the **ovum**:

- Oogenesis occurs in a **monthly** cycle in the **ovaries**
- **diploid** cells in the ovaries
- undergo **mitosis** to produce numerous **follicles**
- every month, **FSH** stimulates one cell inside a follicle to enlarge
- and complete **meiosis** to produce **4** cells
- only **1** of the 4 cells survives to form a large, mature **haploid**; **ovum**



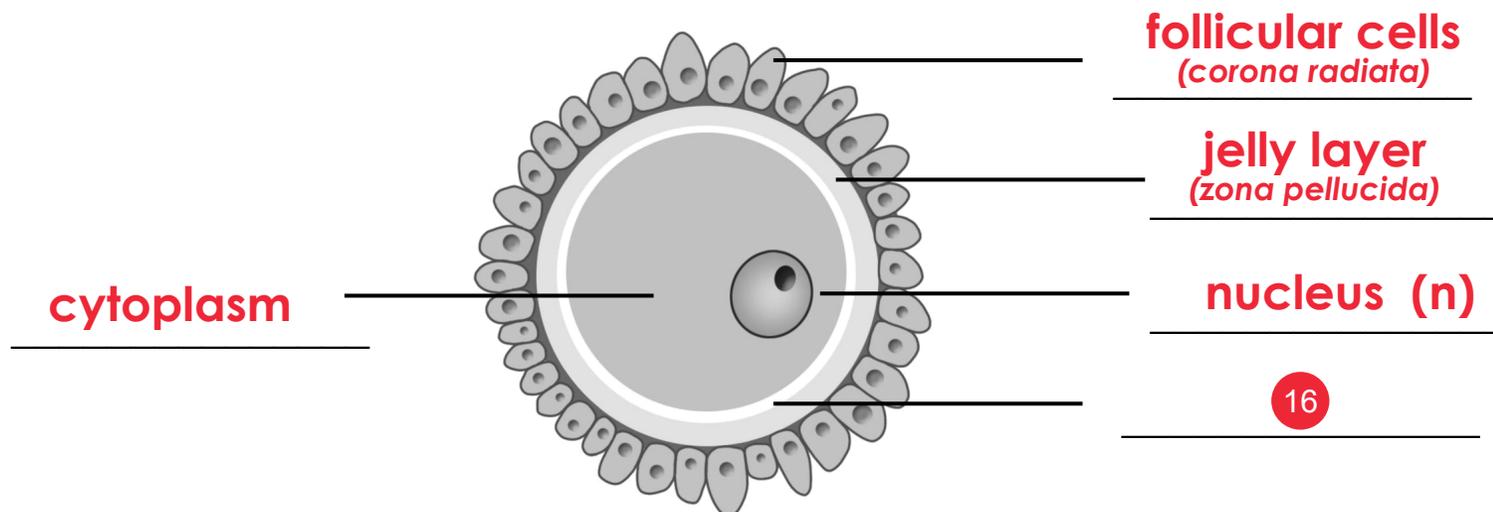
# Complete the steps of **Oogenesis** and label the **ovum**:

- Oogenesis occurs in a **monthly** cycle in the **ovaries**
- **diploid** cells in the ovaries
- undergo **mitosis** to produce numerous **follicles**
- every month, **FSH** stimulates one cell inside a follicle to enlarge
- and complete **meiosis** to produce **4** cells
- only **1** of the 4 cells survives to form a large, mature **haploid**; **ovum**



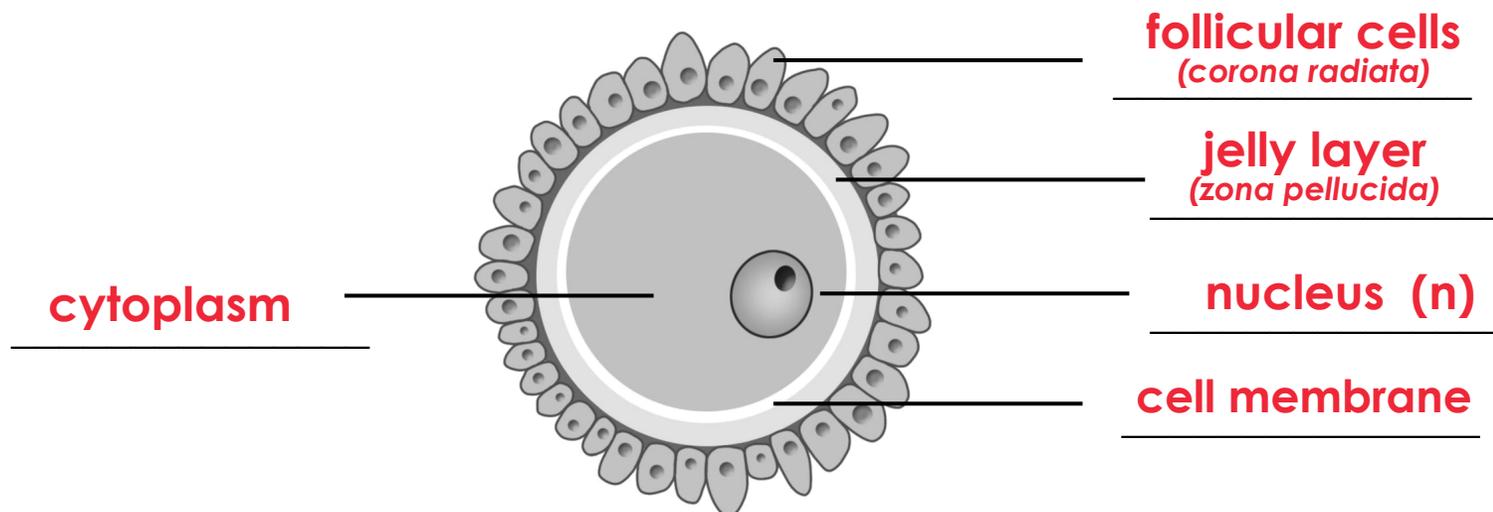
# Complete the steps of **Oogenesis** and label the **ovum**:

- Oogenesis occurs in a **monthly** cycle in the **ovaries**
- **diploid** cells in the ovaries
- undergo **mitosis** to produce numerous **follicles**
- every month, **FSH** stimulates one cell inside a follicle to enlarge
- and complete **meiosis** to produce **4** cells
- only **1** of the 4 cells survives to form a large, mature **haploid**; **ovum**

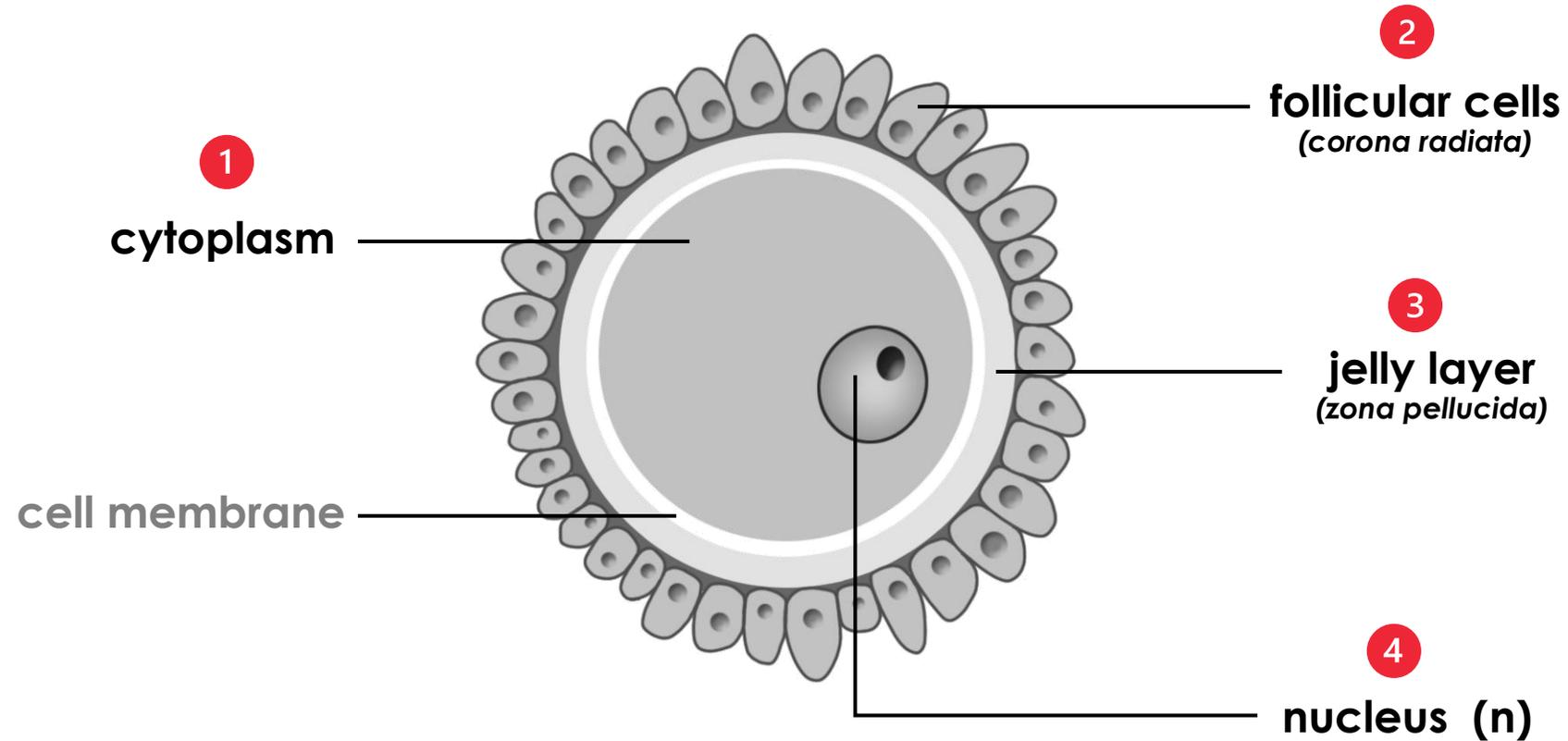


# Complete the steps of **Oogenesis** and label the **ovum**:

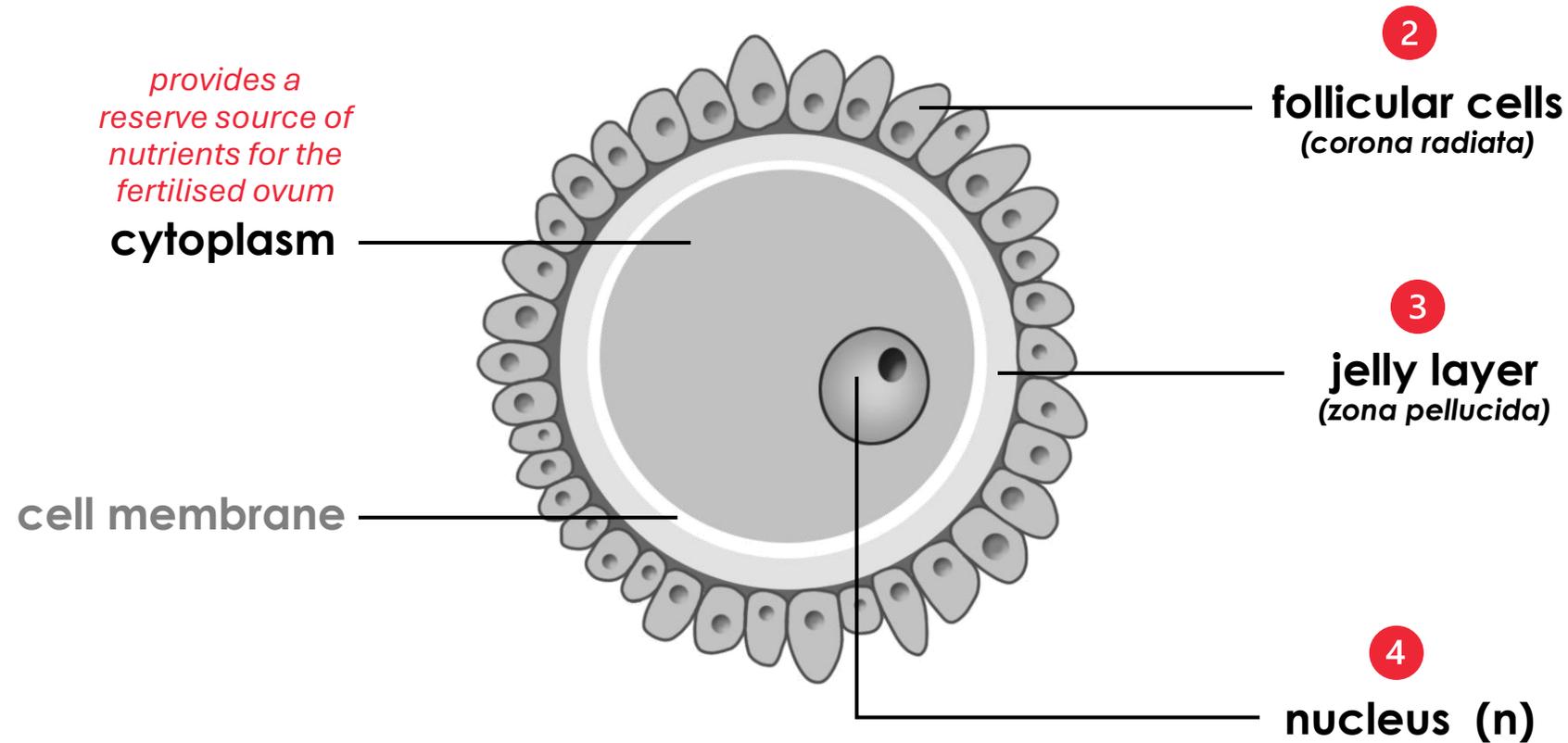
- Oogenesis occurs in a **monthly** cycle in the **ovaries**
- **diploid** cells in the ovaries
- undergo **mitosis** to produce numerous **follicles**
- every month, **FSH** stimulates one cell inside a follicle to enlarge
- and complete **meiosis** to produce **4** cells
- only **1** of the 4 cells survives to form a large, mature **haploid**; **ovum**



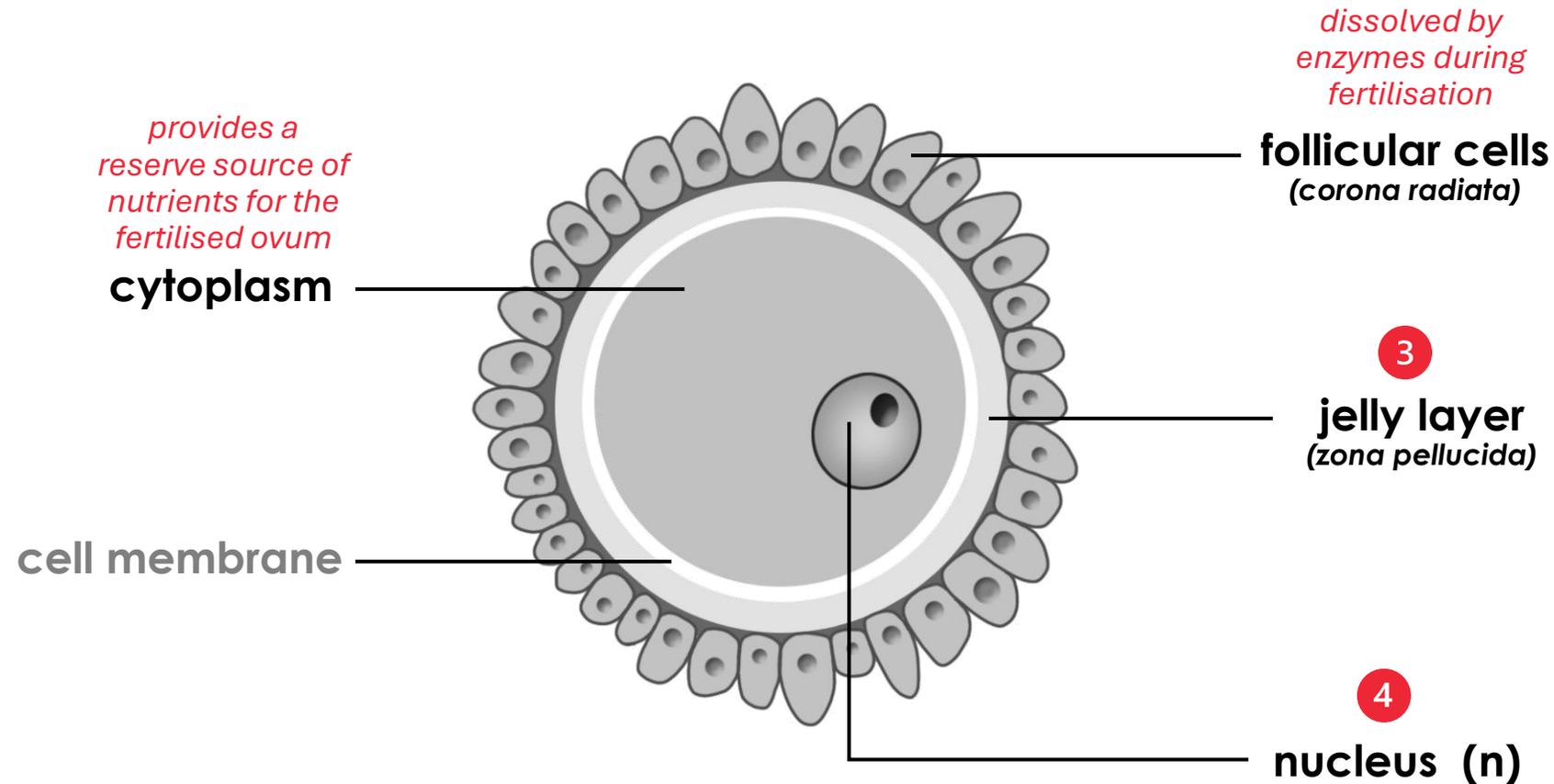
What are the **functions/adaptations** of the different parts of an **ovum**?



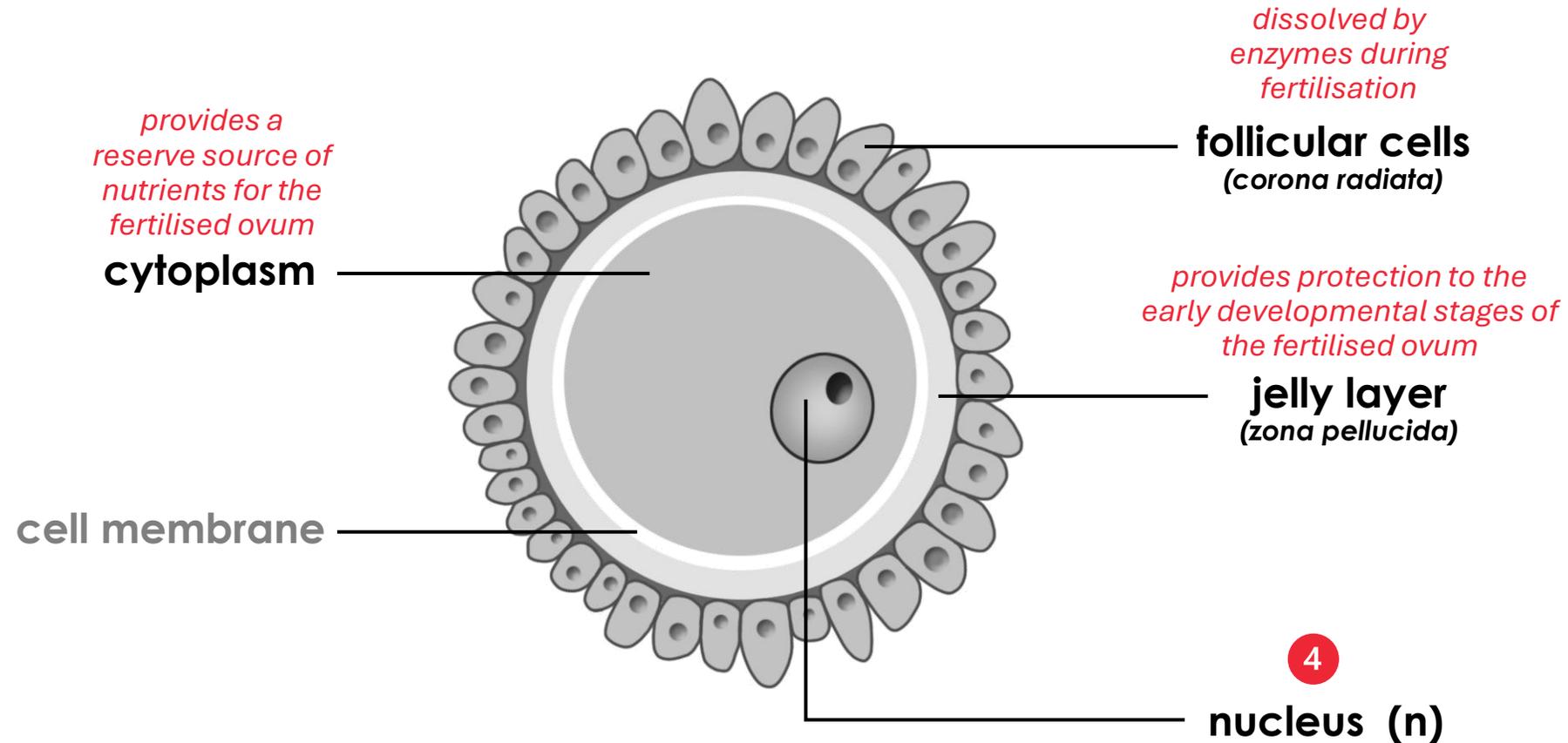
What are the **functions/adaptations** of the different parts of an **ovum**?



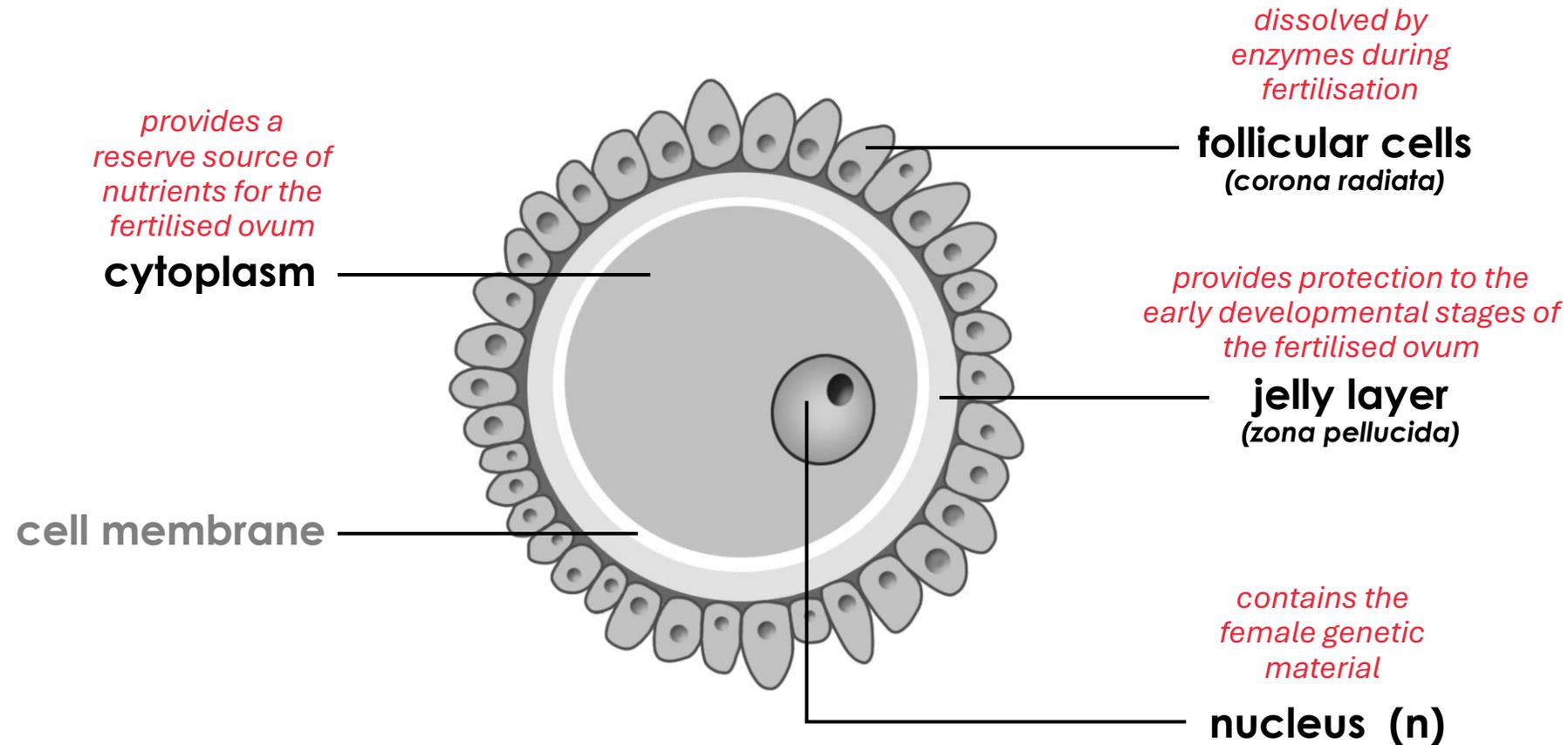
What are the **functions/adaptations** of the different parts of an **ovum**?



What are the **functions/adaptations** of the different parts of an **ovum**?

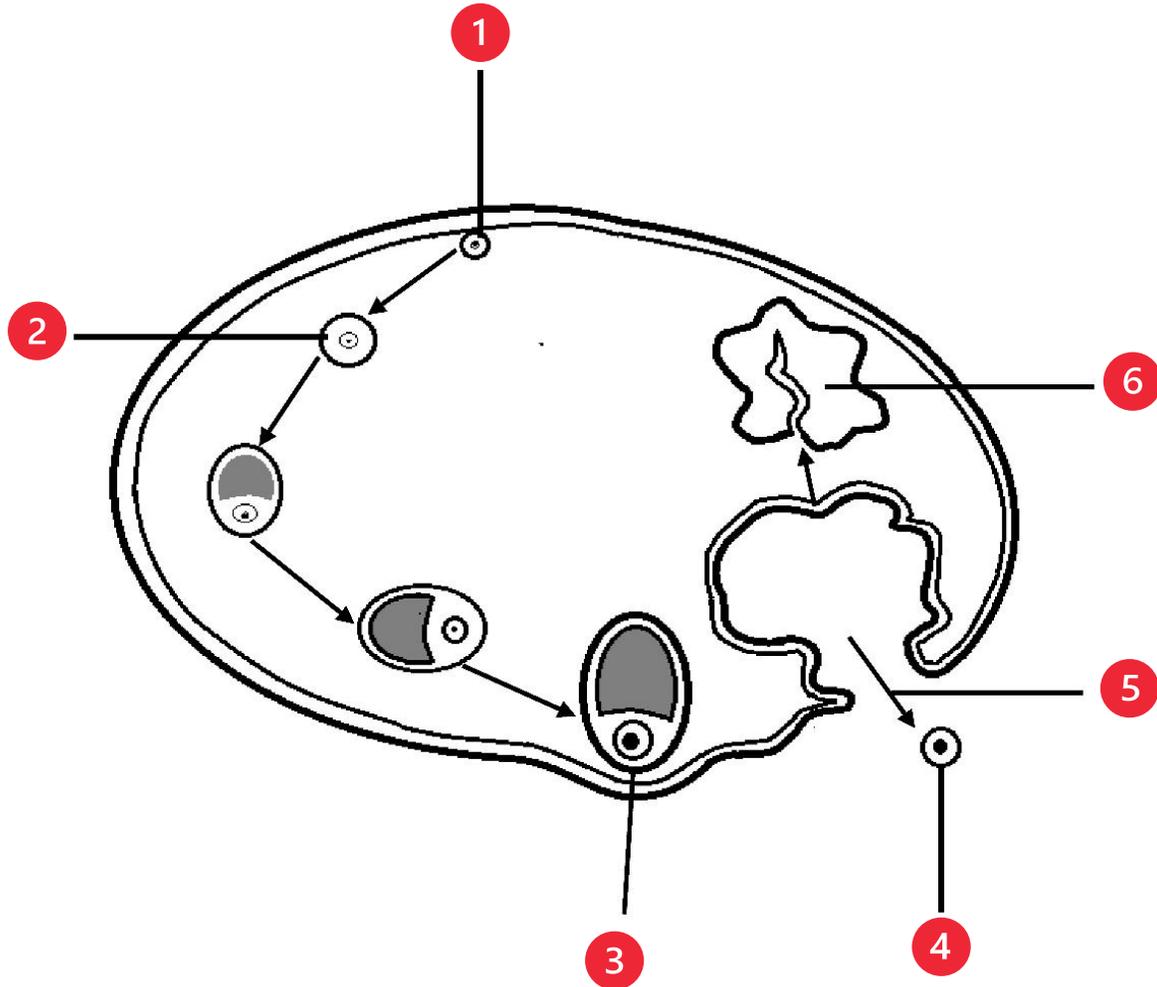


What are the **functions/adaptations** of the different parts of an **ovum**?



# MENSTRUAL CYCLE EVENTS

Answer questions on the **ovarian cycle**:



Identify number 1.

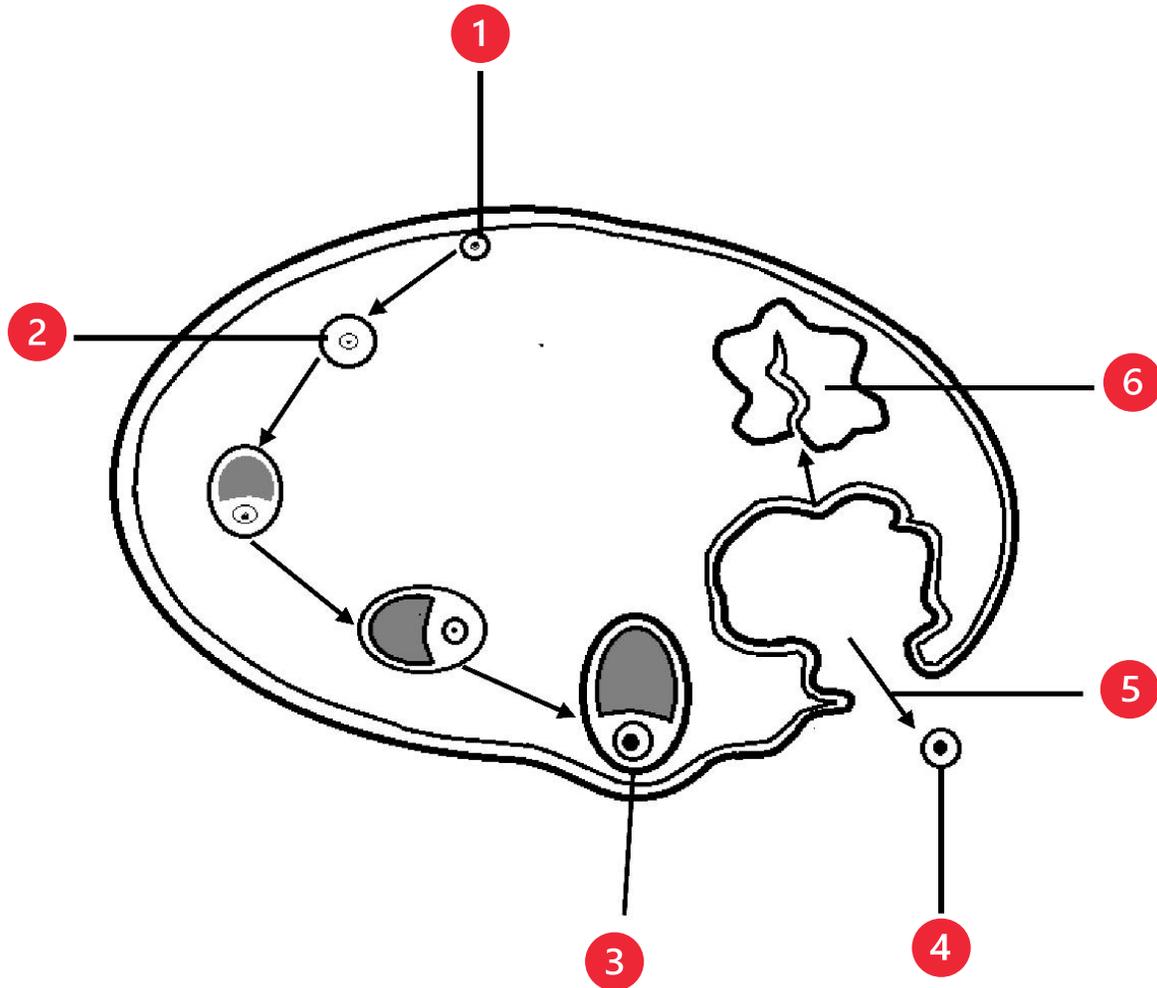
Identify number 2.

Identify number 3.

Name the hormone that *stimulates* the growth of 1 to 3.

Name the hormone that is *released* by the growth of 1 to 3.

Answer questions on the **ovarian cycle**:



**oogonium**

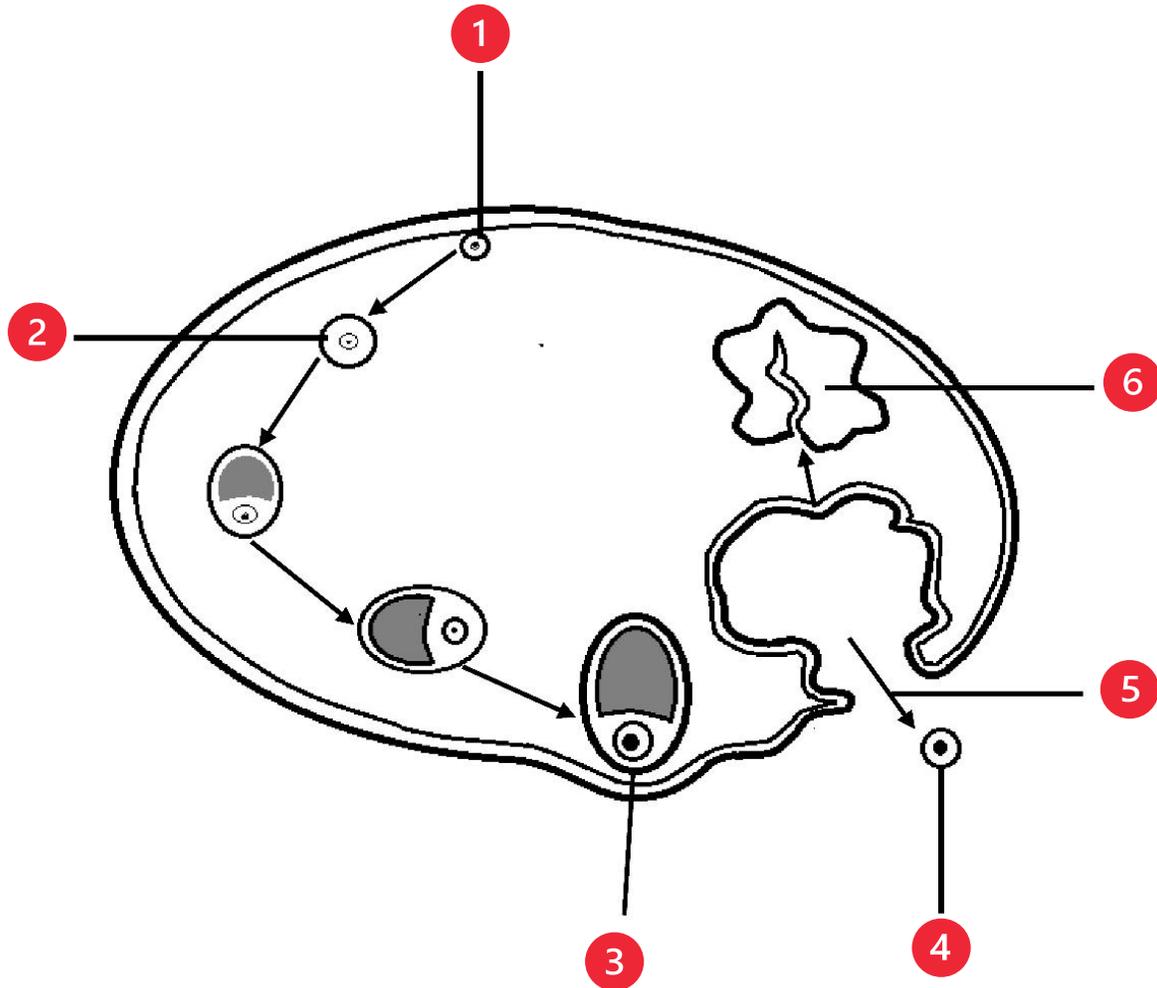
Identify number 2.

Identify number 3.

Name the hormone that *stimulates* the growth of 1 to 3.

Name the hormone that is *released* by the growth of 1 to 3.

Answer questions on the **ovarian cycle**:



**oogonium**

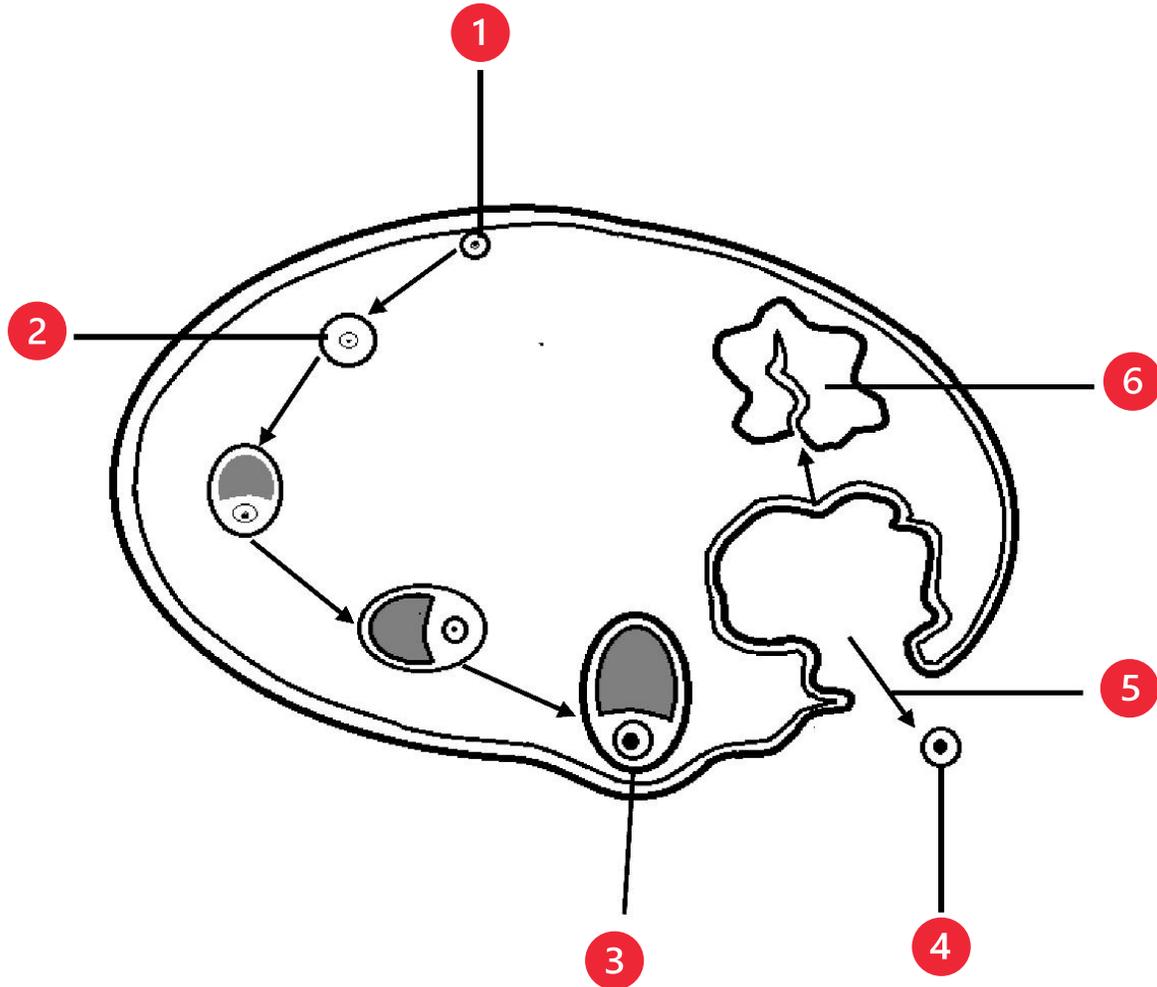
**primary follicle**

**Identify number 3.**

**Name the hormone that *stimulates* the growth of 1 to 3.**

**Name the hormone that is *released* by the growth of 1 to 3.**

Answer questions on the **ovarian cycle**:



**oogonium**

**primary follicle**

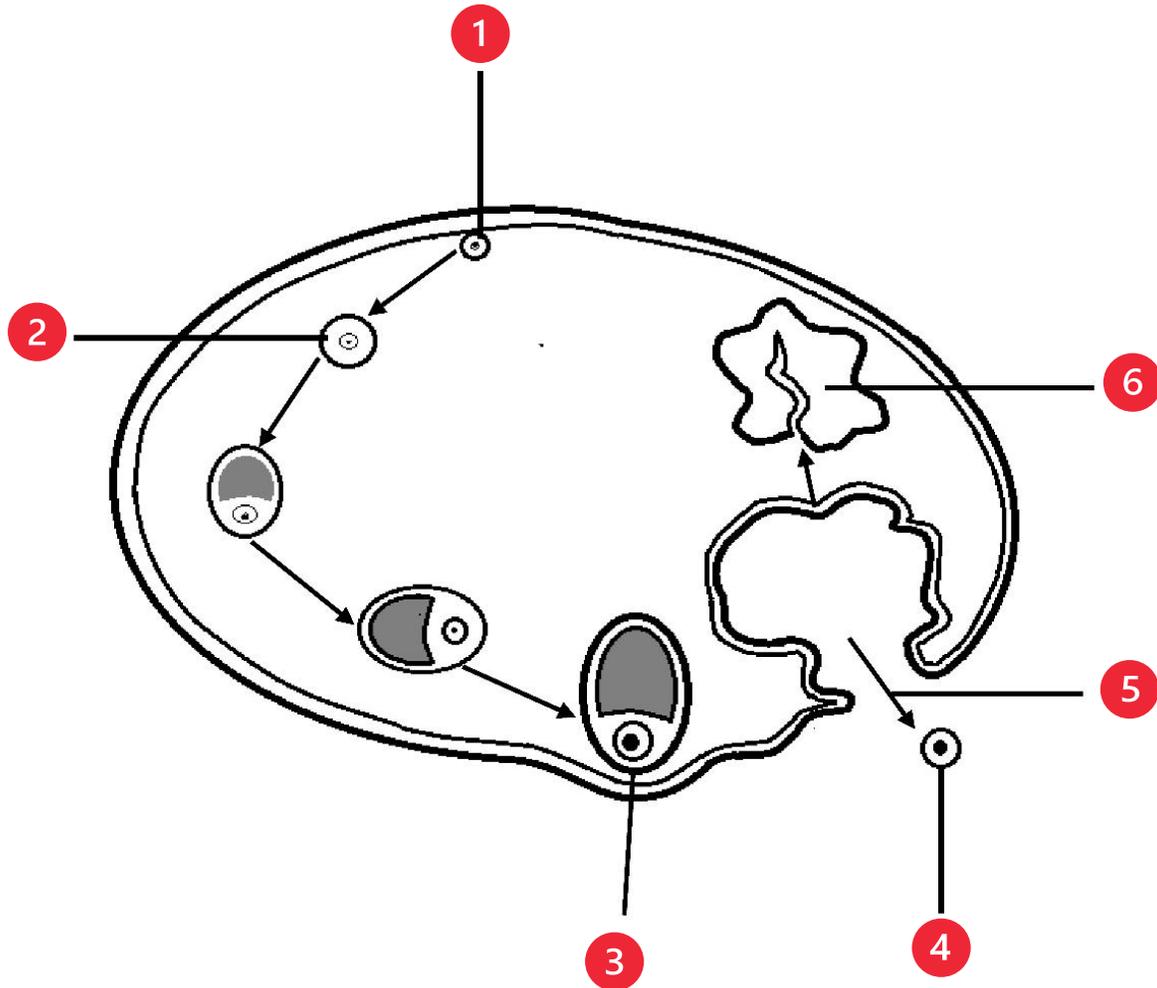
**Graafian follicle**

Name the hormone that *stimulates* the growth of 1 to 3.

Name the hormone that is *released* by the growth of 1 to 3.



Answer questions on the **ovarian cycle**:



**oogonium**

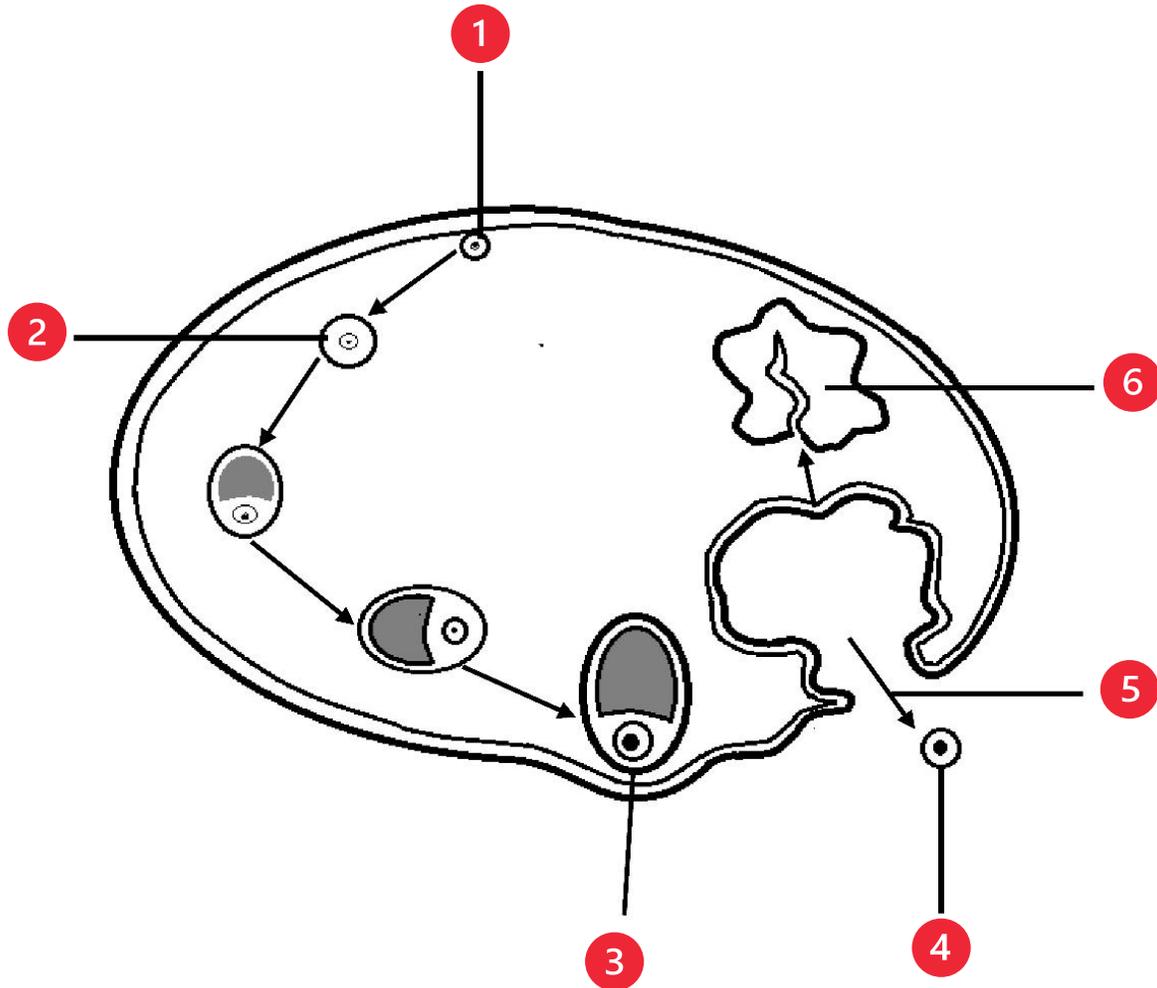
**primary follicle**

**Graafian follicle**

**FSH**

**Name the hormone that is *released* by the growth of 1 to 3.**

Answer questions on the **ovarian cycle**:



**oogonium**

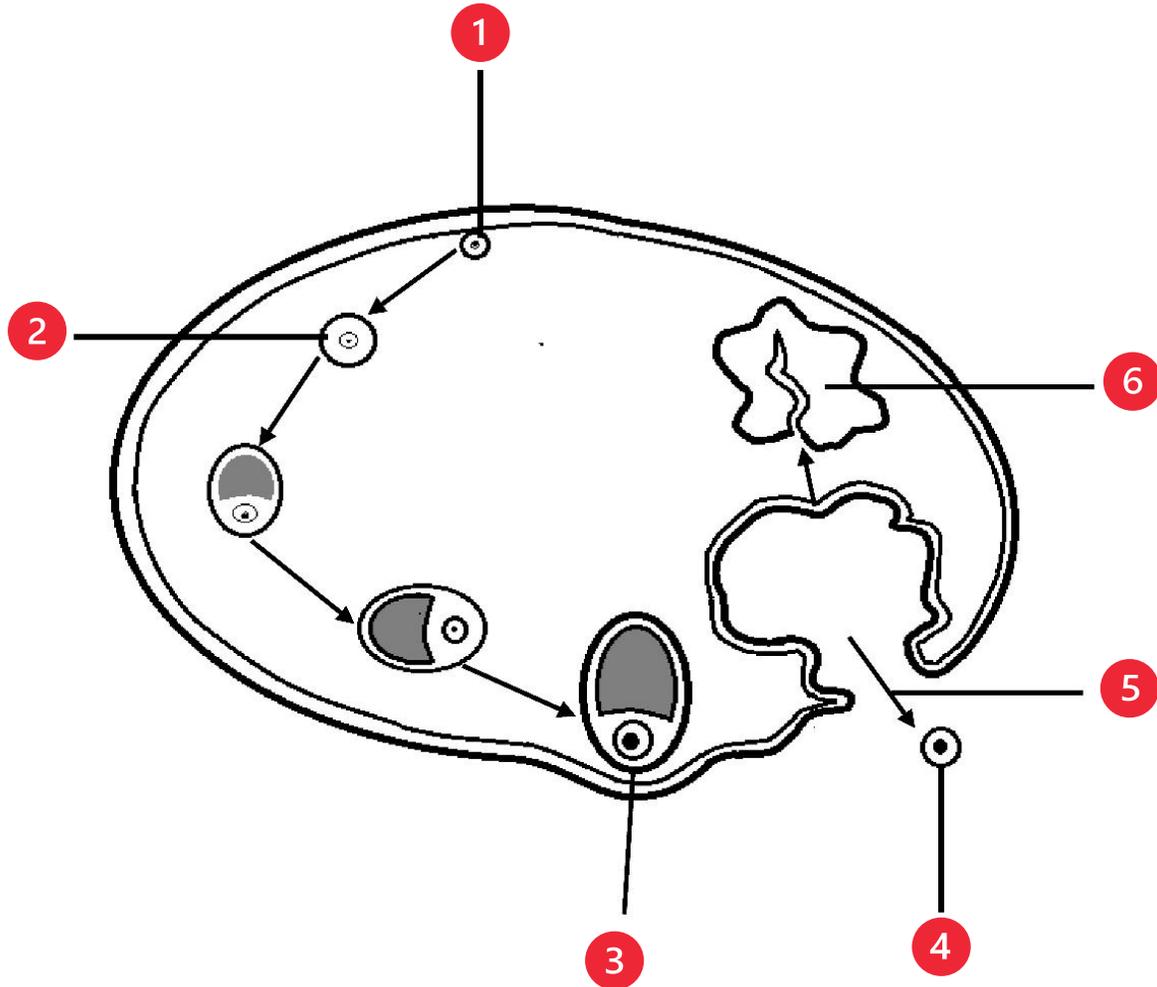
**primary follicle**

**Graafian follicle**

**FSH**

**oestrogen**

Answer questions on the **ovarian cycle**:



Name the process that occurs at 5.

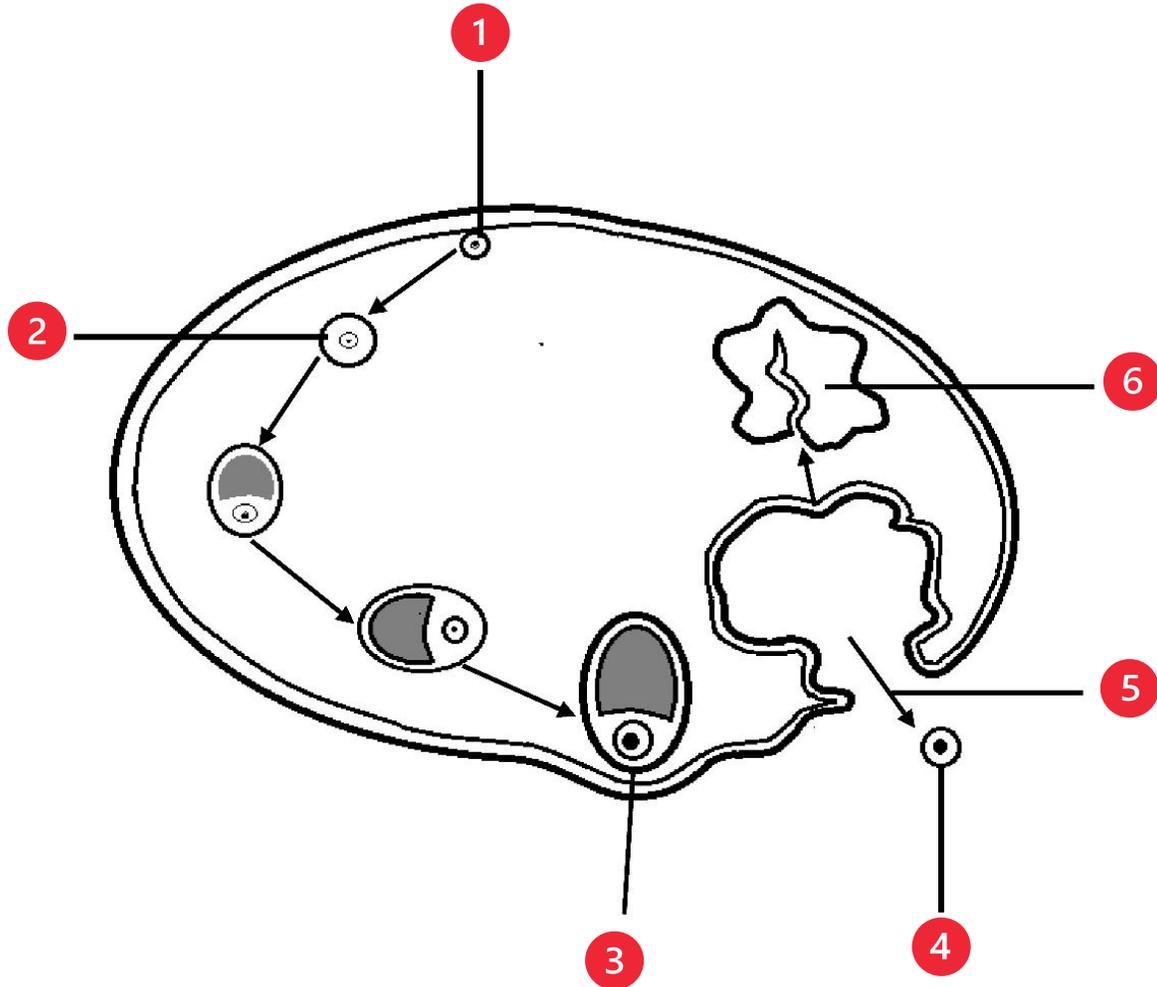
Identify number 4.

Identify number 6.

Name the hormone that *causes* process 5 to occur.

Name the hormone(s) that is/are *released* by number 6.

Answer questions on the **ovarian cycle**:



**ovulation**

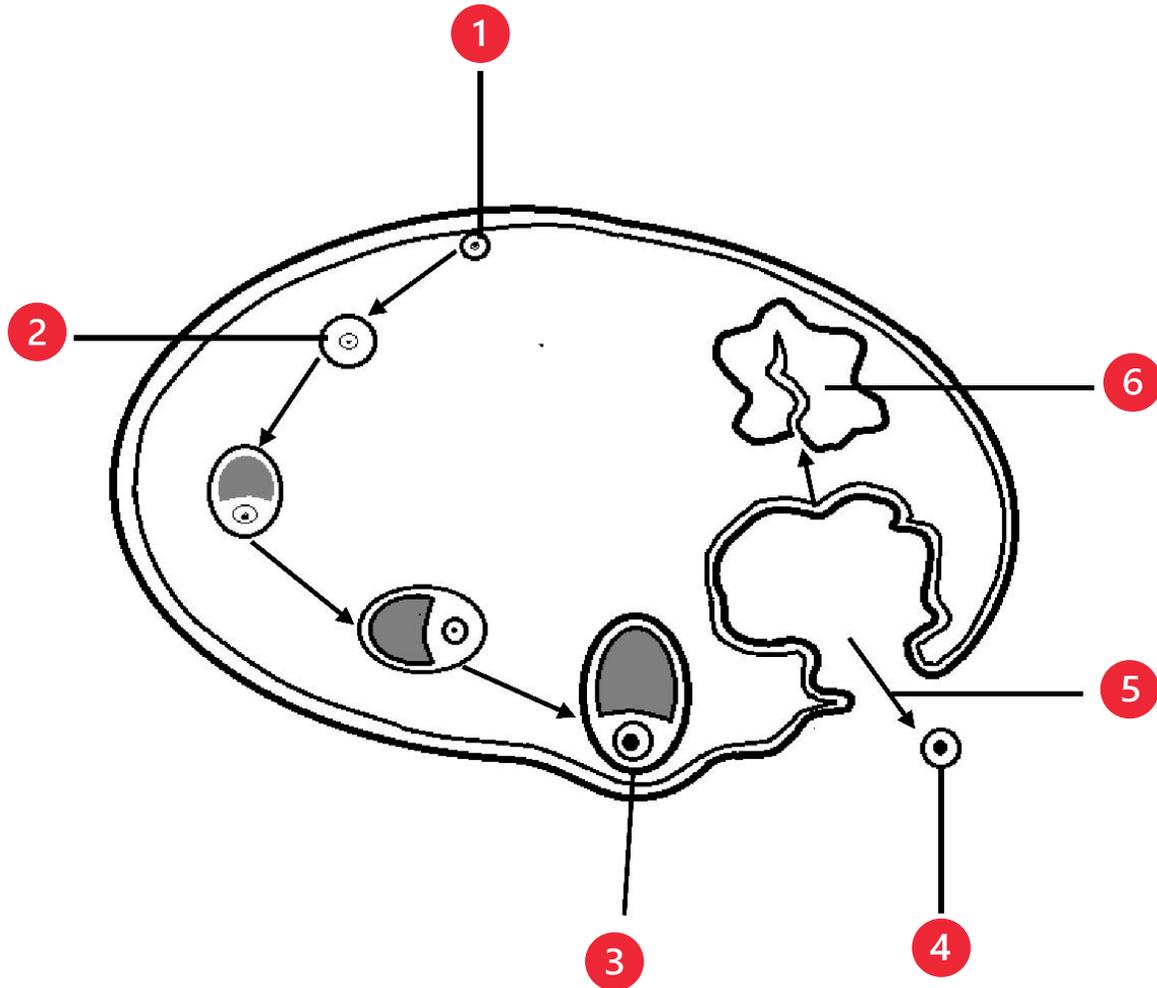
Identify number 4.

Identify number 6.

Name the hormone that *causes* process 5 to occur.

Name the hormone(s) that is/are *released* by number 6.

Answer questions on the **ovarian cycle**:



ovulation

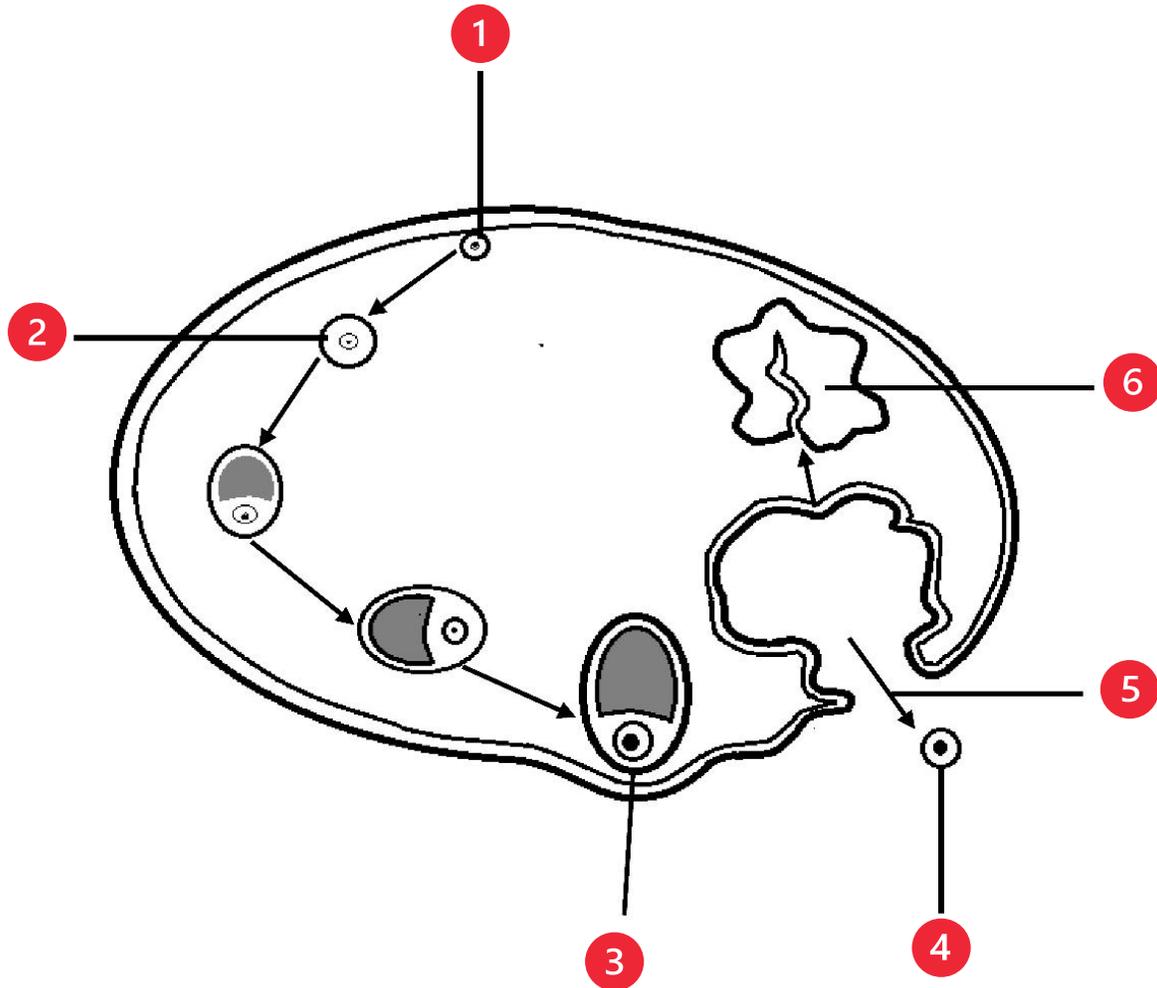
ovum

Identify number 6.

Name the hormone that *causes* process 5 to occur.

Name the hormone(s) that is/are *released* by number 6.

Answer questions on the **ovarian cycle**:



**ovulation**

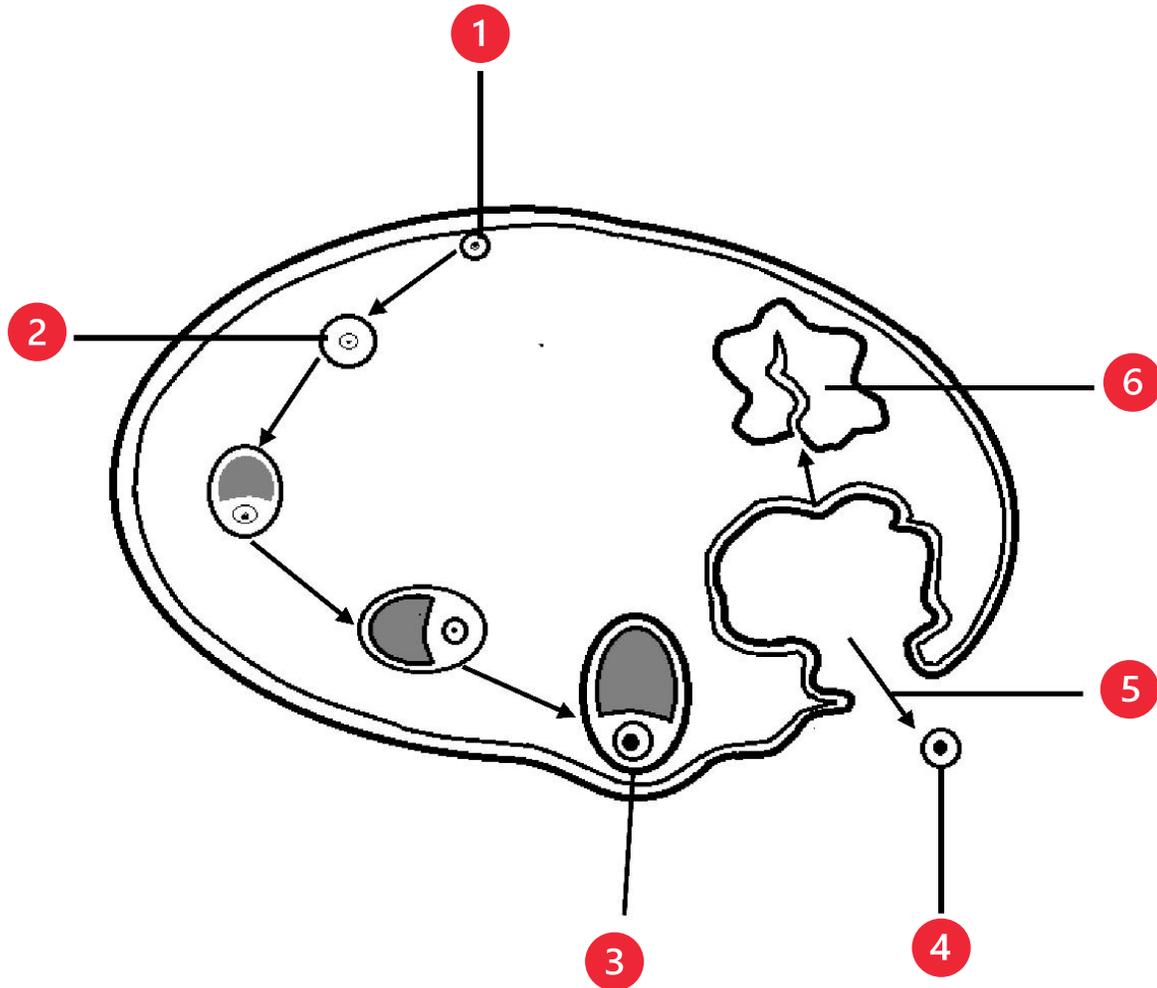
**ovum**

**corpus luteum**

Name the hormone that *causes* process 5 to occur.

Name the hormone(s) that is/are *released* by number 6.

Answer questions on the **ovarian cycle**:



ovulation

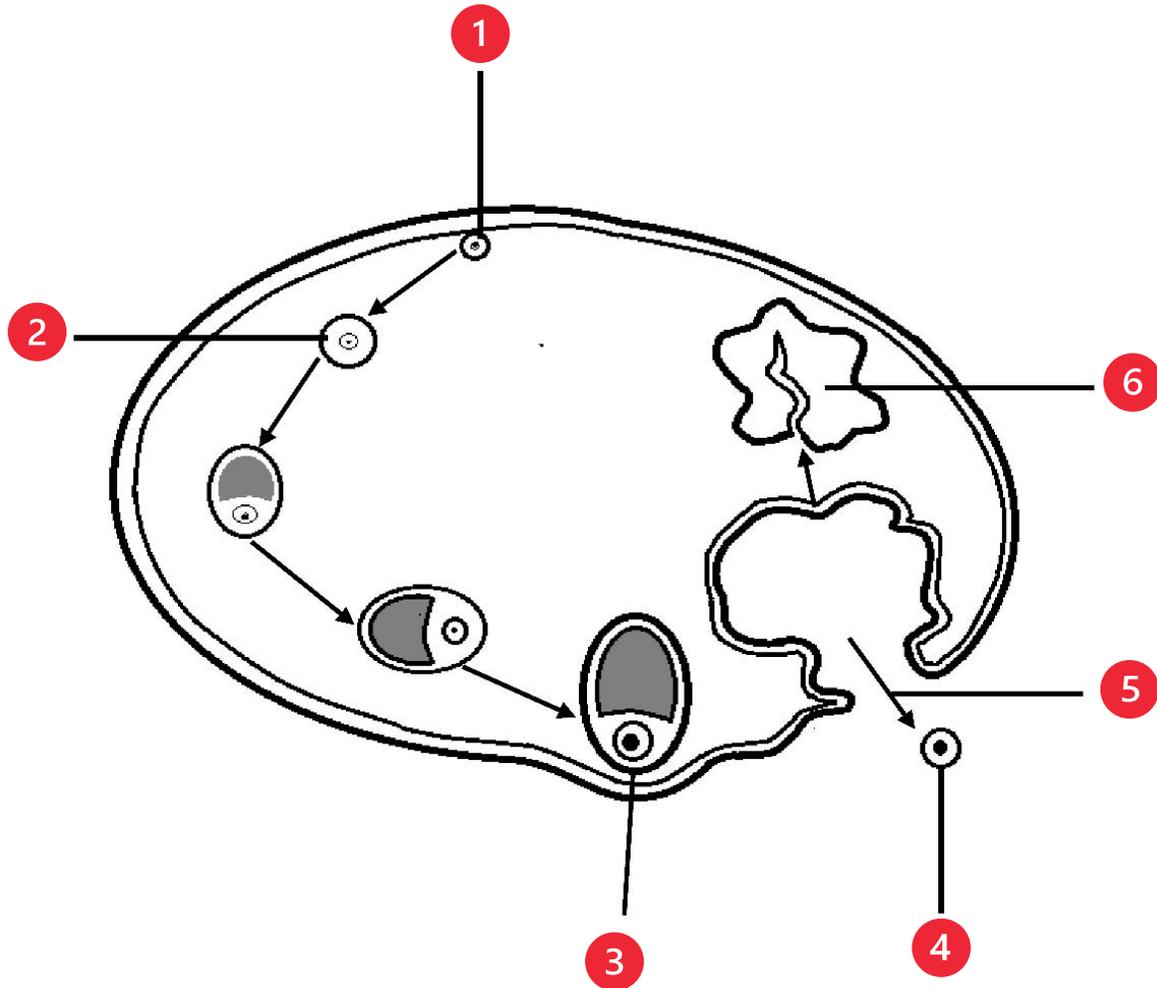
ovum

corpus luteum

LH

Name the hormone(s) that is/are released by number 6.

Answer questions on the **ovarian cycle**:



ovulation

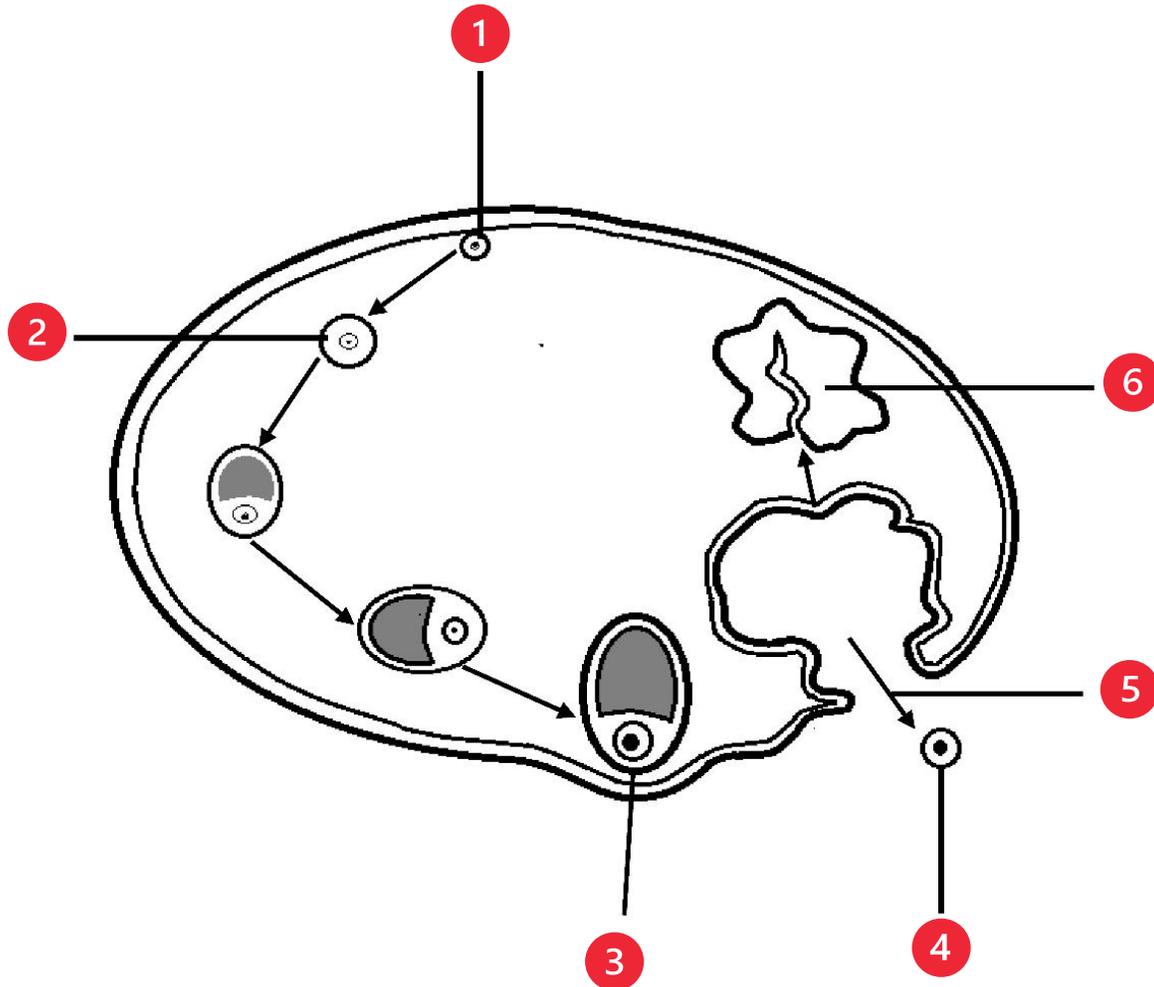
ovum

corpus luteum

LH

oestrogen (little)  
progesterone (lots)

Answer questions on the **ovarian cycle**:



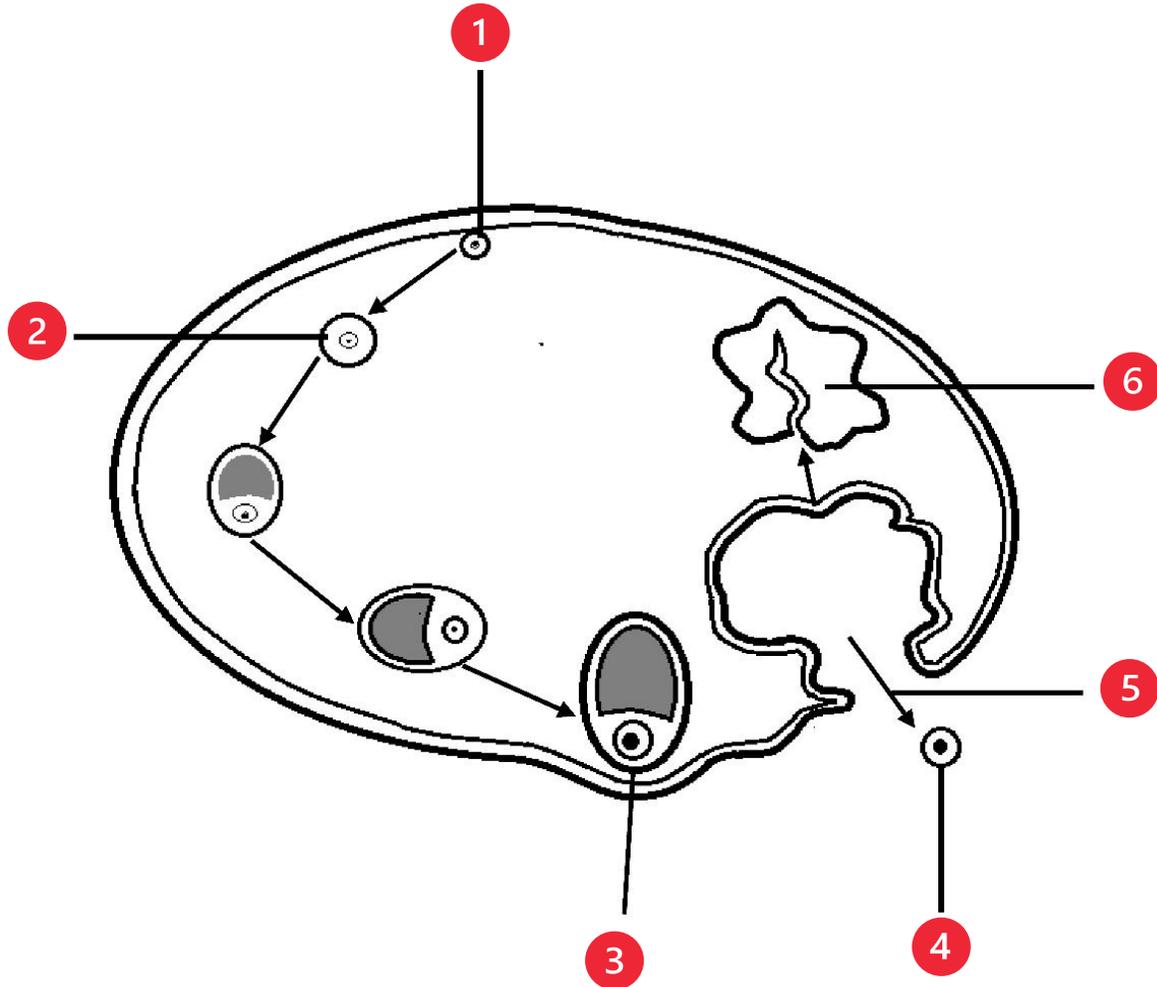
On which day of the menstrual cycle does process 4 normally occur?

The woman becomes pregnant. Describe what happens to number 6.

The woman does not become pregnant. Describe what happens to number 6.

If no pregnancy occurs, explain how changes to number 6 will affect the brain and the development of number 1.

Answer questions on the **ovarian cycle**:



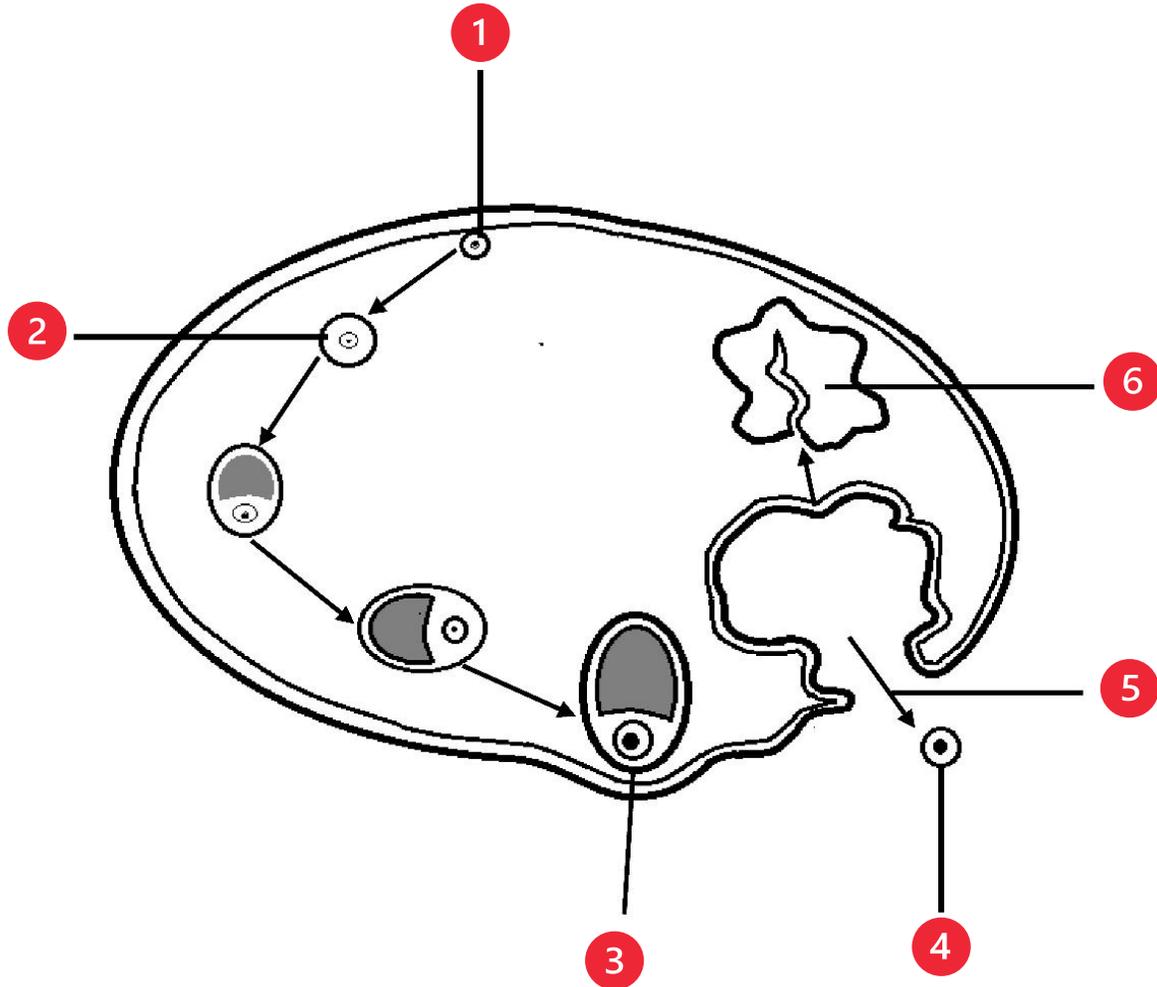
**Day 14**

The woman becomes pregnant. Describe what happens to number 6.

The woman does not become pregnant. Describe what happens to number 6.

If no pregnancy occurs, explain how changes to number 6 will affect the brain and the development of number 1.

Answer questions on the **ovarian cycle**:



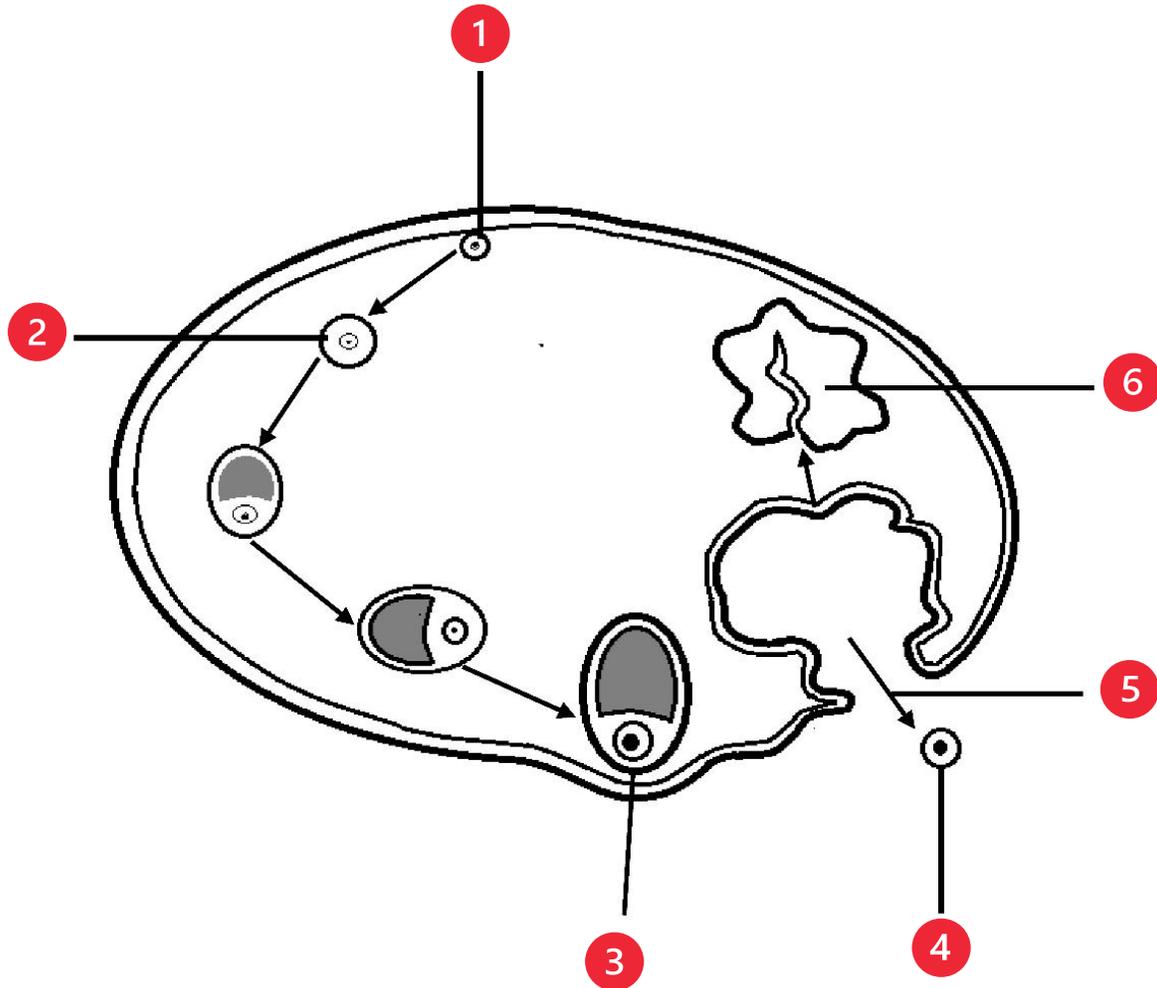
**Day 14**

- **Stays intact**
- **Continues to secrete progesterone & oestrogen**

**The woman does not become pregnant. Describe what happens to number 6.**

**If no pregnancy occurs, explain how changes to number 6 will affect the brain and the development of number 1.**

Answer questions on the **ovarian cycle**:



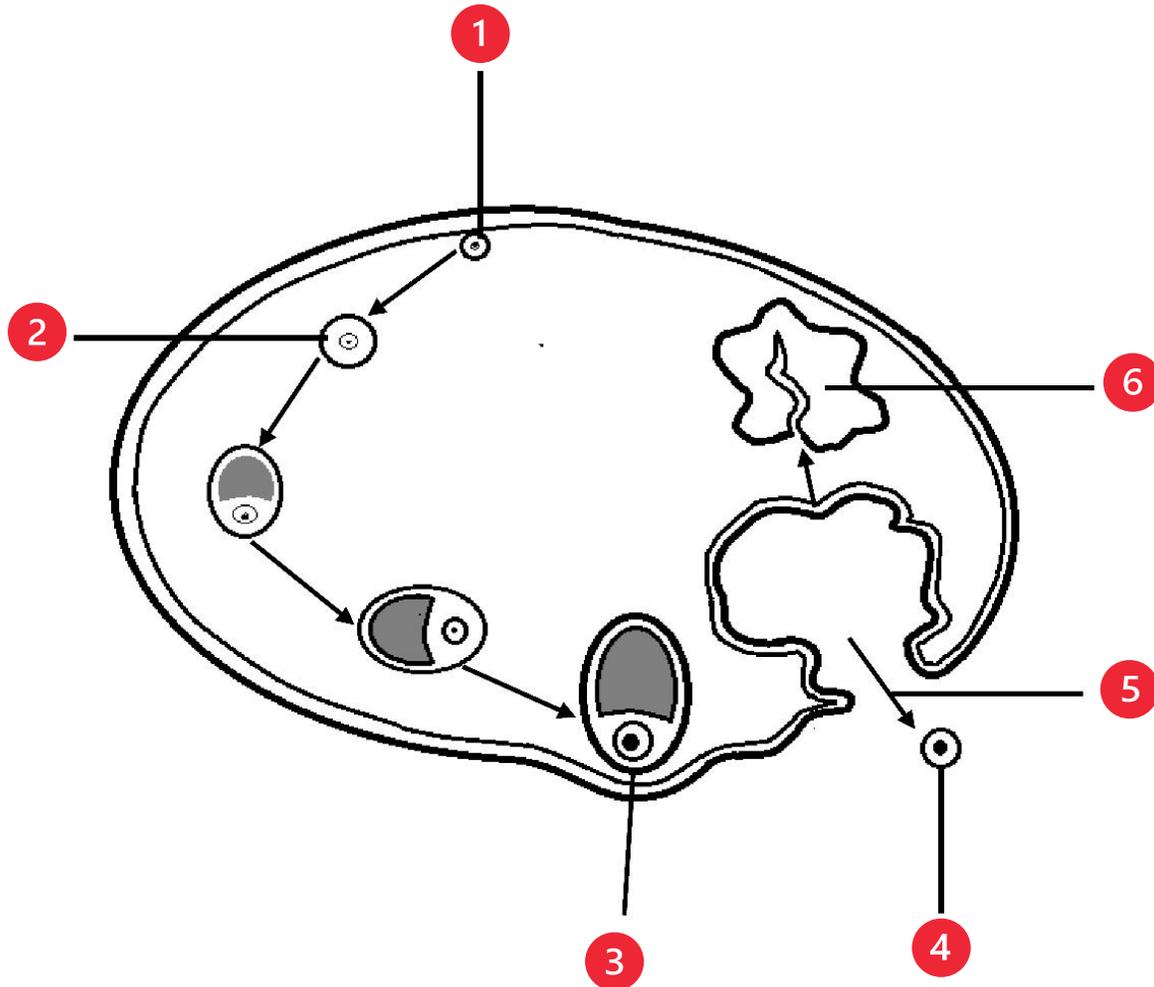
**Day 14**

- **Stays intact**
- **Continues to secrete progesterone & oestrogen**

- **Disintegrates**
- **Progesterone and oestrogen levels decrease**

**If no pregnancy occurs, explain how changes to number 6 will affect the brain and the development of number 1.**

## Answer questions on the **ovarian cycle**:



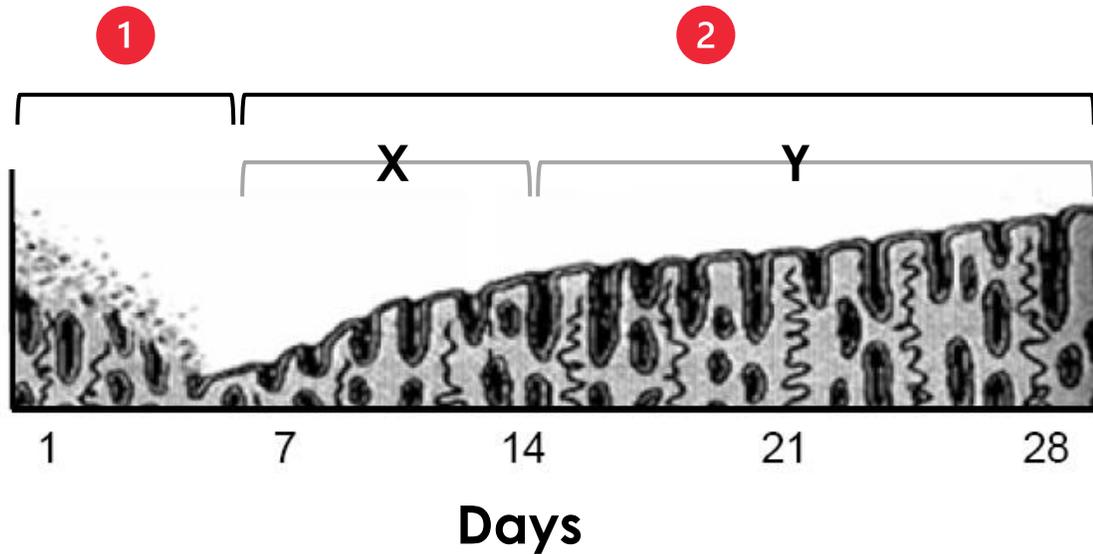
### Day 14

- Stays intact
- Continues to secrete progesterone & oestrogen

- Disintegrates
- Progesterone and oestrogen levels decrease

- If the corpus luteum disintegrates
- Progesterone and oestrogen secretion decreases / their levels decrease
- No more inhibition of the pituitary (in the brain)
- Levels of FSH and LH increase
- New follicles develop from number 1

Answer questions on the **uterine cycle**:



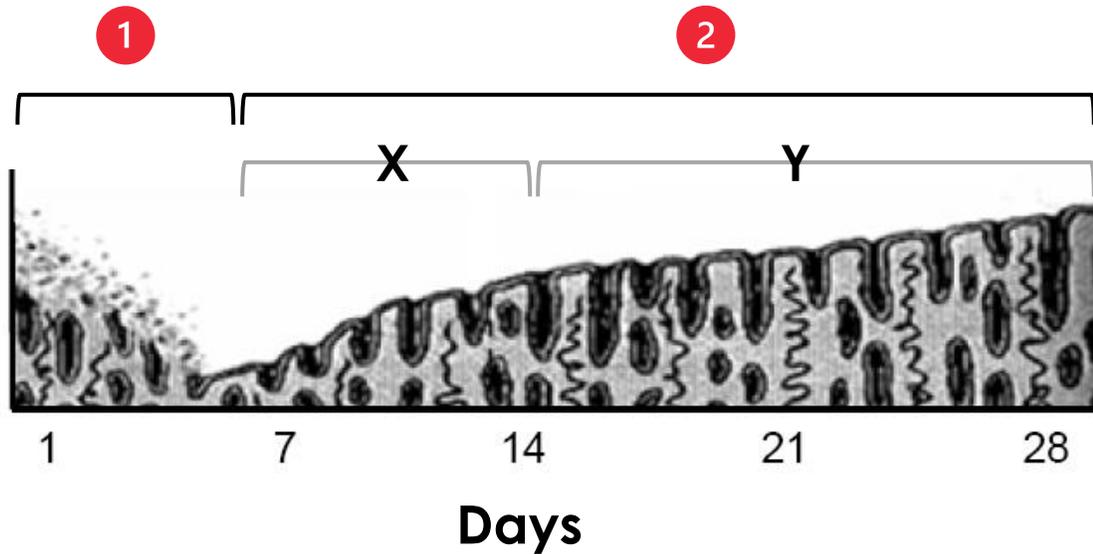
How long is the menstrual cycle?

Name the process that occurs during phase 1.

During phase 1, describe the hormone levels as HIGH or LOW:

- FSH
- LH
- Oestrogen
- Progesterone

Answer questions on the **uterine cycle**:



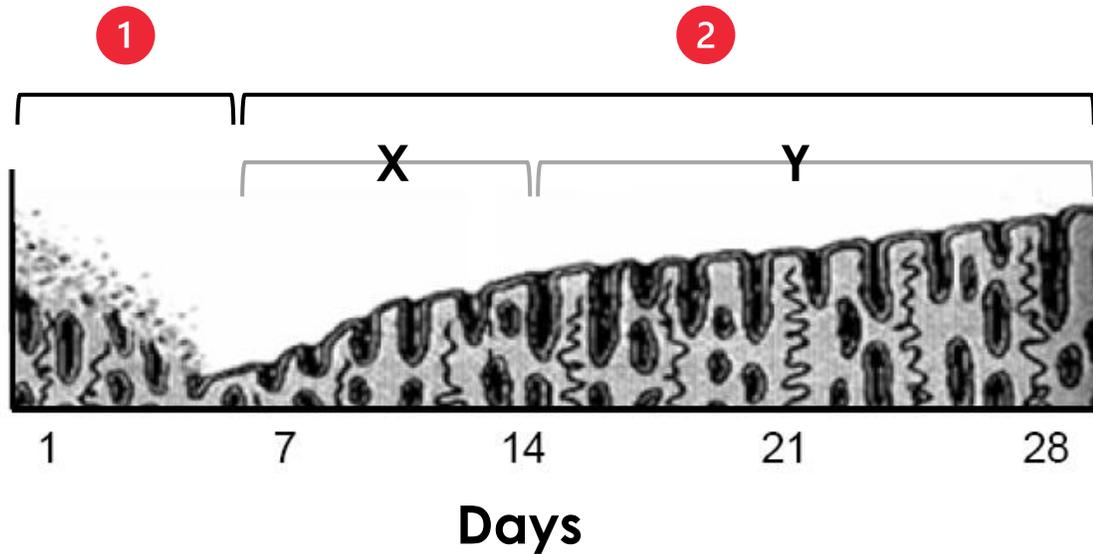
**28 days**

Name the process that occurs during phase 1.

During phase 1, describe the hormone levels as HIGH or LOW:

- FSH
- LH
- Oestrogen
- Progesterone

Answer questions on the **uterine cycle**:



**28 days**

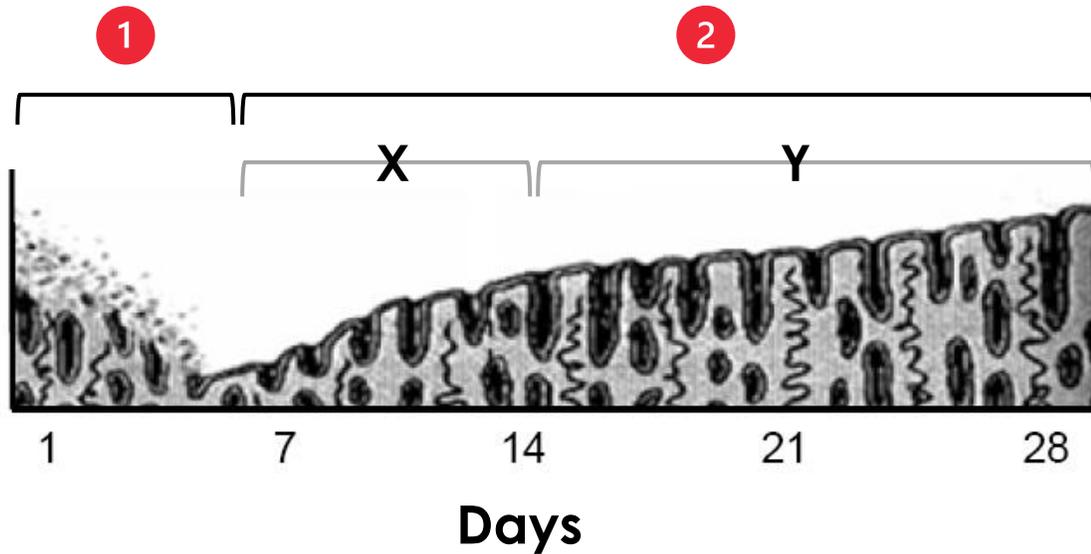
**Menstruation**

During phase 1, describe the hormone levels as HIGH or LOW:

- FSH
- LH
- Oestrogen
- Progesterone



# Answer questions on the **uterine cycle**:



**28 days**

**Menstruation**

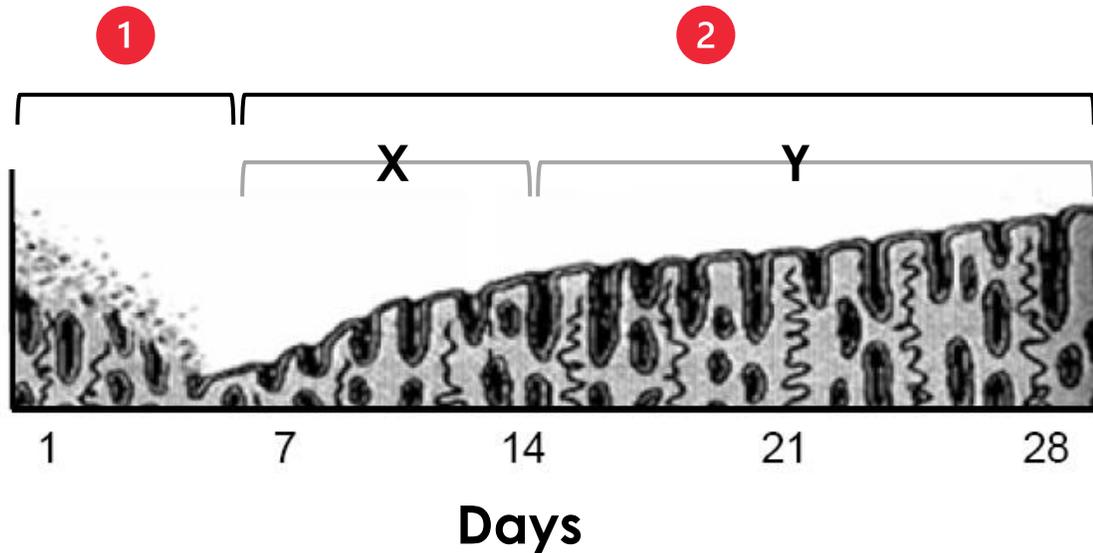
- **FSH = high (increasing)**
- **LH = high**
- **Oestrogen = low**
- **Progesterone = low**

Progesterone levels are low, therefore hypophysis is no longer inhibited

No corpus luteum present AND follicles are still small, i.e. little oestrogen secreted



Answer questions on the **uterine cycle**:



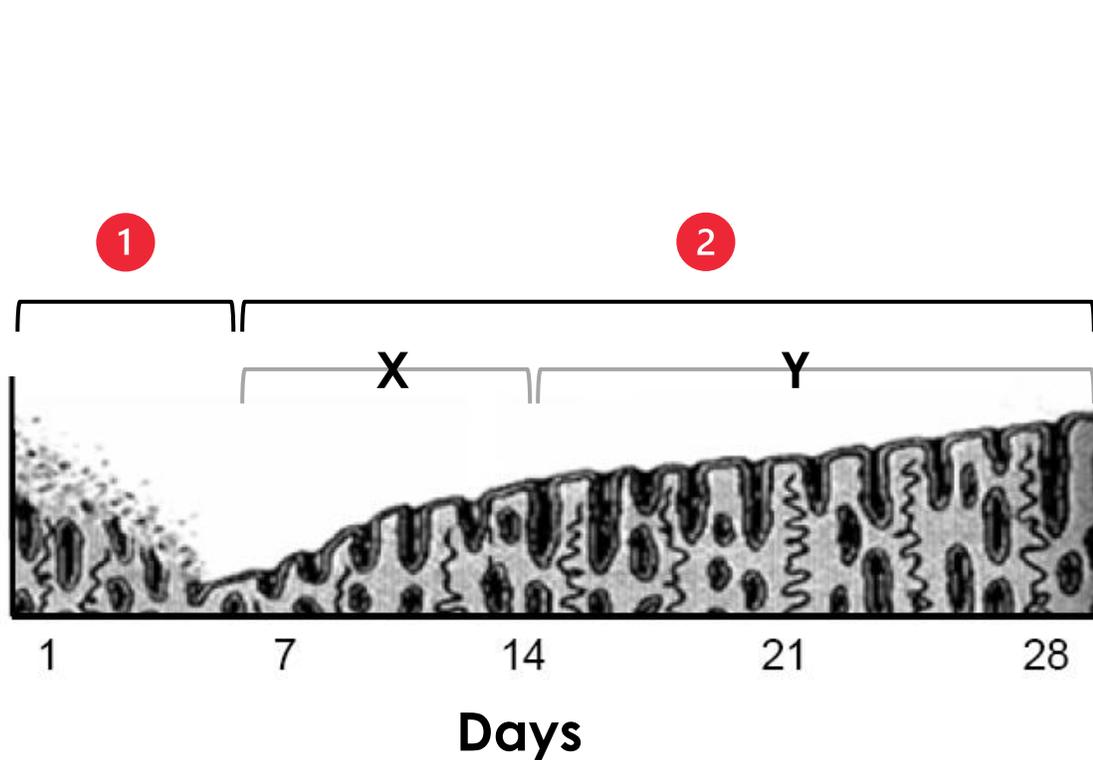
During phase 2, describe the hormone levels as HIGH or LOW:

- Oestrogen during interval **X**
- Progesterone during interval **X**
- Progesterone during interval **Y**
- FSH and LH during interval **Y**

Describe the changes in the endometrium during phase 2.

Is this woman pregnant?  
Explain your answer with evidence from the diagram.

# Answer questions on the **uterine cycle**:



- **Oestrogen (X) = high**
- **Progesterone (X) = low**
- **Progesterone (Y) = high**
- **FSH & LH = low**

Secreted by  
developing follicle

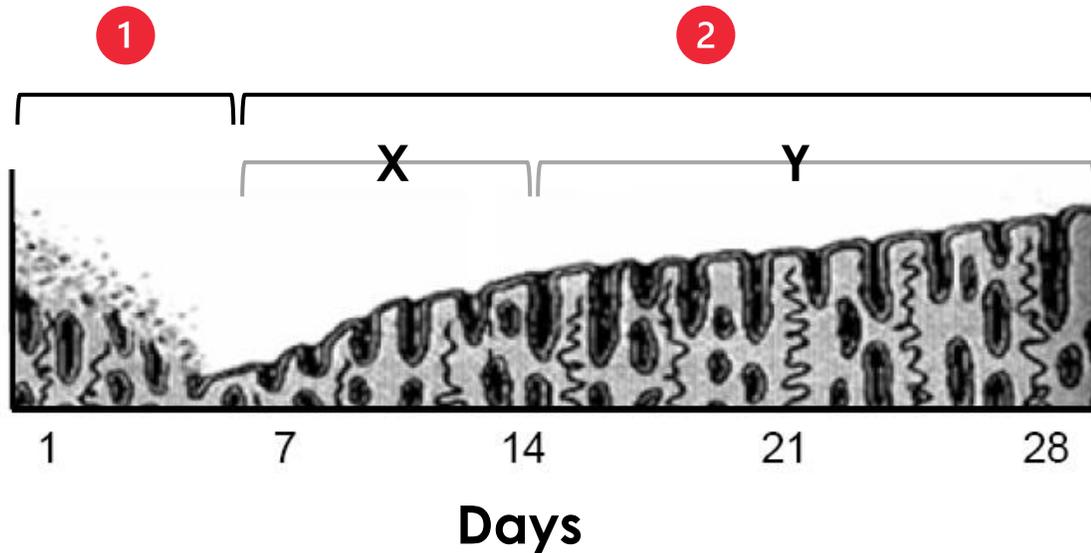
Is secreted by the corpus  
Luteum which only forms  
after ovulation, i.e. day 14

Progesterone inhibits their release  
through negative feedback

**Describe the changes in the  
endometrium during phase 2.**

**Is this woman pregnant?  
Explain your answer with evidence  
from the diagram.**

Answer questions on the **uterine cycle**:

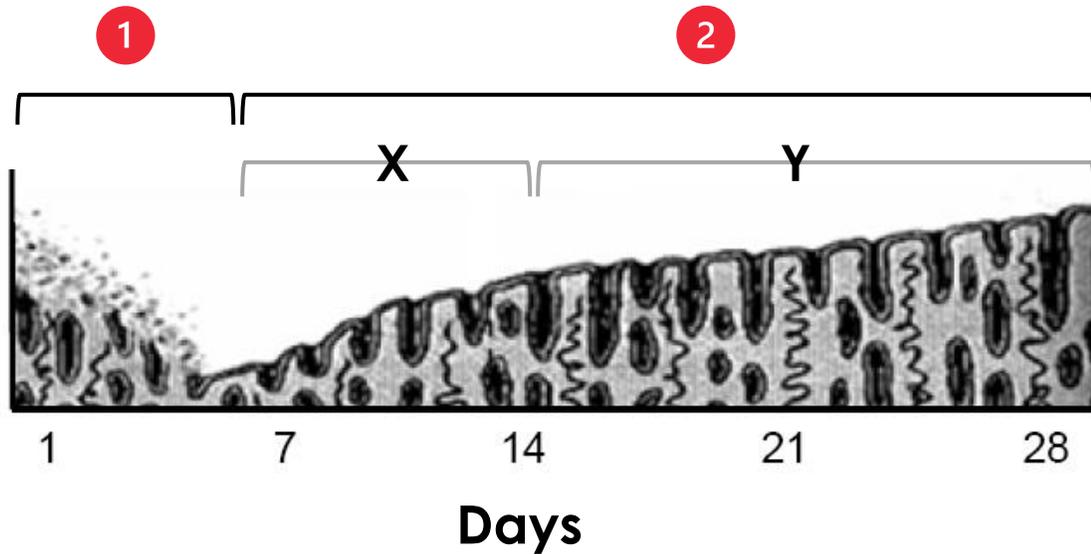


- Oestrogen (X) = high
- Progesterone (X) = low
- Progesterone (Y) = high
- FSH & LH = low

Becomes more vascular (more blood vessels), glandular (more glands) and thicker.

Is this woman pregnant?  
Explain your answer with evidence from the diagram.

## Answer questions on the **uterine cycle**:

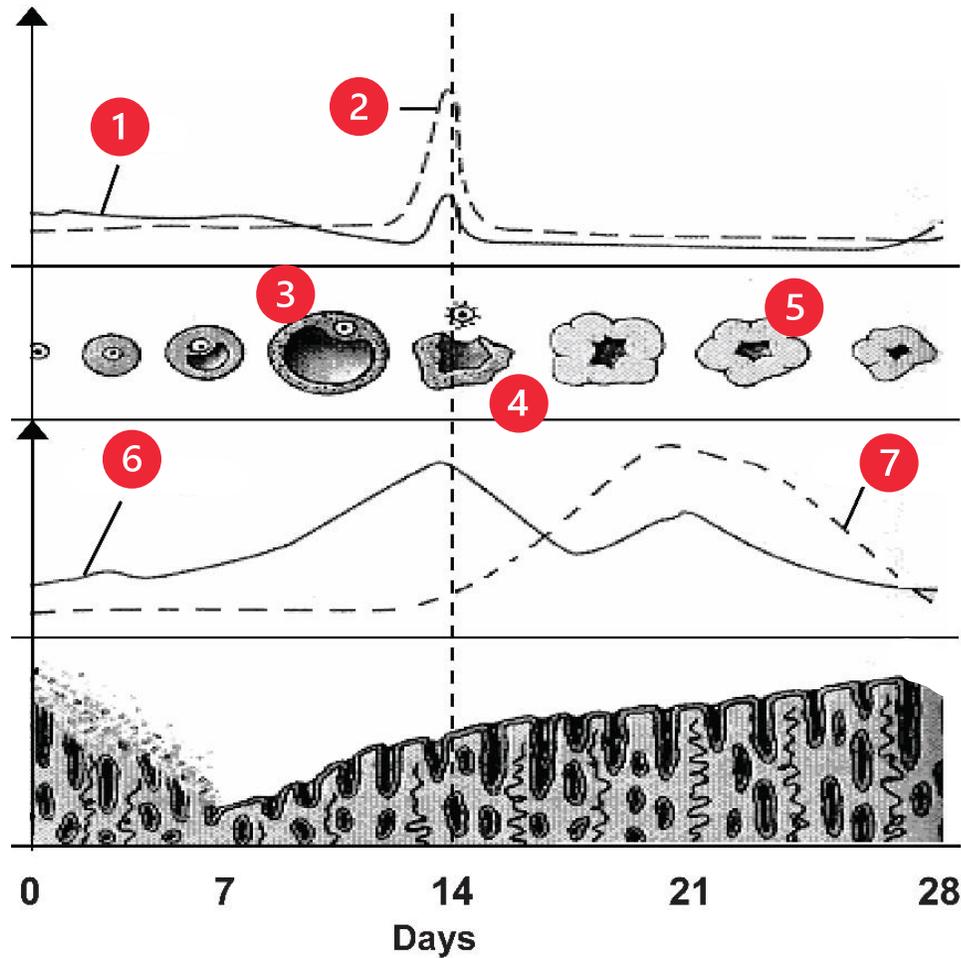


- Oestrogen (X) = high
- Progesterone (X) = low
- Progesterone (Y) = high
- FSH & LH = low

Becomes more vascular (more blood vessels), glandular (more glands) and thicker.

Yes, the endometrium continues to thicken after day 28 / does not break down after day 28 / stays intact after day 28

Answer questions on the **graph of the menstrual cycle**:



Identify hormones 1 and 2.

Name the gland that secretes hormones 1 and 2.

Identify structures 3 and 5.

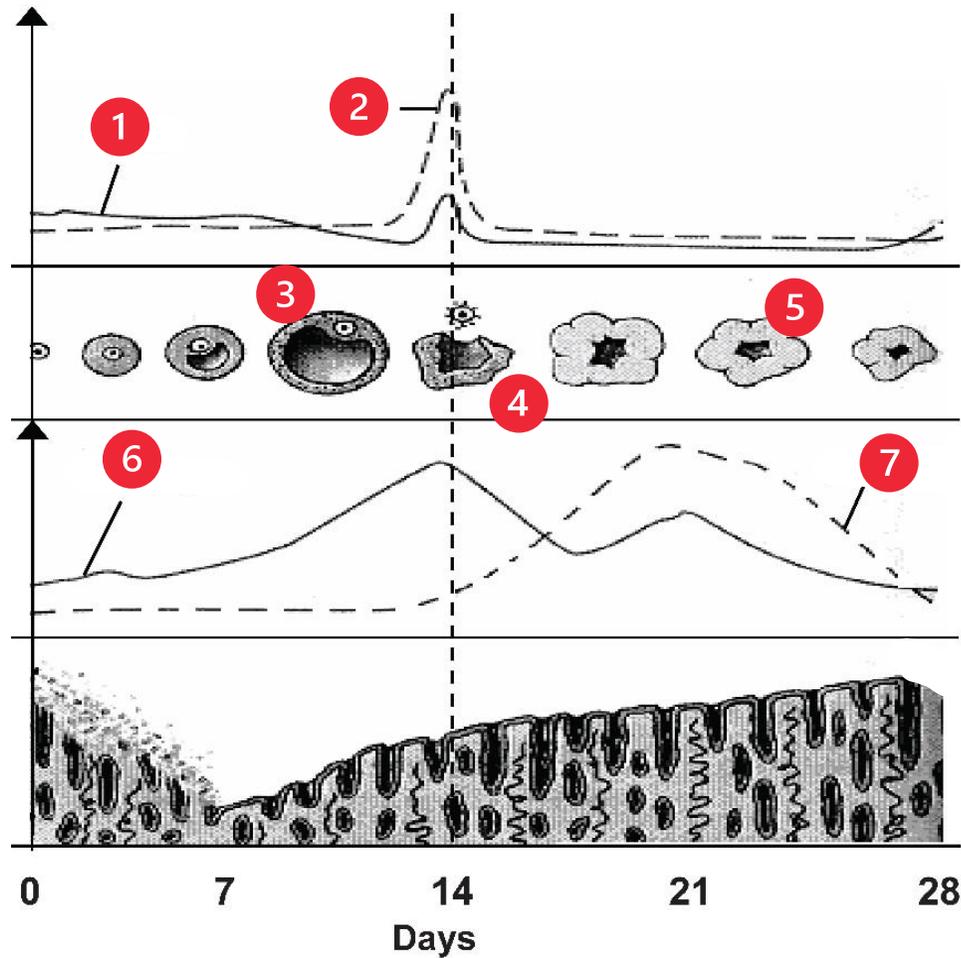
Identify process 4.

Identify hormones 6 and 7.

What structure secretes hormone 6 from day 0 to 14?

What structure secretes hormone 6 from day 14 to 28?

Answer questions on the **graph of the menstrual cycle**:



**1 – FSH** (*always increases first*)  
**2 – LH** (*only peaks at ovulation*)

**Name the gland that secretes hormones 1 and 2.**

**Identify structures 3 and 5.**

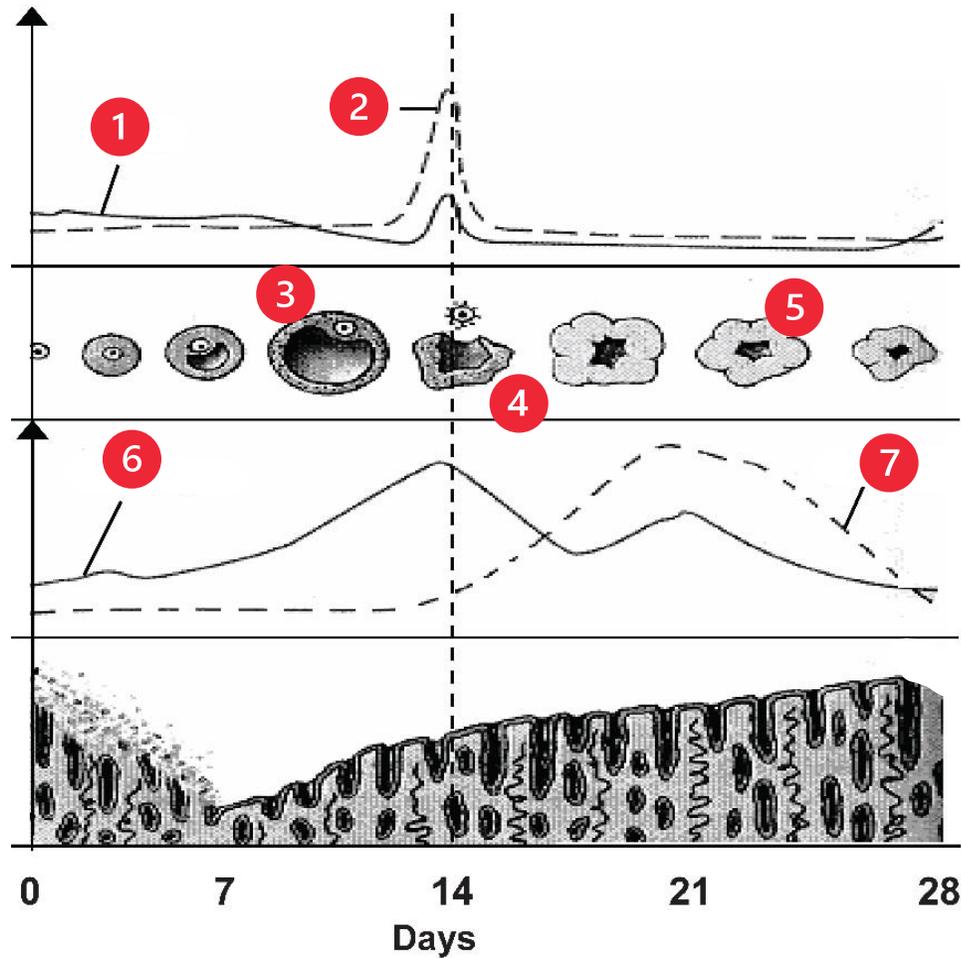
**Identify process 4.**

**Identify hormones 6 and 7.**

**What structure secretes hormone 6 from day 0 to 14?**

**What structure secretes hormone 6 from day 14 to 28?**

Answer questions on the **graph of the menstrual cycle:**



1 – FSH (always increases first)

2 – LH (only peaks at ovulation)

pituitary gland / hypophysis

Identify structures 3 and 5.

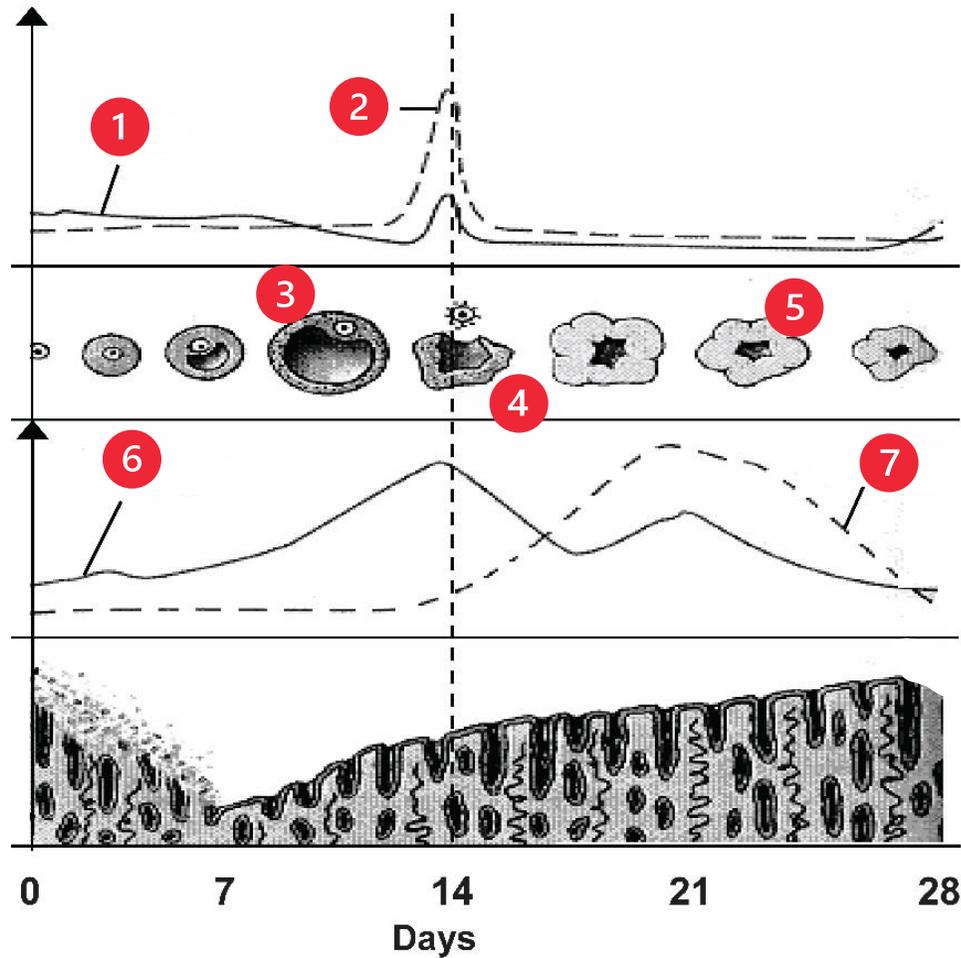
Identify process 4.

Identify hormones 6 and 7.

What structure secretes hormone 6 from day 0 to 14?

What structure secretes hormone 6 from day 14 to 28?

Answer questions on the **graph of the menstrual cycle:**



1 – FSH (always increases first)

2 – LH (only peaks at ovulation)

pituitary gland / hypophysis

3 – Graafian follicle; 5 – corpus luteum

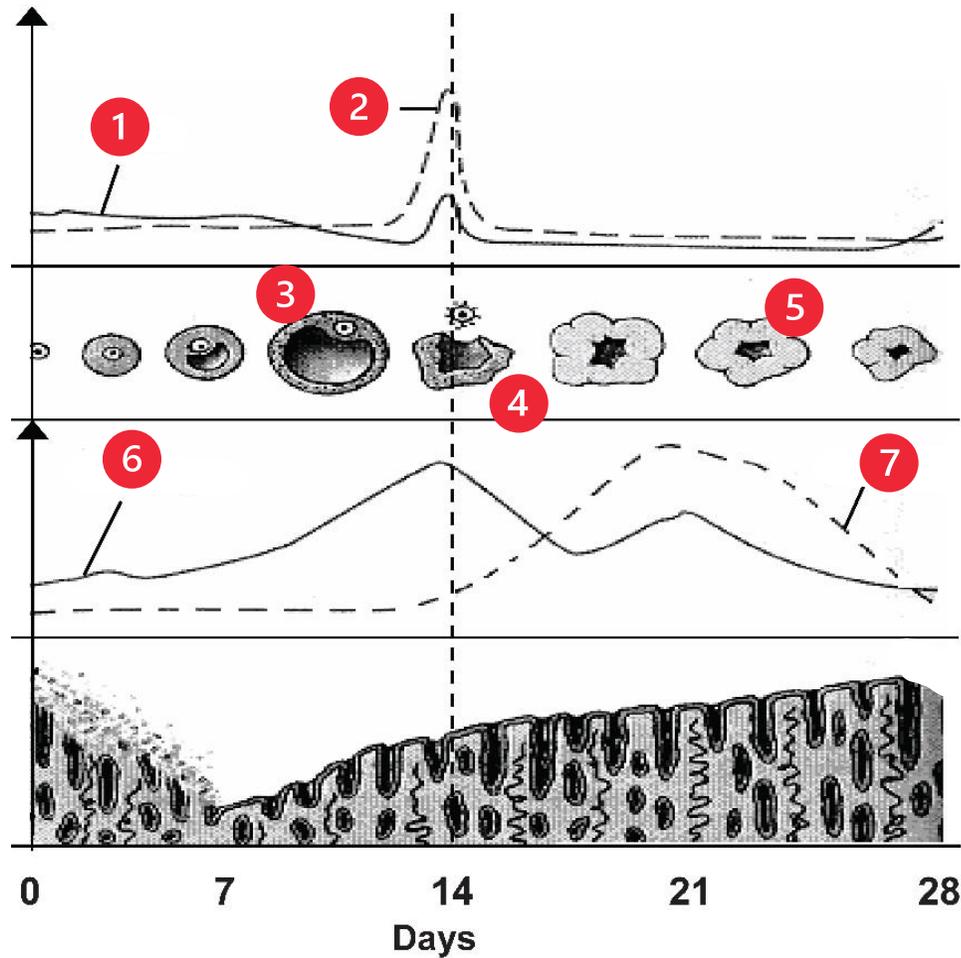
Identify process 4.

Identify hormones 6 and 7.

What structure secretes hormone 6 from day 0 to 14?

What structure secretes hormone 6 from day 14 to 28?

Answer questions on the **graph of the menstrual cycle:**



1 – FSH (always increases first)

2 – LH (only peaks at ovulation)

pituitary gland / hypophysis

3 – Graafian follicle; 5 – corpus luteum

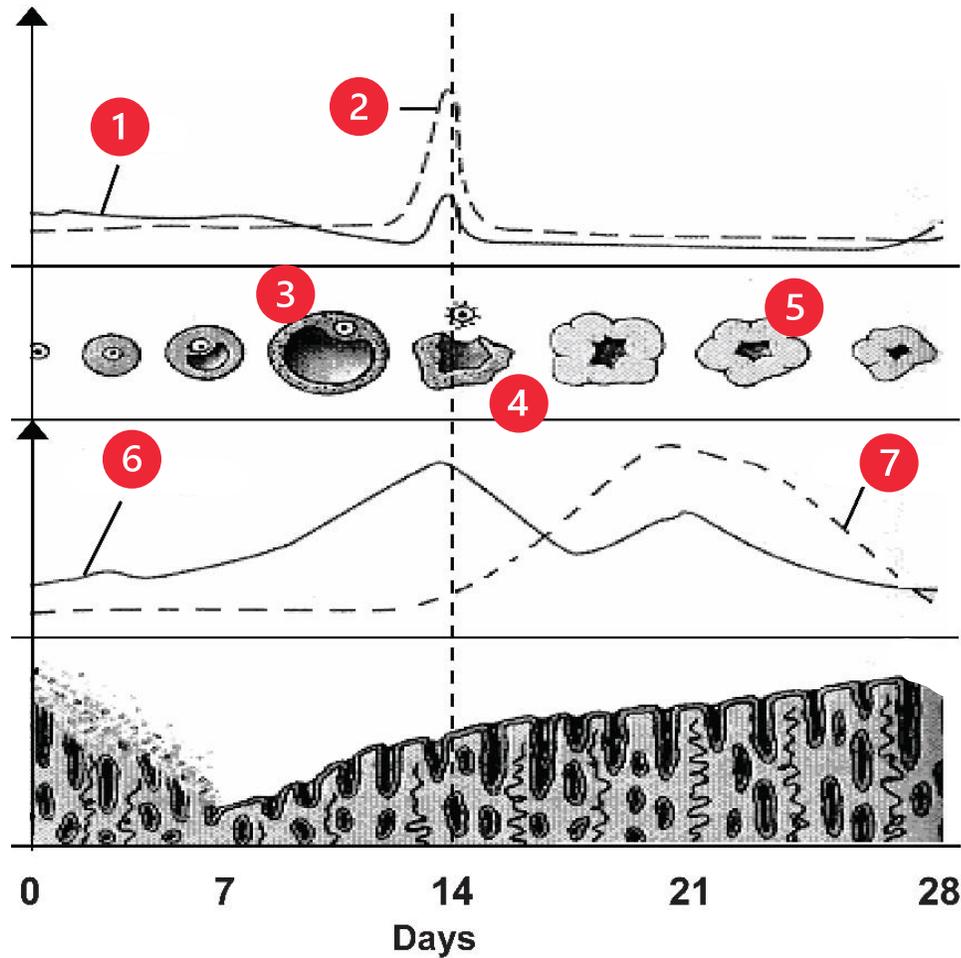
ovulation

Identify hormones 6 and 7.

What structure secretes hormone 6 from day 0 to 14?

What structure secretes hormone 6 from day 14 to 28?

Answer questions on the **graph of the menstrual cycle:**



**1 – FSH** (always increases first)

**2 – LH** (only peaks at ovulation)

**pituitary gland / hypophysis**

**3 – Graafian follicle; 5 – corpus luteum**

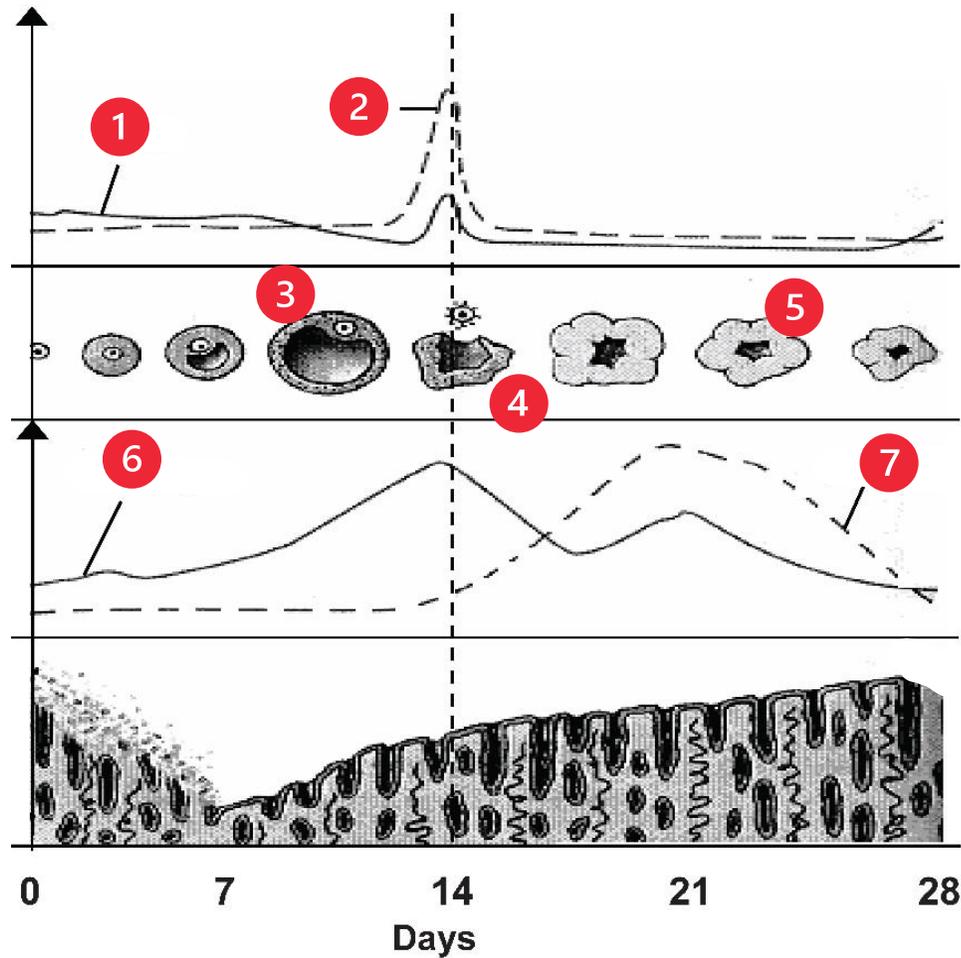
**ovulation**

**6 – oestrogen ; 7 progesterone**

**What structure secretes hormone 6 from day 0 to 14?**

**What structure secretes hormone 6 from day 14 to 28?**

Answer questions on the **graph of the menstrual cycle**:



1 – FSH (always increases first)

2 – LH (only peaks at ovulation)

pituitary gland / hypophysis

3 – Graafian follicle; 5 – corpus luteum

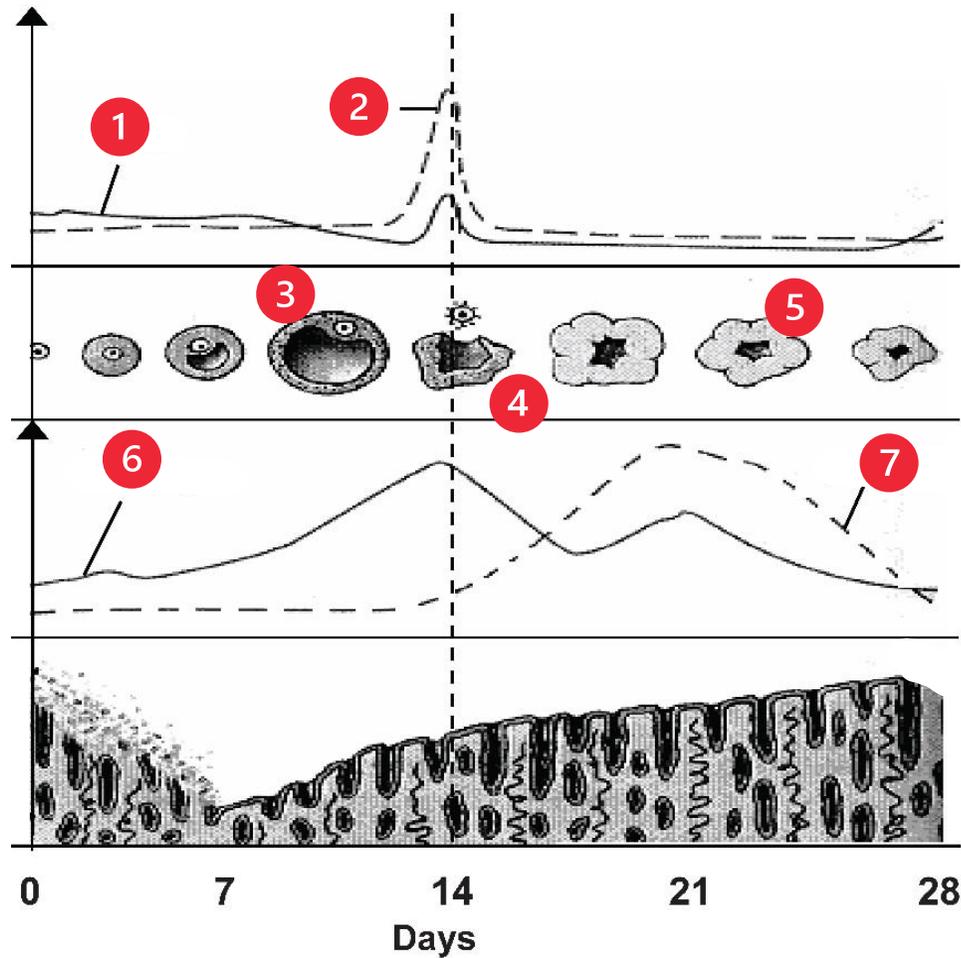
ovulation

6 – oestrogen ; 7 progesterone

developing follicle

What structure secretes hormone 6 from day 14 to 28?

Answer questions on the **graph of the menstrual cycle:**



1 – FSH (always increases first)

2 – LH (only peaks at ovulation)

pituitary gland / hypophysis

3 – Graafian follicle; 5 – corpus luteum

ovulation

6 – oestrogen ; 7 progesterone

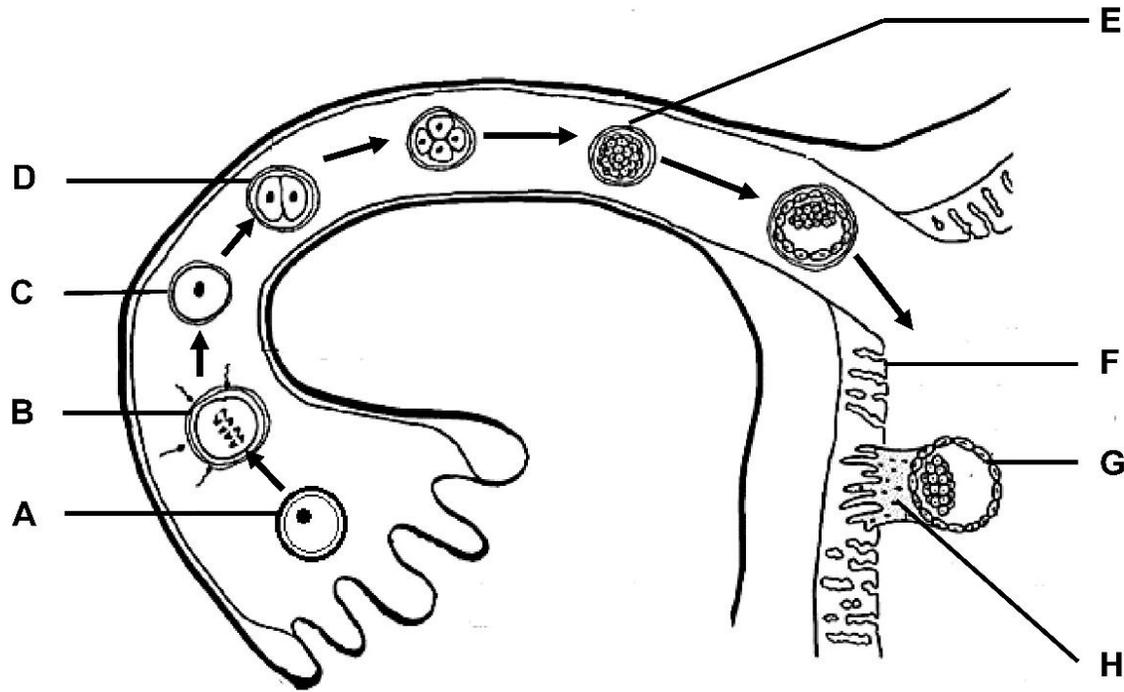
developing follicle

corpus luteum



# FERTILISATION & DEVELOPMENT OF THE ZYGOTE

Answer questions on the **fertilisation and development of the zygote**:



Identify A.

Identify process B.

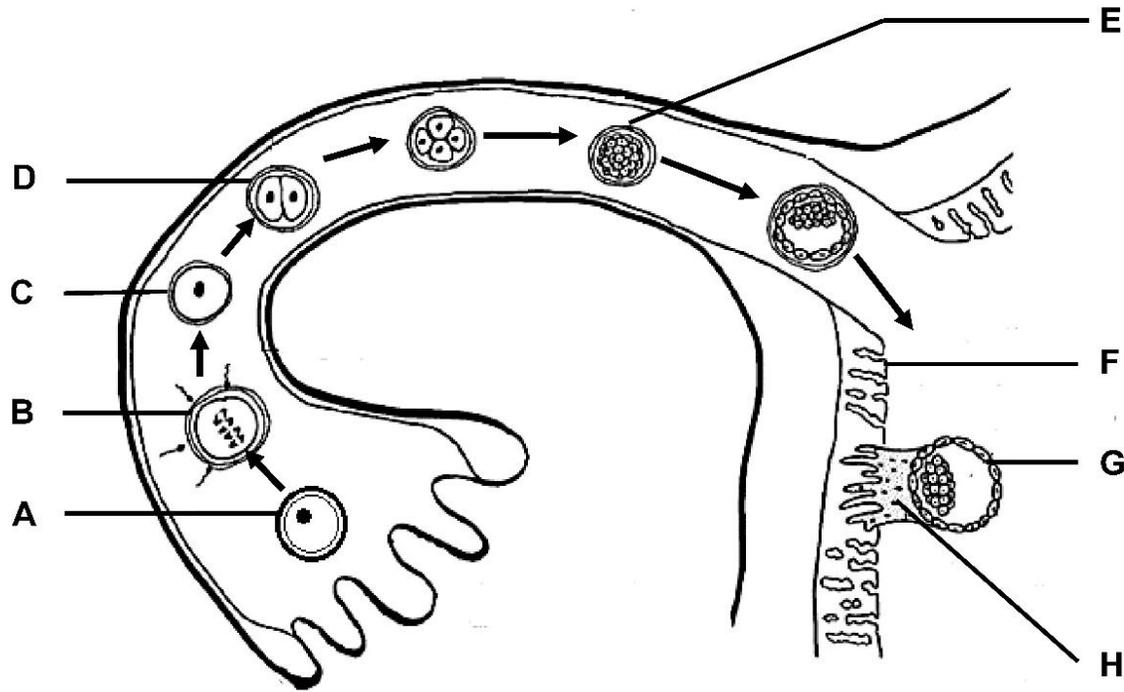
Describe process B.

Identify structure C.

What is the chromosome number of:

- 1) A
- 2) C

# Answer questions on the **fertilisation and development of the zygote**:



**ovum**

**Identify process B.**

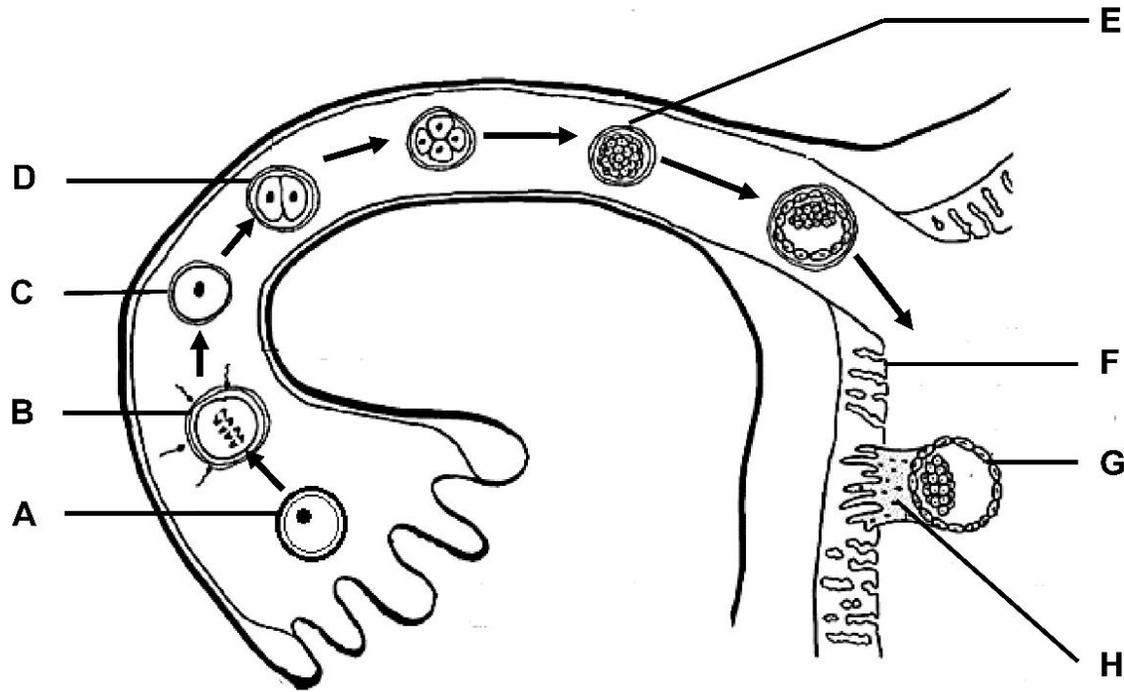
**Describe process B.**

**Identify structure C.**

**What is the chromosome number of:**

- 1) **A**
- 2) **C**

# Answer questions on the **fertilisation and development of the zygote**:



**ovum**

**fertilisation**

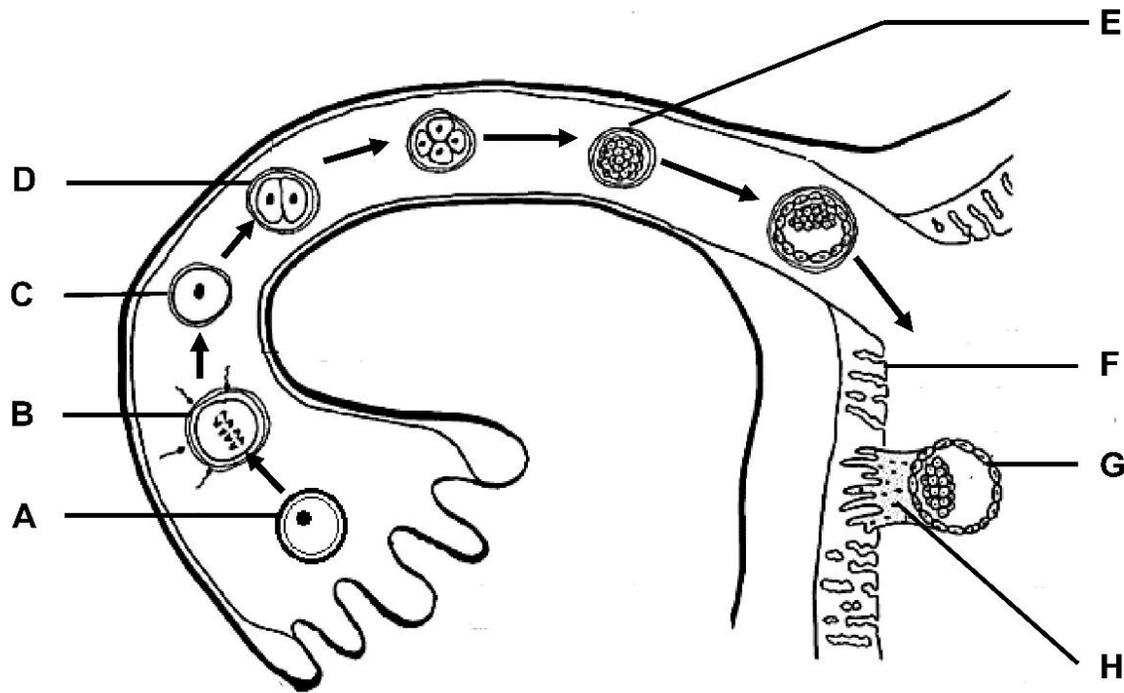
**Describe process B.**

**Identify structure C.**

**What is the chromosome number of:**

- 1) A
- 2) C

## Answer questions on the **fertilisation and development of the zygote**:



**ovum**

**fertilisation**

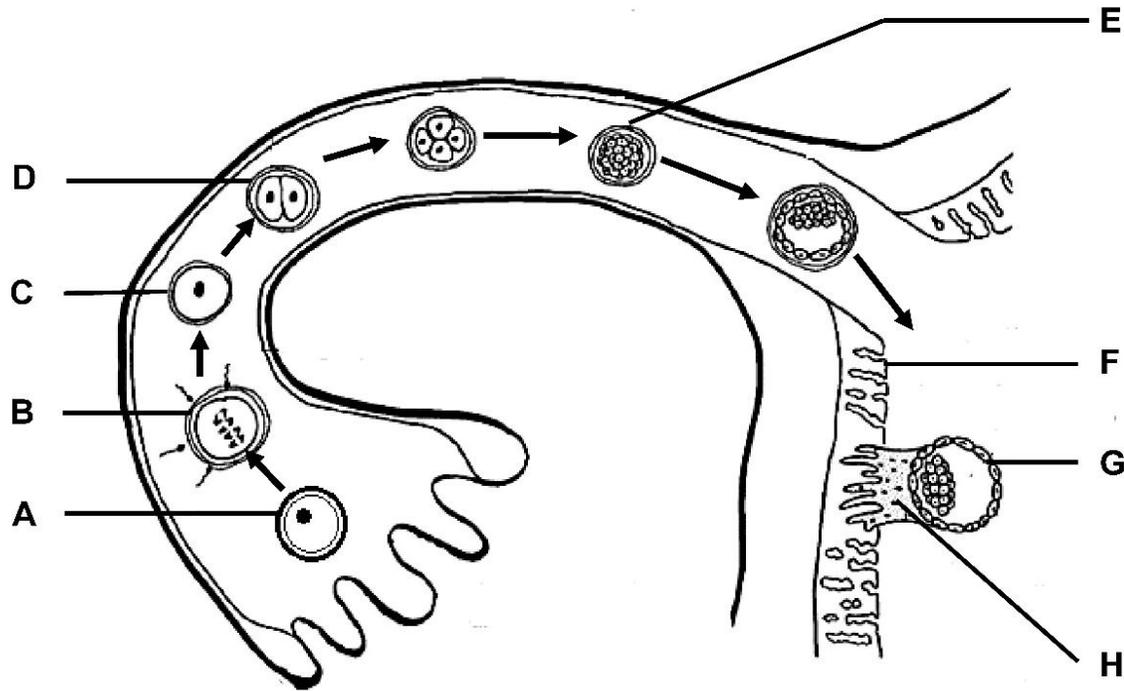
- occurs in the fallopian tubes
- acrosome of sperm cell dissolves follicular layer around ovum
- one sperm cell makes contact with the ovum's membrane
- nucleus of the sperm enters the ovum
- haploid nucleus of the sperm fuses with the haploid nucleus of the ovum
- to form a diploid zygote

**Identify structure C.**

**What is the chromosome number of:**

- 1) A
- 2) C

## Answer questions on the **fertilisation and development of the zygote**:



**ovum**

**fertilisation**

- occurs in the fallopian tubes
- acrosome of sperm cell dissolves follicular layer around ovum
- one sperm cell makes contact with the ovum's membrane
- nucleus of the sperm enters the ovum
- haploid nucleus of the sperm fuses with the haploid nucleus of the ovum
- to form a diploid zygote

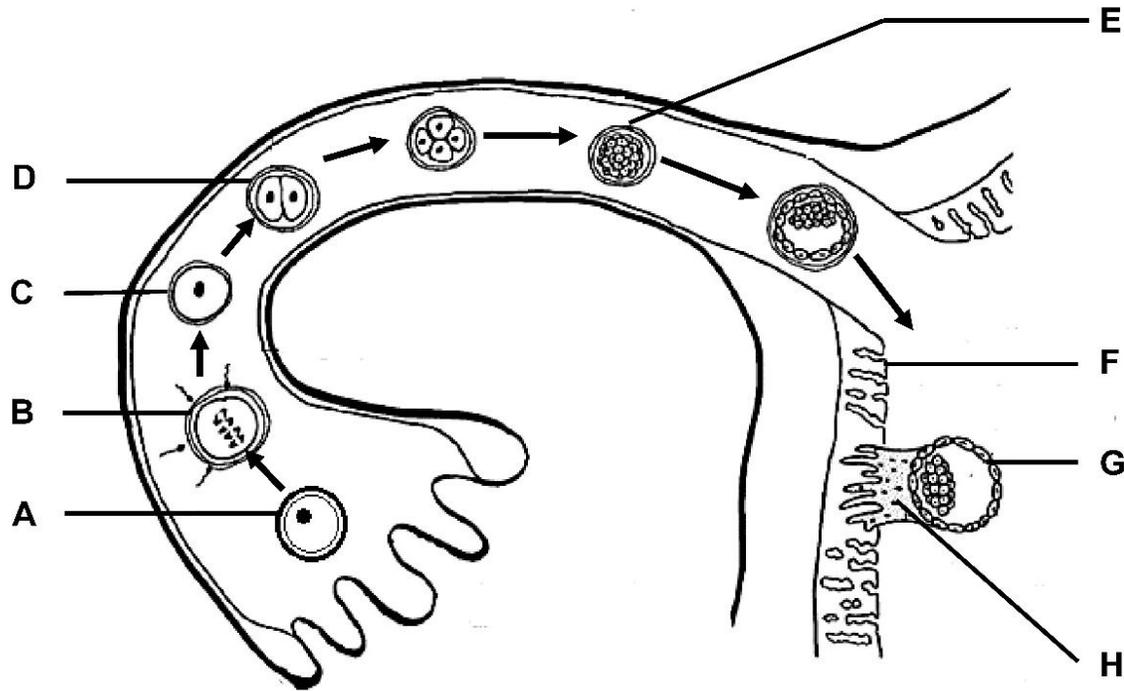
**zygote**

What is the chromosome number of:

- 1) A
- 2) C



## Answer questions on the **fertilisation and development of the zygote**:



**ovum**

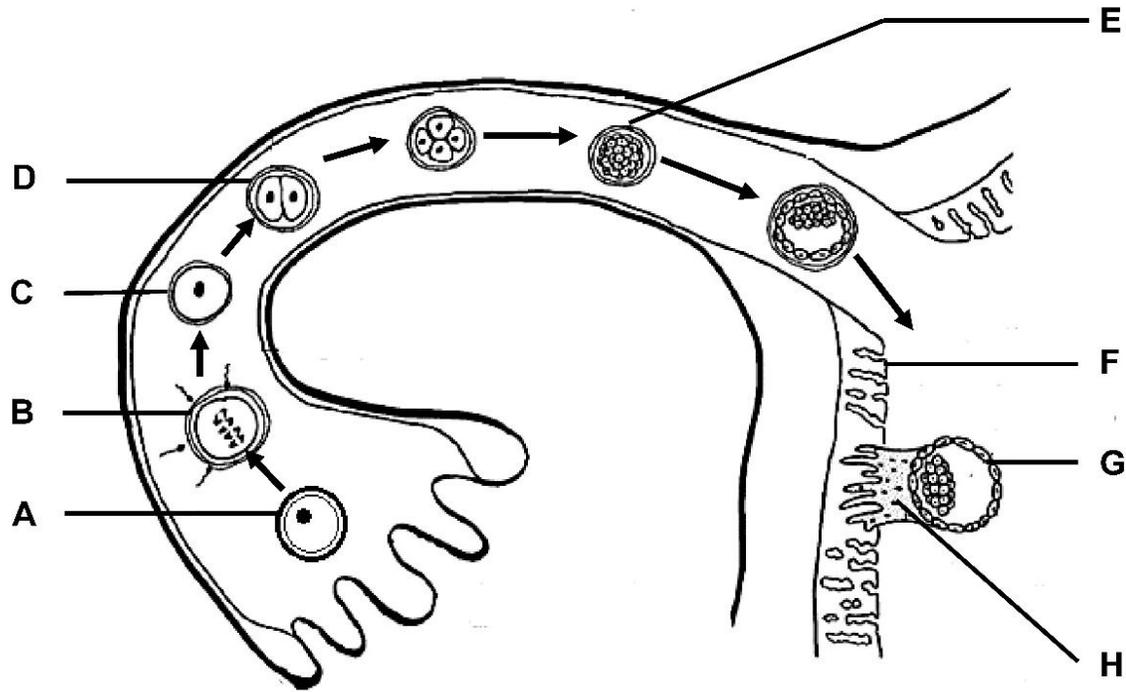
**fertilisation**

- occurs in the fallopian tubes
- acrosome of sperm cell dissolves follicular layer around ovum
- one sperm cell makes contact with the ovum's membrane
- nucleus of the sperm enters the ovum
- haploid nucleus of the sperm fuses with the haploid nucleus of the ovum
- to form a diploid zygote

**zygote**

- 1) 23 (haploid)
- 2) 46 (diploid)

Answer questions on the **fertilisation and development of the zygote**:



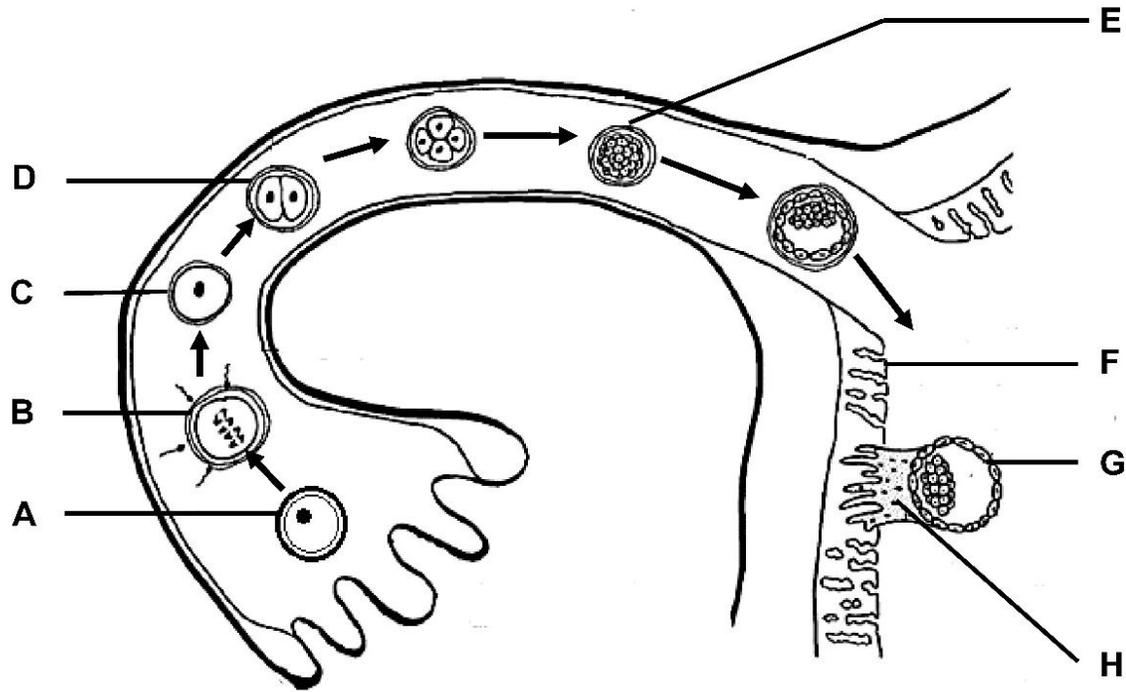
Identify process occurring at D.

Identify E and G.

Identify F.

Identify process occurring at H.

Answer questions on the **fertilisation and development of the zygote**:



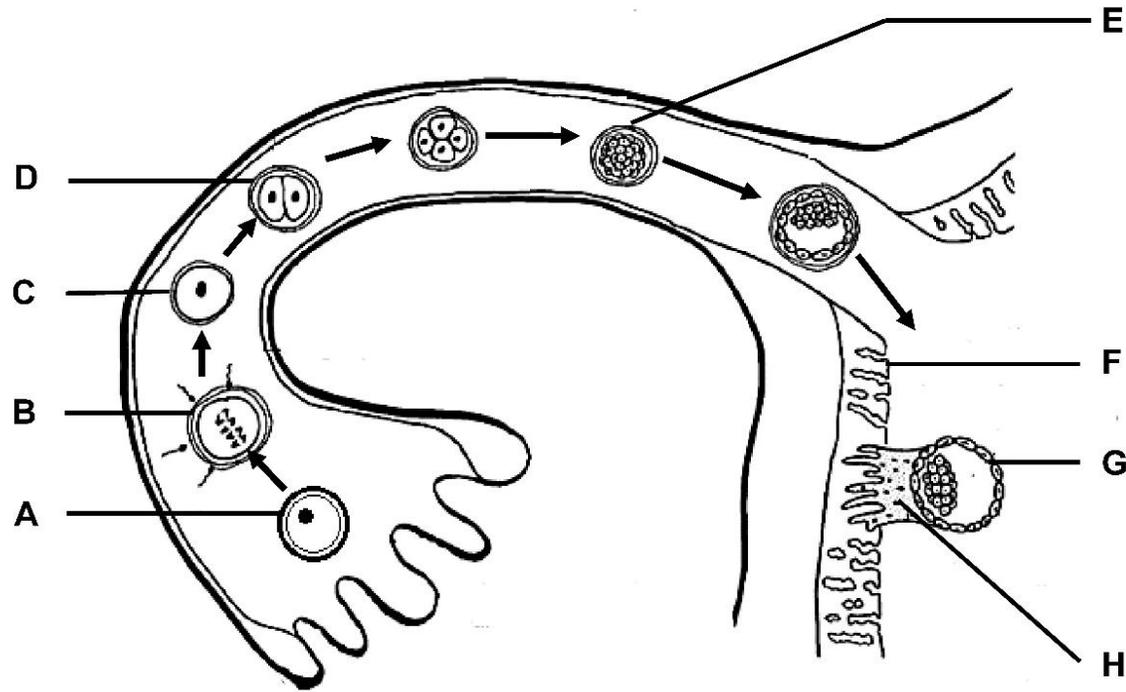
**mitosis**

Identify E and G.

Identify F.

Identify process occurring at H.

Answer questions on the **fertilisation and development of the zygote**:



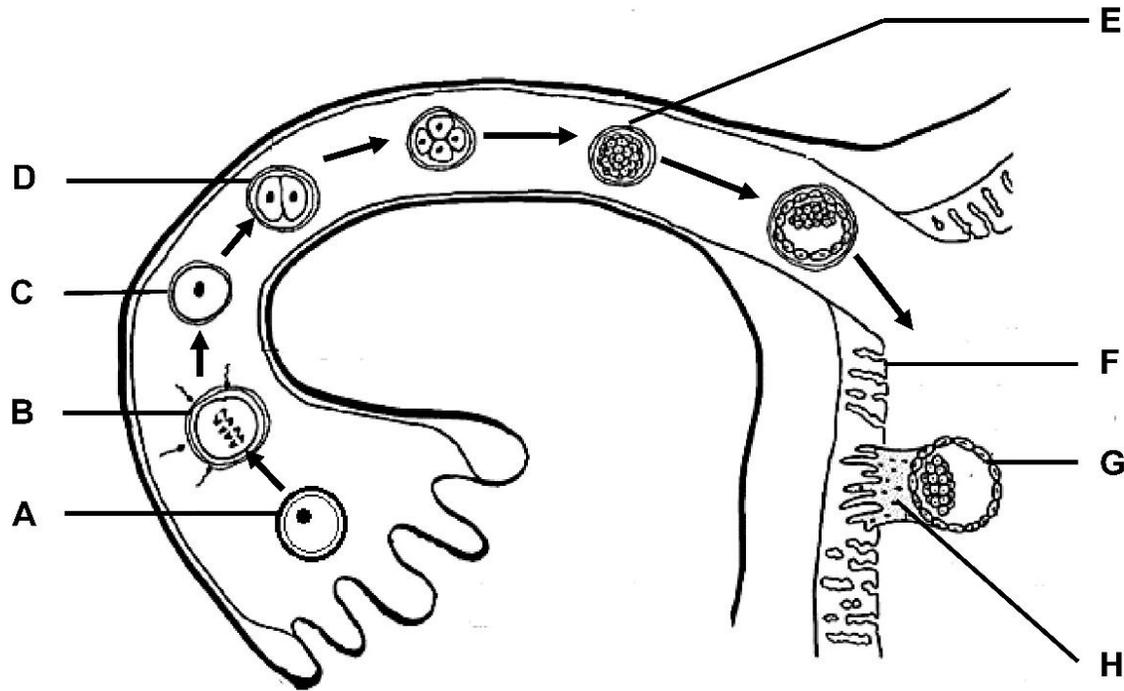
**mitosis**

**E – morula ; G – blastocyst**

**Identify F.**

**Identify process occurring at H.**

Answer questions on the **fertilisation and development of the zygote**:



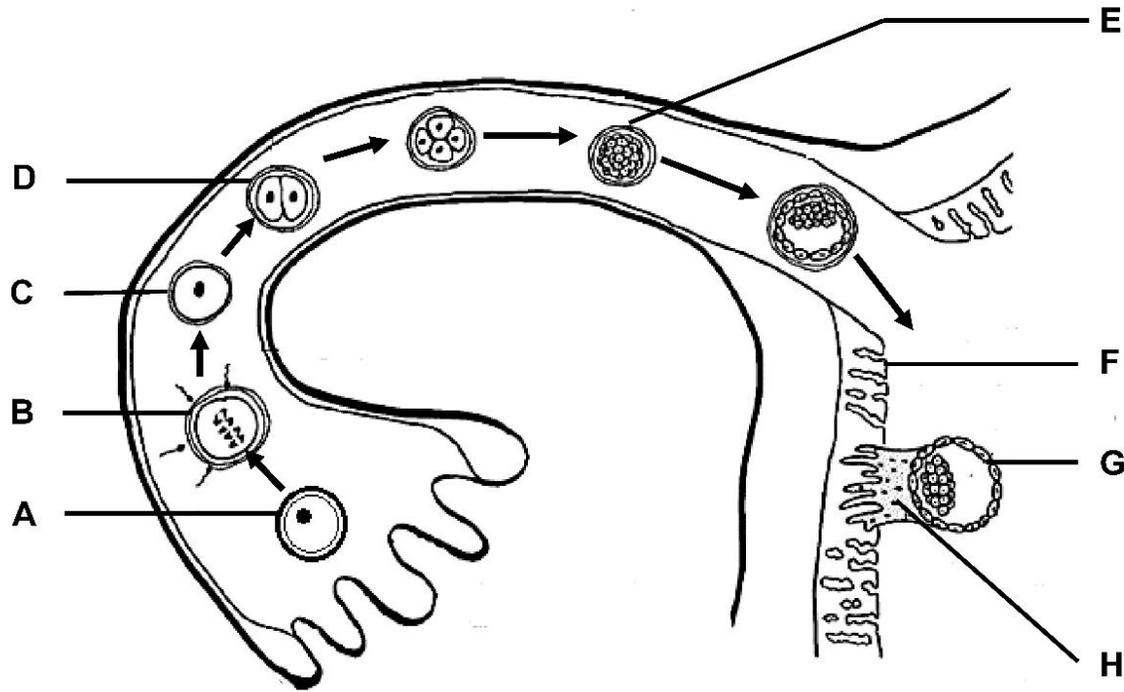
mitosis

E – morula ; G – blastocyst

endometrium

Identify process occurring at H.

# Answer questions on the **fertilisation and development of the zygote:**



**mitosis**

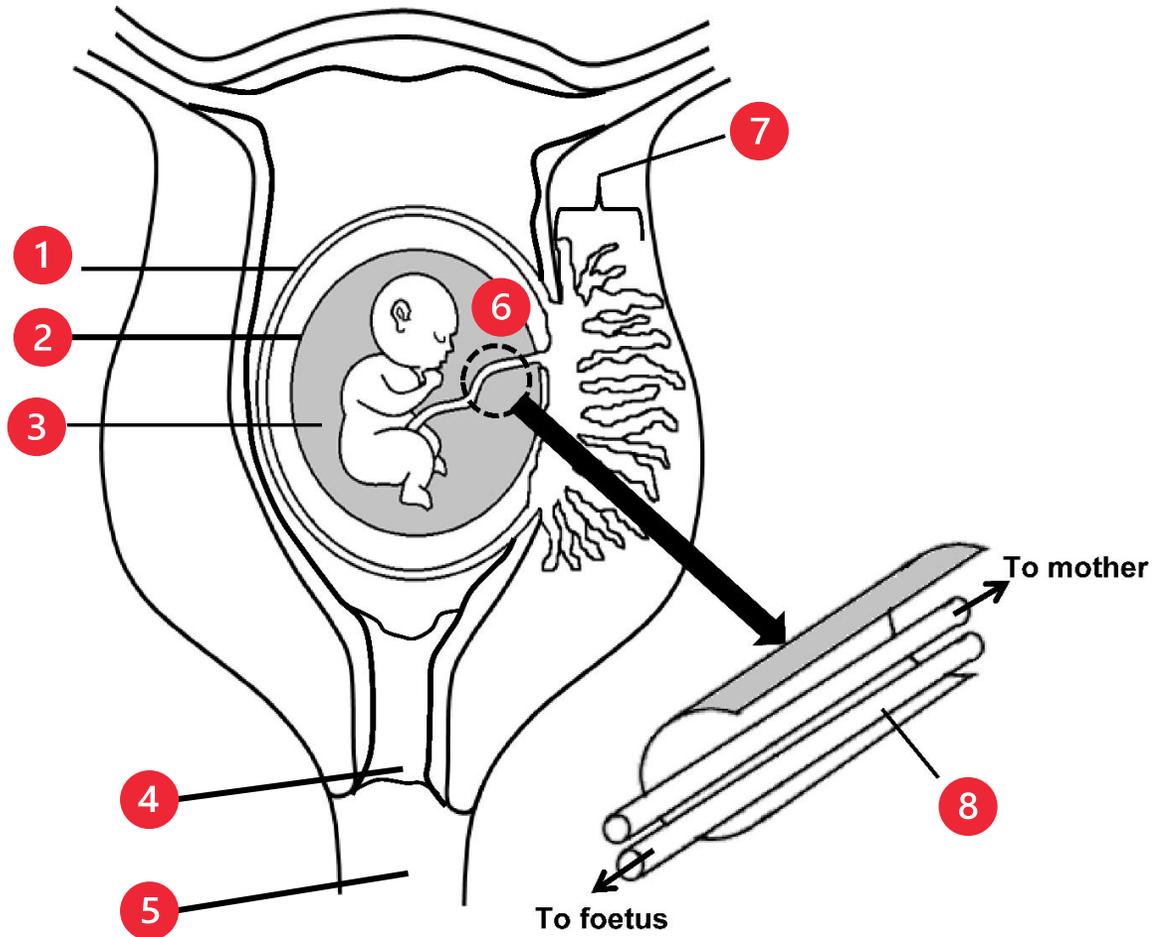
**E – morula ; G – blastocyst**

**endometrium**

**implantation**

# IMPLANTATION AND PREGNANCY

## Answer questions on **implantation and pregnancy:**



Identify 1.

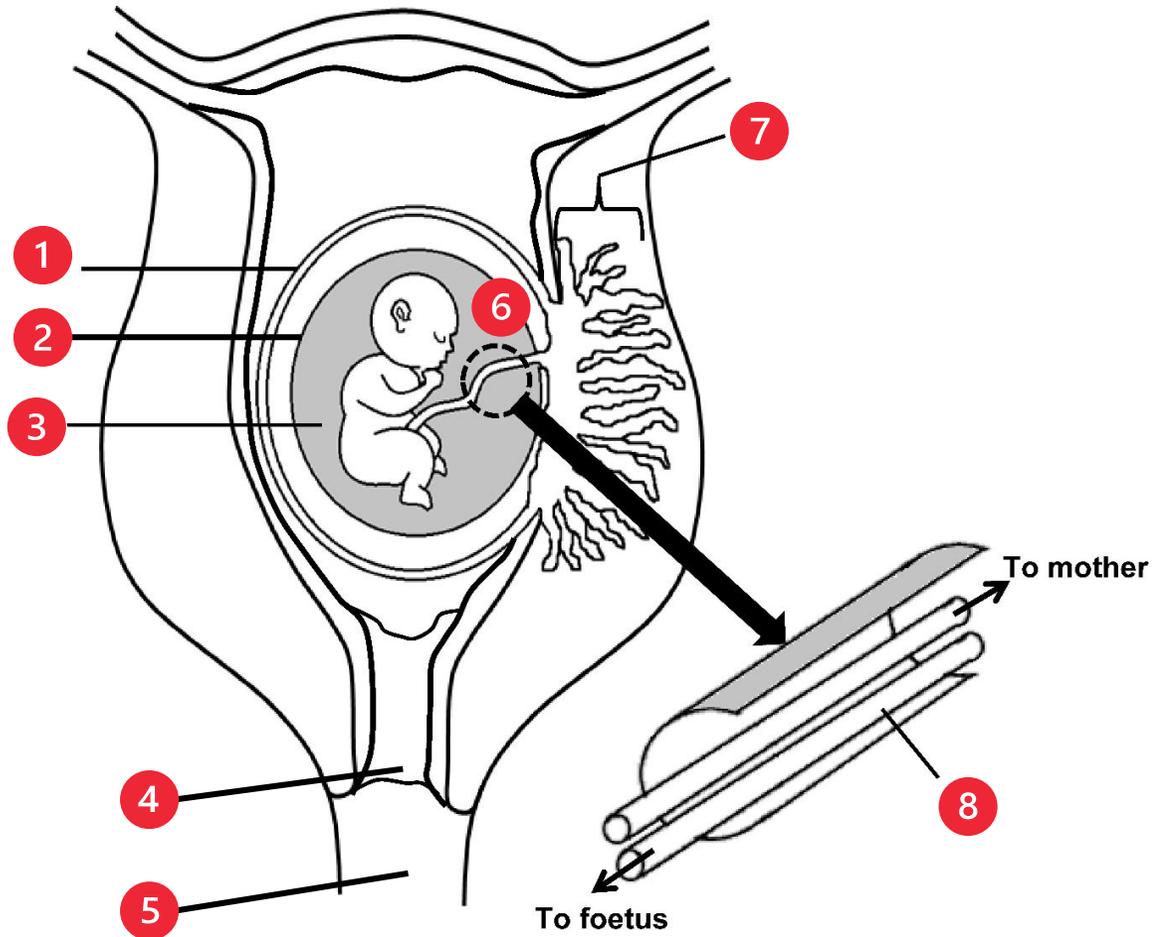
Identify 2.

Identify fluid 3.

Provide **THREE** functions of fluid 3.

Identify 4 and 5.

## Answer questions on **implantation and pregnancy**:



**chorion**

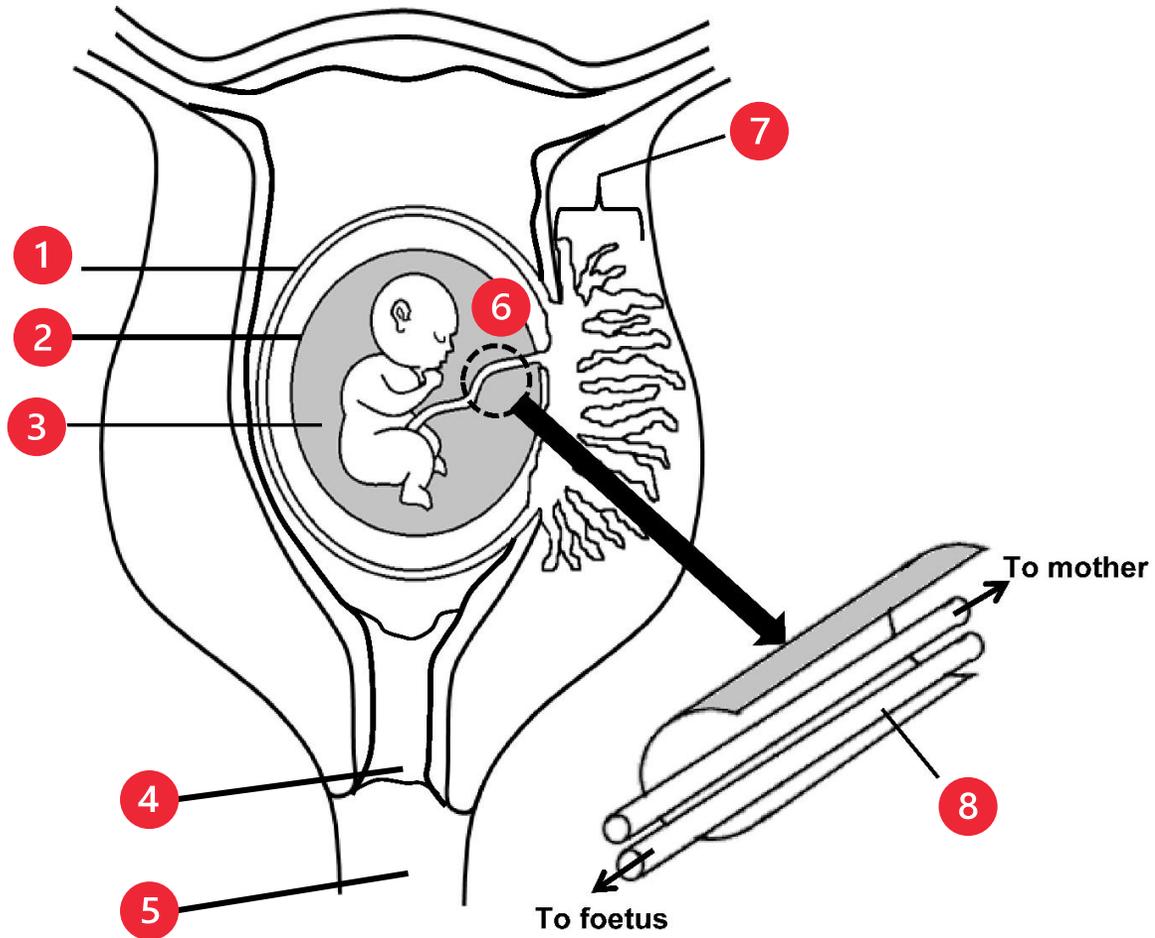
**Identify 2.**

**Identify fluid 3.**

**Provide THREE functions of fluid 3.**

**Identify 4 and 5.**

## Answer questions on **implantation and pregnancy**:



**chorion**

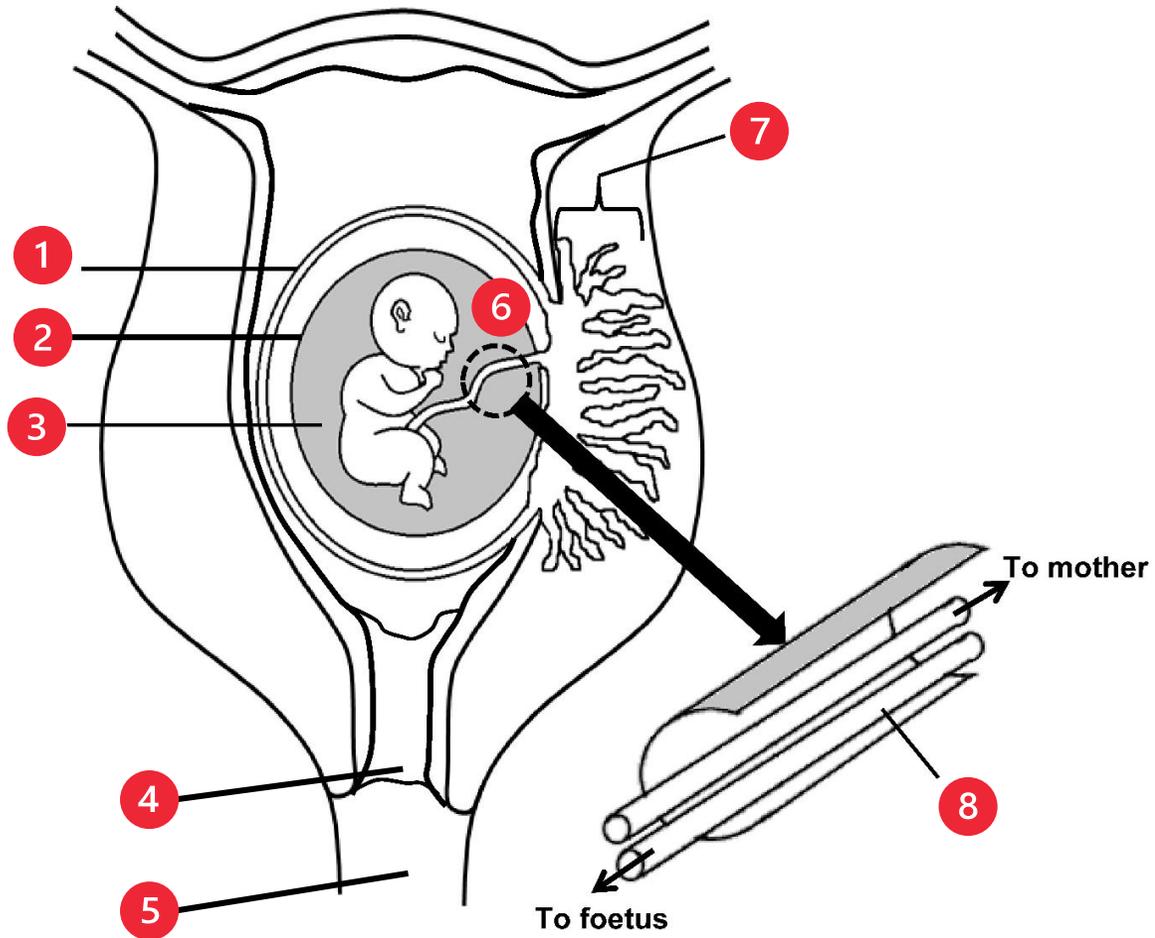
**amnion**

**Identify fluid 3.**

**Provide THREE functions of fluid 3.**

**Identify 4 and 5.**

## Answer questions on **implantation and pregnancy**:



**chorion**

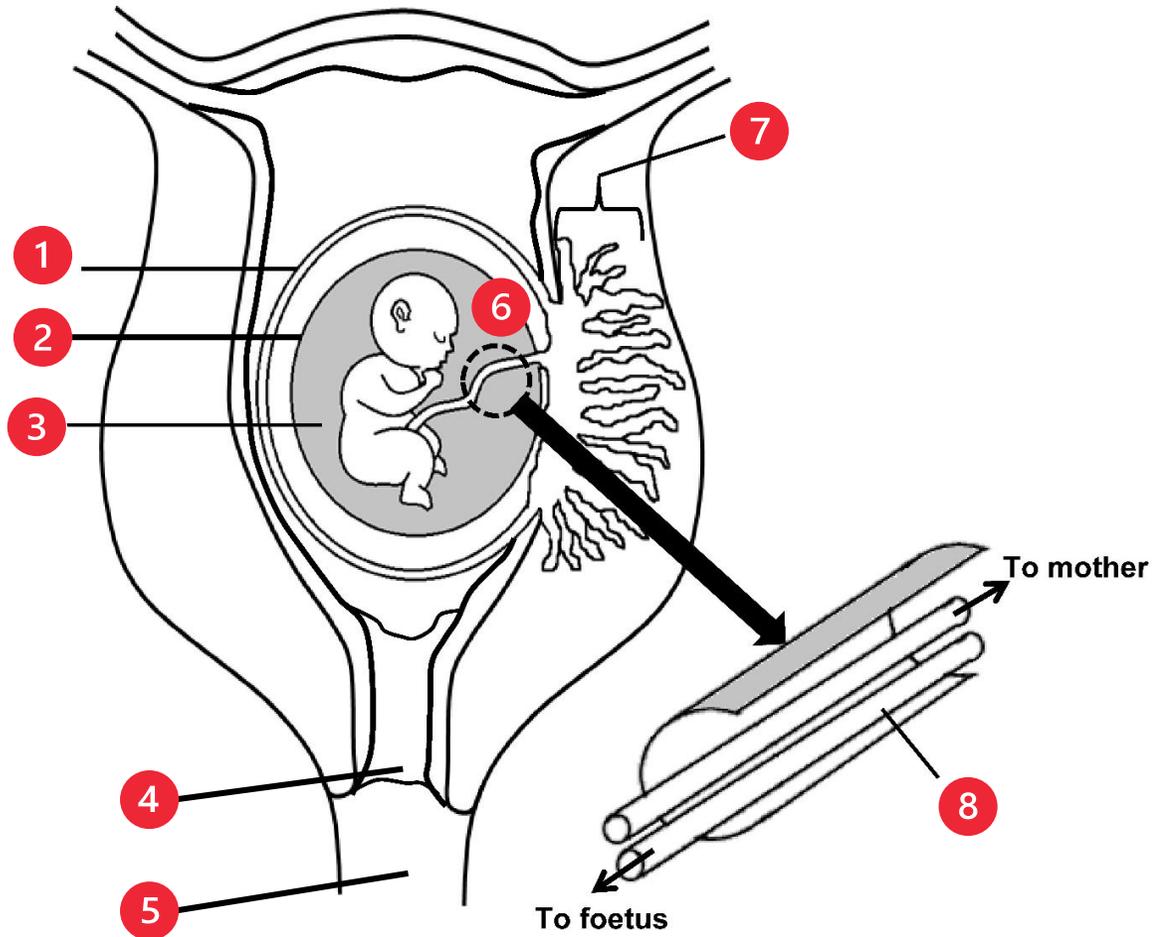
**amnion**

**amniotic fluid**

**Provide THREE functions of fluid 3.**

**Identify 4 and 5.**

## Answer questions on **implantation and pregnancy:**



**chorion**

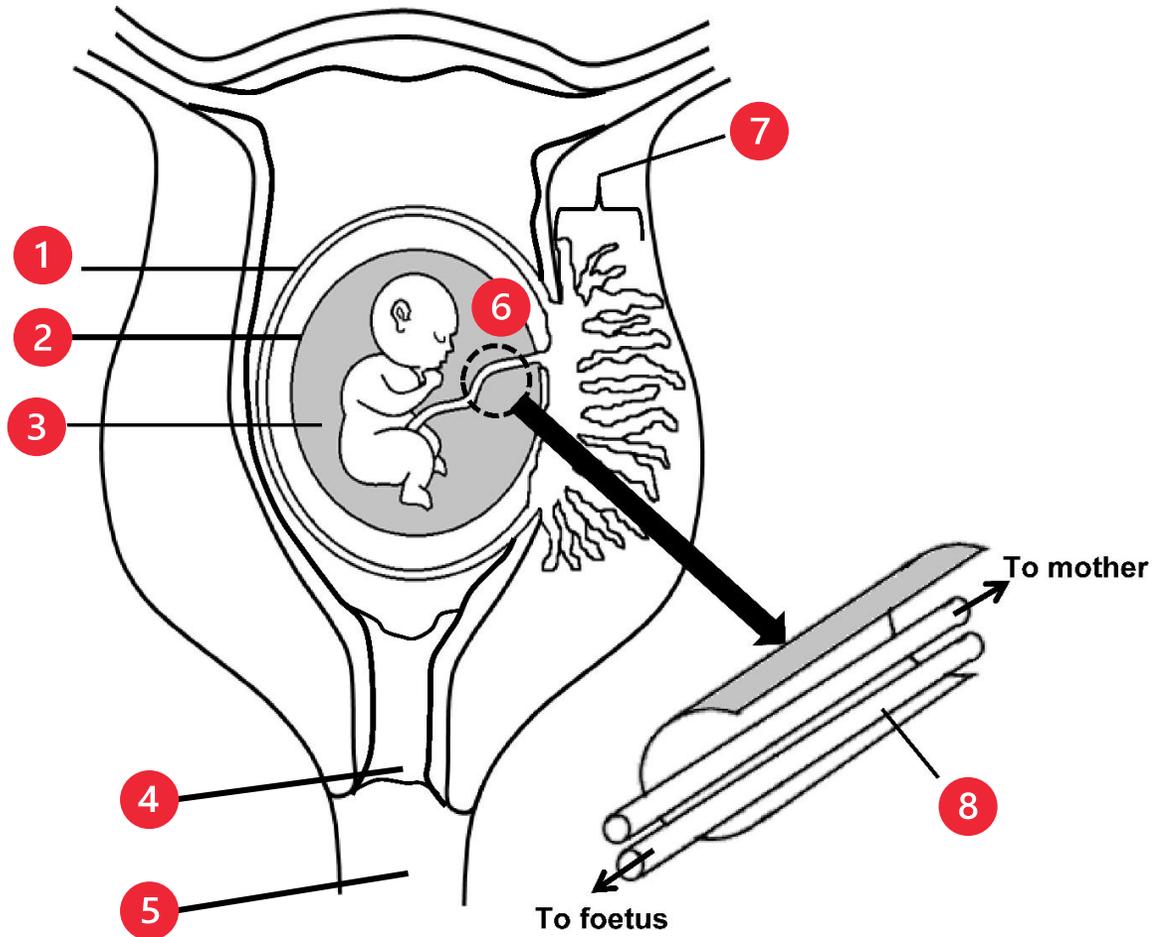
**amnion**

**amniotic fluid**

- **shock absorber / protect against mechanical injuries**
- **Temperature regulator**
- **Prevents dehydration**
- **Medium for the foetus to move in**

**Identify 4 and 5.**

## Answer questions on **implantation and pregnancy**:



**chorion**

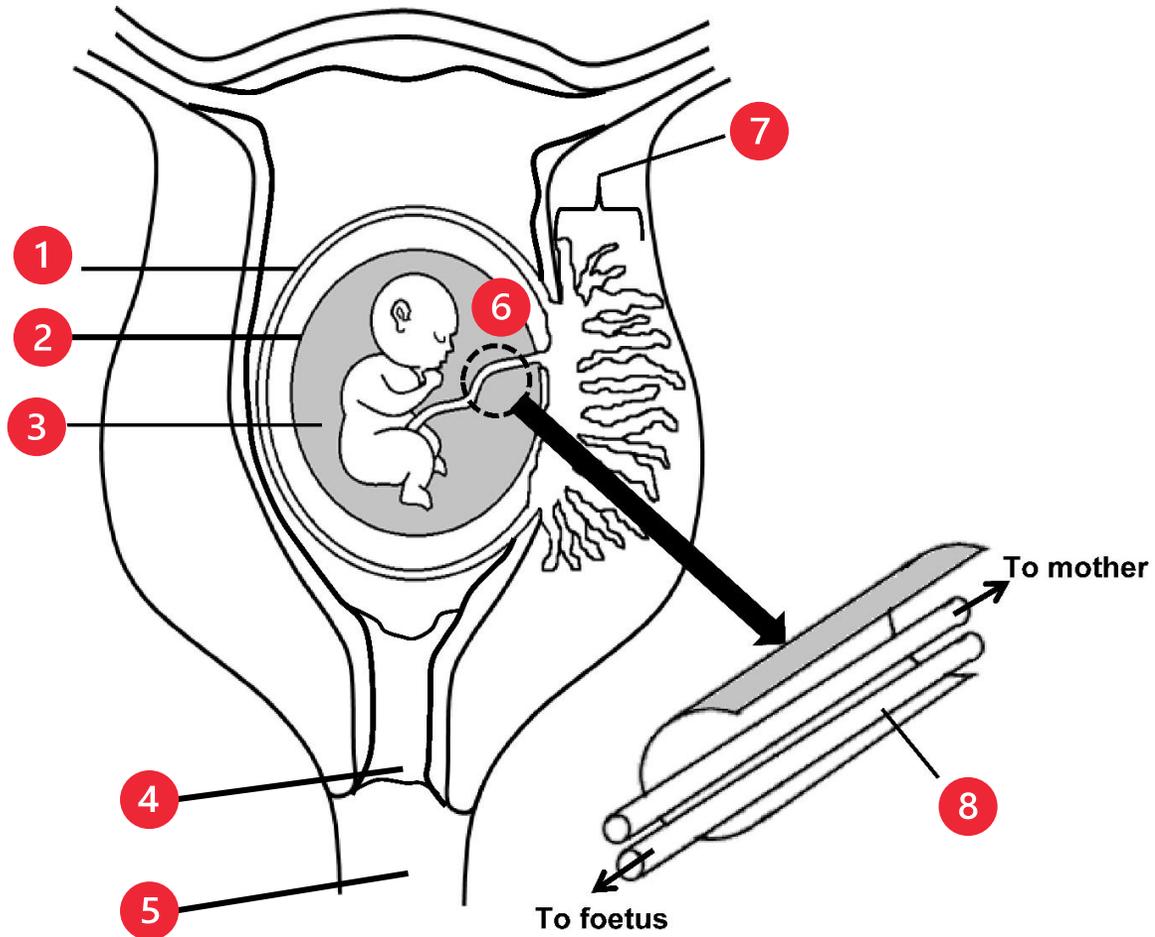
**amnion**

**amniotic fluid**

- **shock absorber / protect against mechanical injuries**
- **Temperature regulator**
- **Prevents dehydration**
- **Medium for the foetus to move in**

**4 – cervix ; 5 – vagina**

## Answer questions on **implantation and pregnancy**:



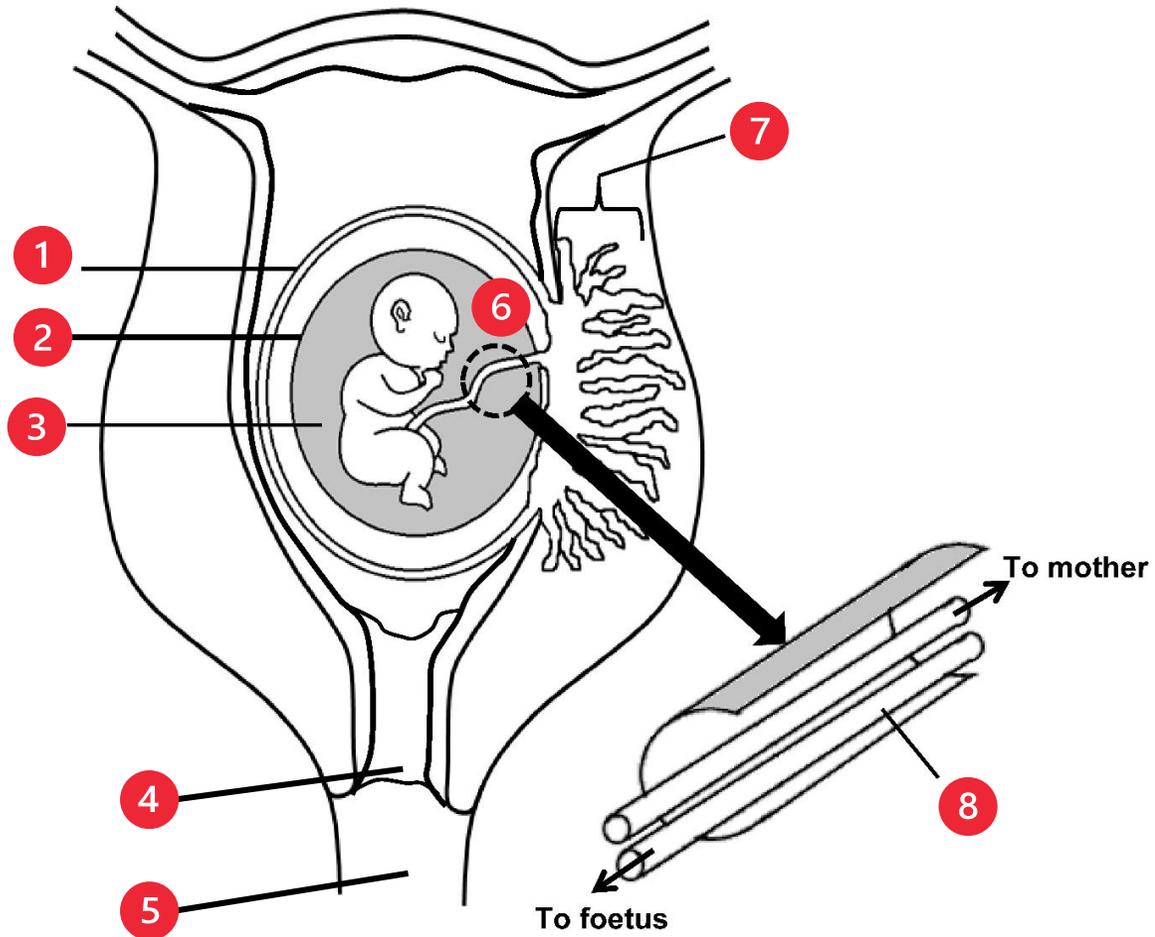
Identify 6.

Identify blood vessel 8.

Identify 7.

Provide TWO ways in which 7 functions to protect the developing foetus.

## Answer questions on **implantation and pregnancy**:



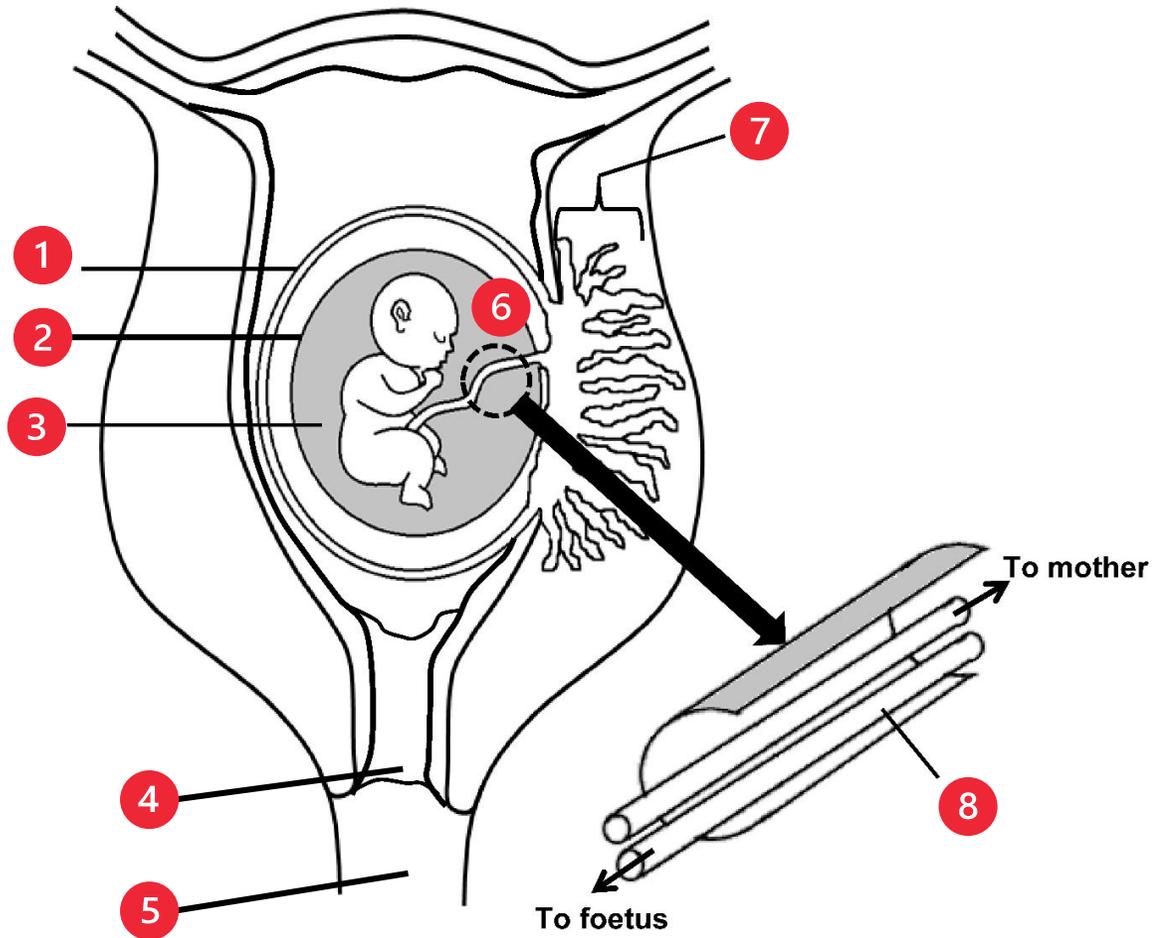
**umbilical cord**

**Identify blood vessel 8.**

**Identify 7.**

**Provide TWO ways in which 7 functions to protect the developing foetus.**

## Answer questions on **implantation and pregnancy**:



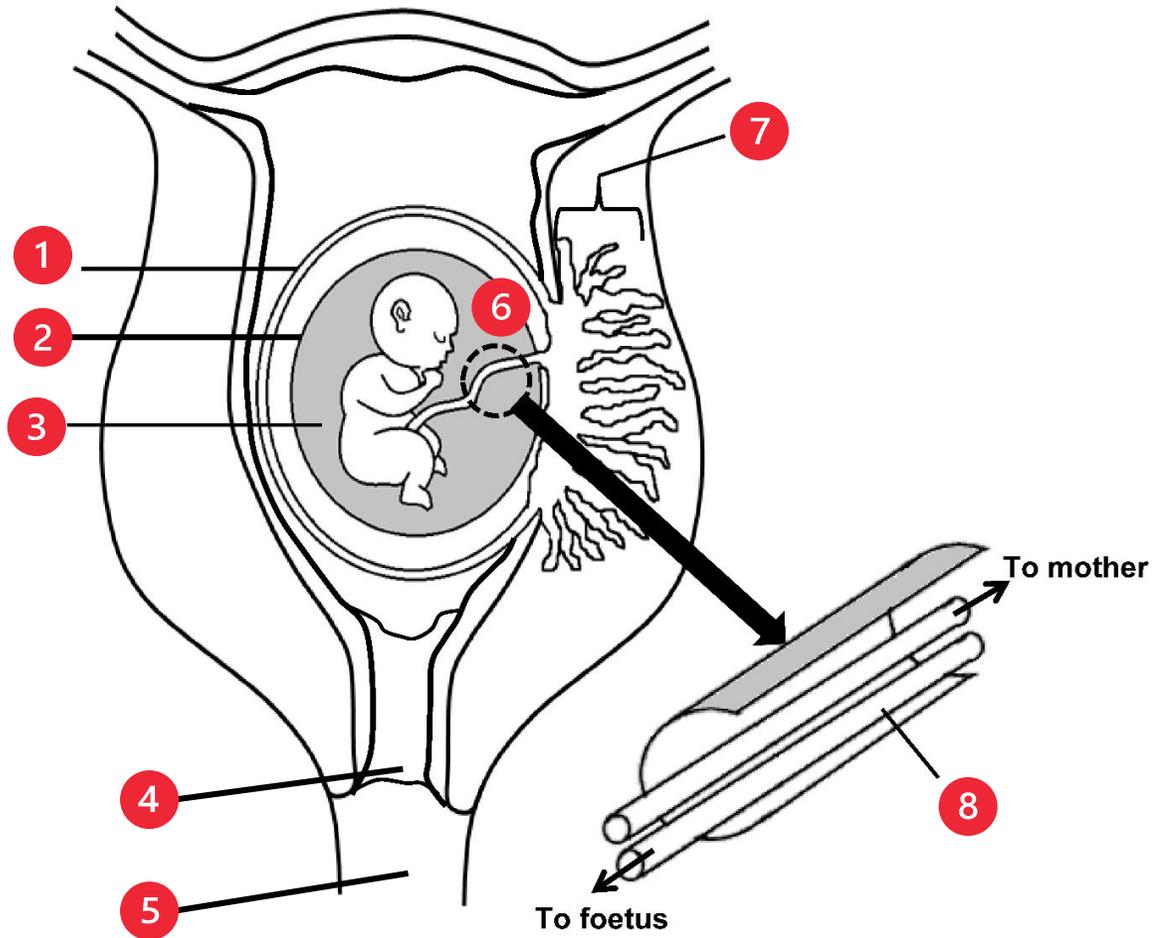
**umbilical cord**

**umbilical vein**

**Identify 7.**

**Provide TWO ways in which 7 functions to protect the developing foetus.**

## Answer questions on **implantation and pregnancy**:



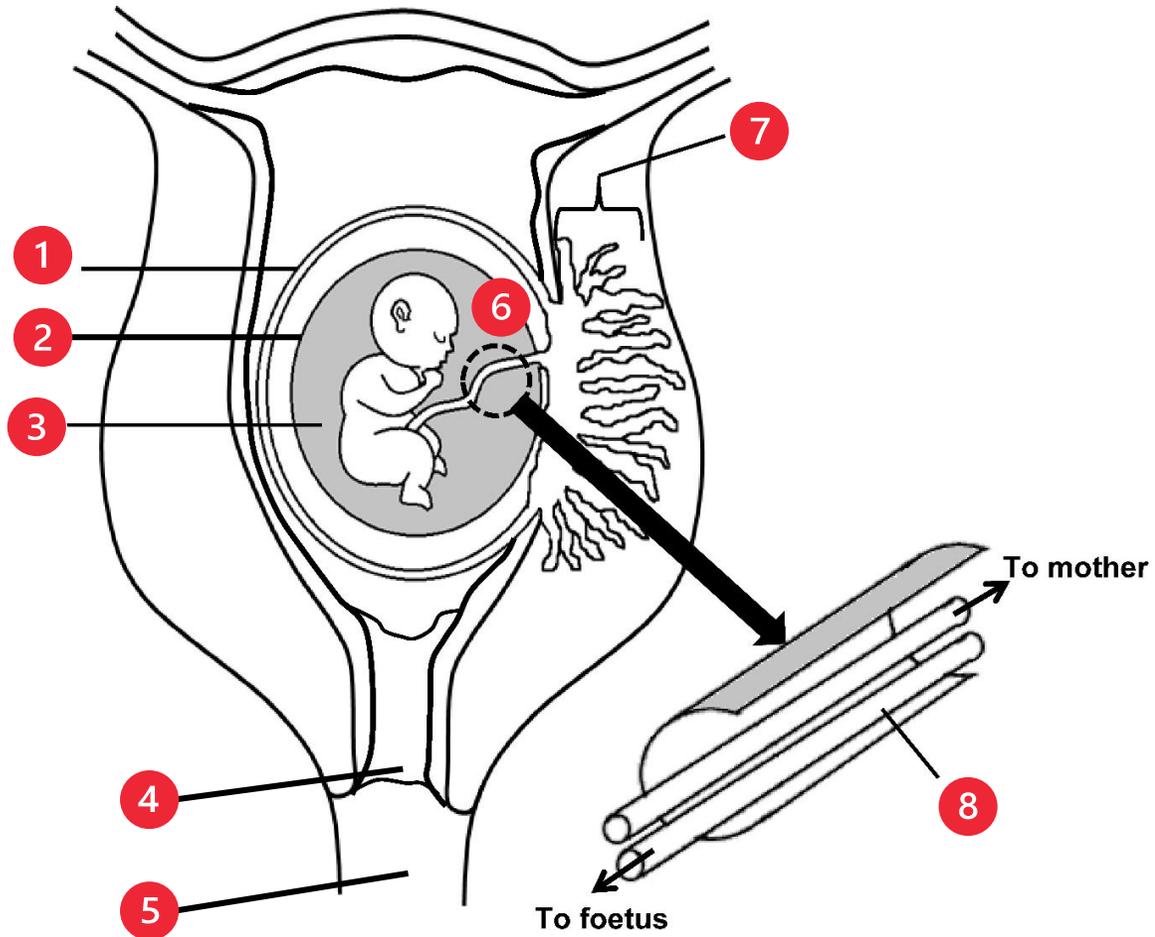
**umbilical cord**

**umbilical vein**

**placenta**

**Provide TWO ways in which 7 functions to protect the developing foetus.**

## Answer questions on **implantation and pregnancy**:



**umbilical cord**

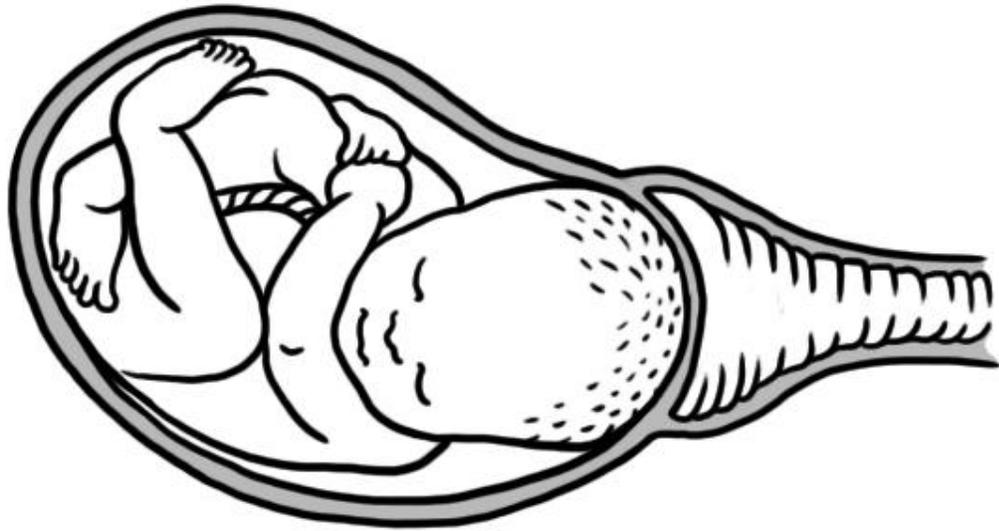
**umbilical vein**

**placenta**

- **Acts as a micro-filter / protect against pathogens**
- **Removes harmful metabolic wastes**
- **Produces antibodies**
- **Maintains the endometrium**

# BIRTH AND LACTATION

Answer questions on **birth and lactation**:



How long is gestation typically?

Explain how the uterus is adapted to facilitate birth.

Which hormone initiates the birthing process?

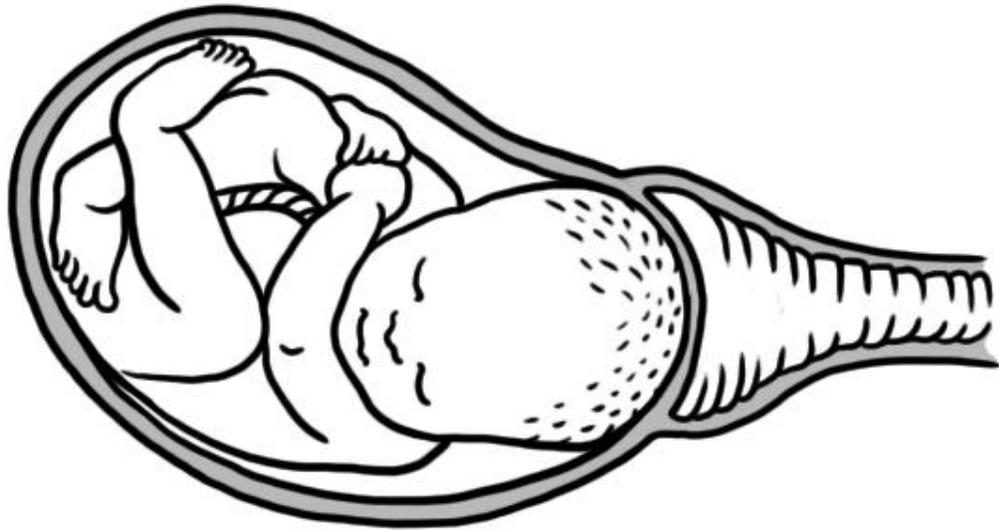
Name the structure that forms the birth canal.

Name the hormone that stimulates milk production in the breasts.



**THE ANSWER**  
SERIES *Your Key to Exam Success*

Answer questions on **birth and lactation**:



**9 months**

**Explain how the uterus is adapted to facilitate birth.**

**Which hormone initiates the birthing process?**

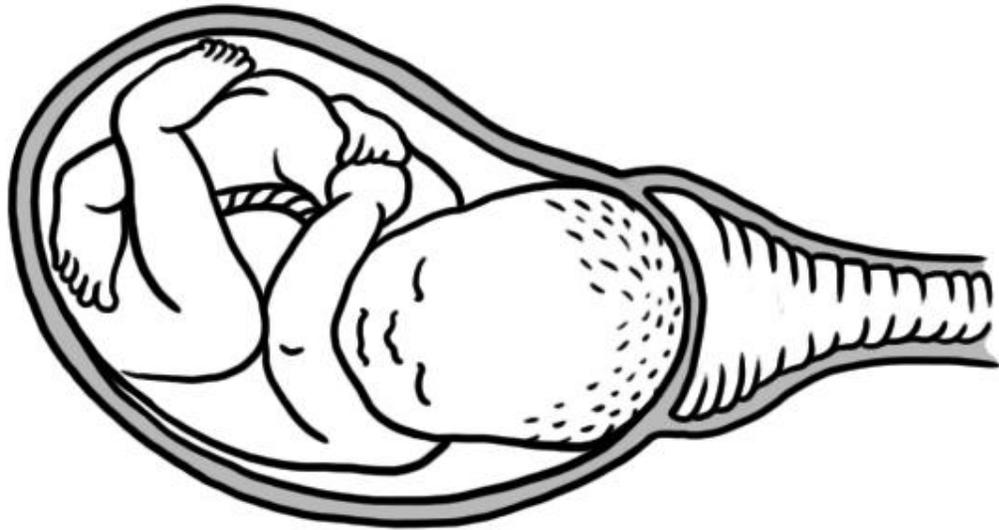
**Name the structure that forms the birth canal.**

**Name the hormone that stimulates milk production in the breasts.**



**THE ANSWER**  
SERIES *Your Key to Exam Success*

Answer questions on **birth and lactation**:



**9 months**

**Contains muscles that perform powerful contractions to push the foetus out.**

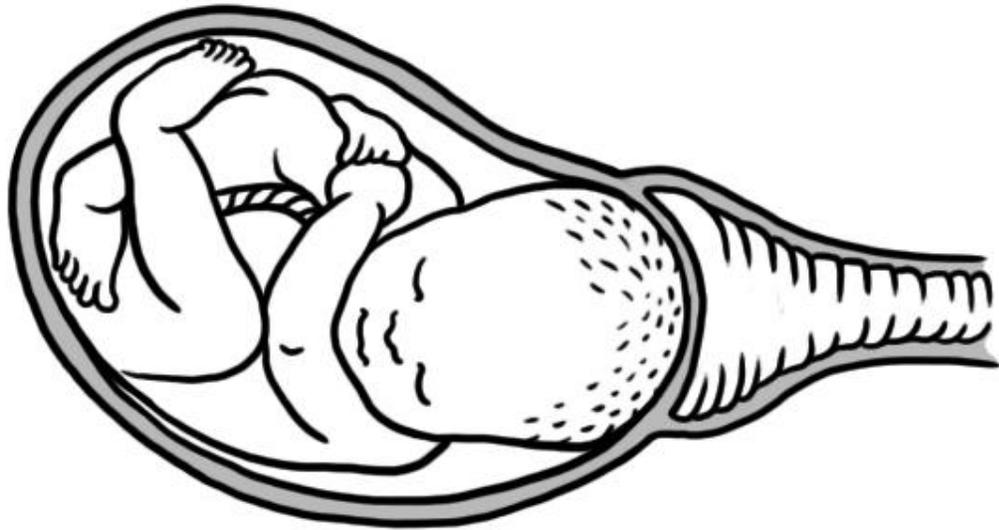
**Which hormone initiates the birthing process?**

**Name the structure that forms the birth canal.**

**Name the hormone that stimulates milk production in the breasts.**



Answer questions on **birth and lactation**:



**9 months**

**Contains muscles that perform powerful contractions to push the foetus out.**

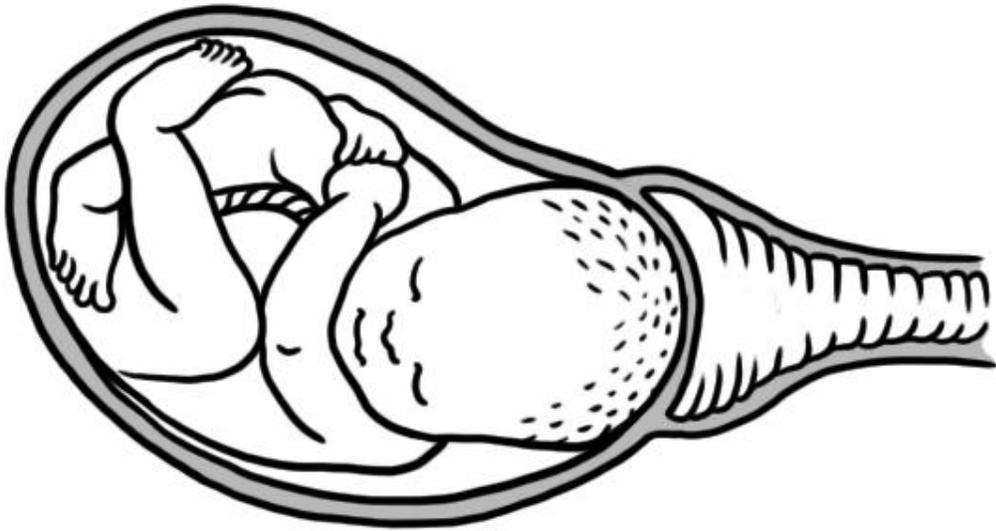
**oxytocin**

**Name the structure that forms the birth canal.**

**Name the hormone that stimulates milk production in the breasts.**



Answer questions on **birth and lactation**:



**9 months**

**Contains muscles that perform powerful contractions to push the foetus out.**

**oxytocin**

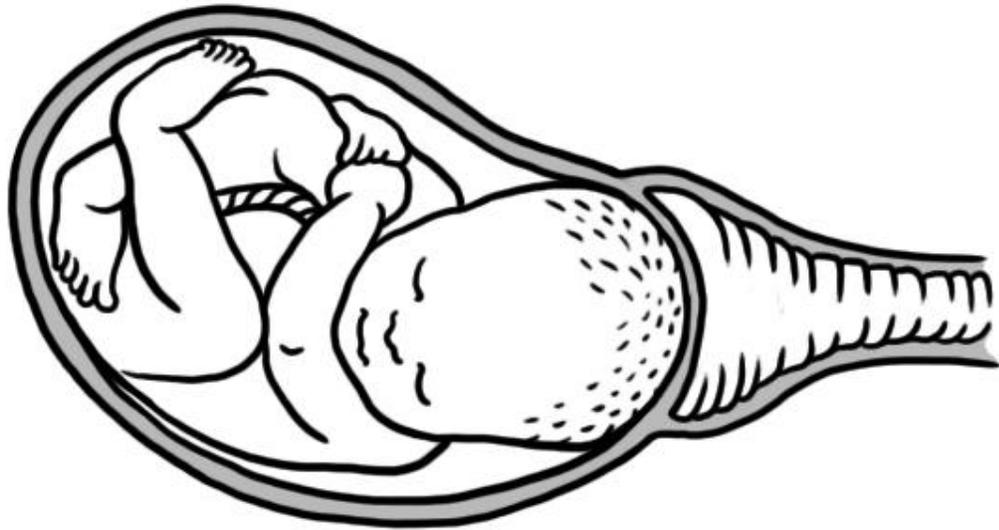
**vagina**

**Name the hormone that stimulates milk production in the breasts.**



**THE ANSWER**  
SERIES *Your Key to Exam Success*

Answer questions on **birth and lactation**:



9 months

Contains muscles that perform powerful contractions to push the foetus out.

oxytocin

vagina

prolactin



THE  
**ANSWER**  
SERIES *Your Key to Exam Success*

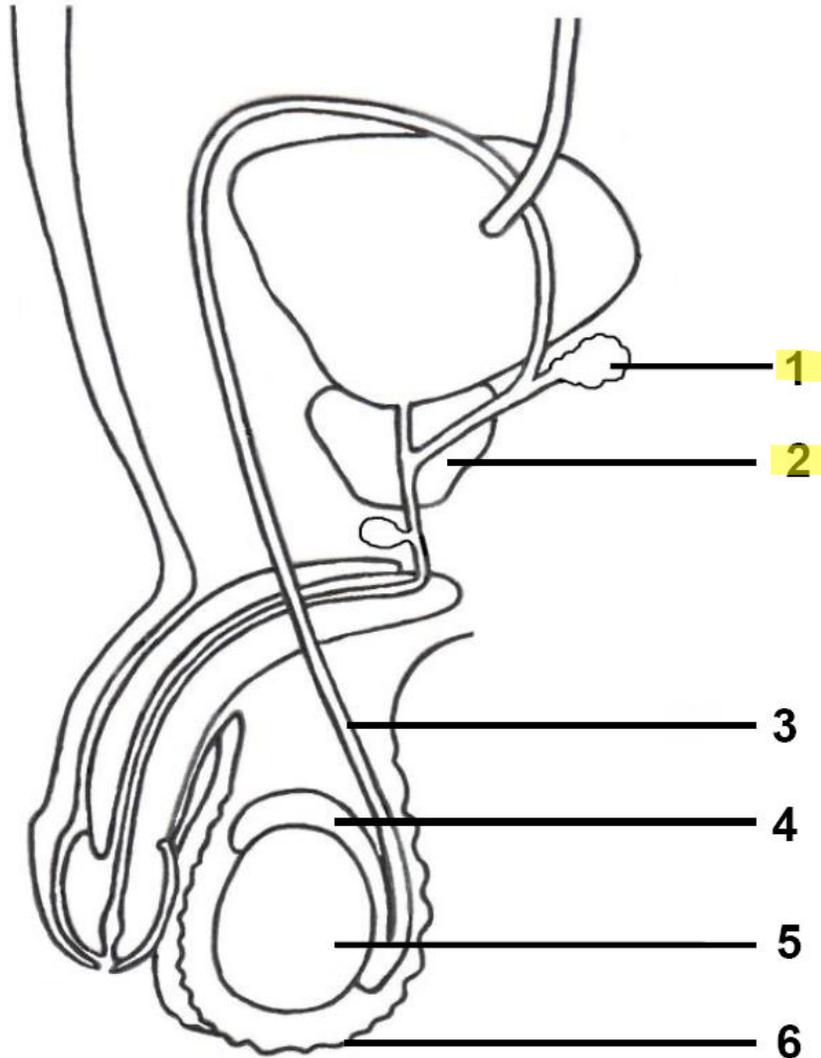
# ABNORMALITIES AND DISEASE STATES



For more revision and training on this -  
see the **2024 Diagnostic Report and  
Teaching Tool for Paper 1** p. 93.  
Download [here](#) under Grade 12 Resources.



Understand the consequences of certain **abnormalities and/or disease states** in the male reproductive system:



A man who had cancer underwent surgery to remove part **1** and part **2**. The man ...

**A** – will be able to release semen not containing sperm and therefore cannot reproduce

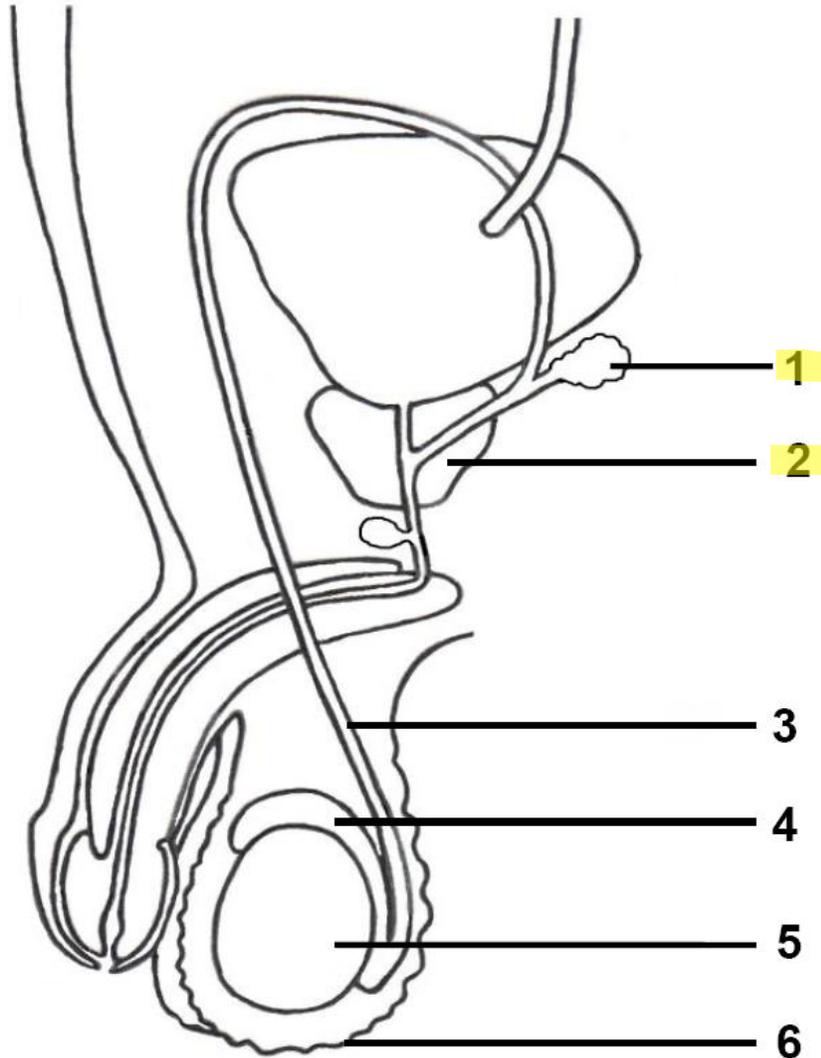
**B** – cannot reproduce because he will produce abnormal sperm

**C** – cannot reproduce as his sperm will not be able to survive the acidic conditions of the vagina

**D** – will be able to reproduce but his sperm will not be able to move fast as they will not have energy



Understand the consequences of certain **abnormalities and/or disease states** in the male reproductive system:



A man who had cancer underwent surgery to remove part **1** and part **2**. The man ...

**A** – will be able to release semen not containing sperm and therefore cannot reproduce

**B** – cannot reproduce because he will produce abnormal sperm

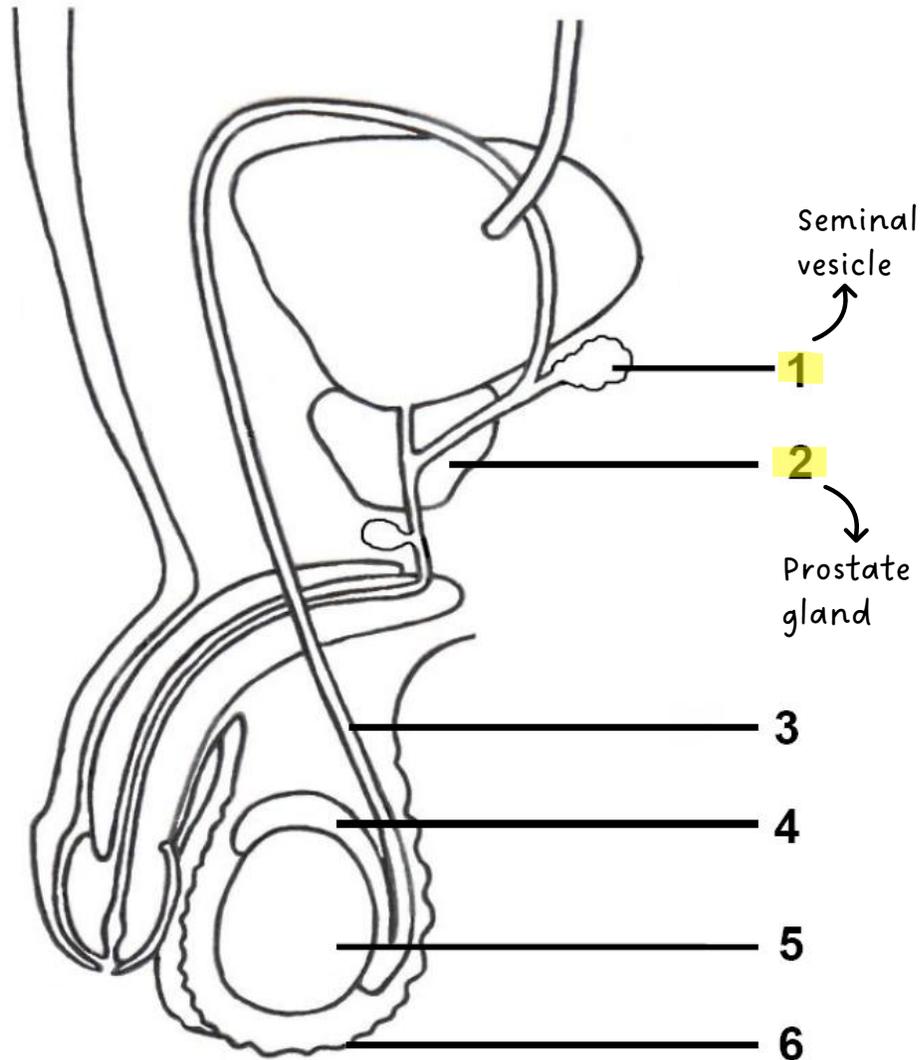
**C** – cannot reproduce as his sperm will not be able to survive the acidic conditions of the vagina

**D** – will be able to reproduce but his sperm will not be able to move fast as they will not have energy

WHY?



Understand the consequences of certain **abnormalities and/or disease states** in the male reproductive system:

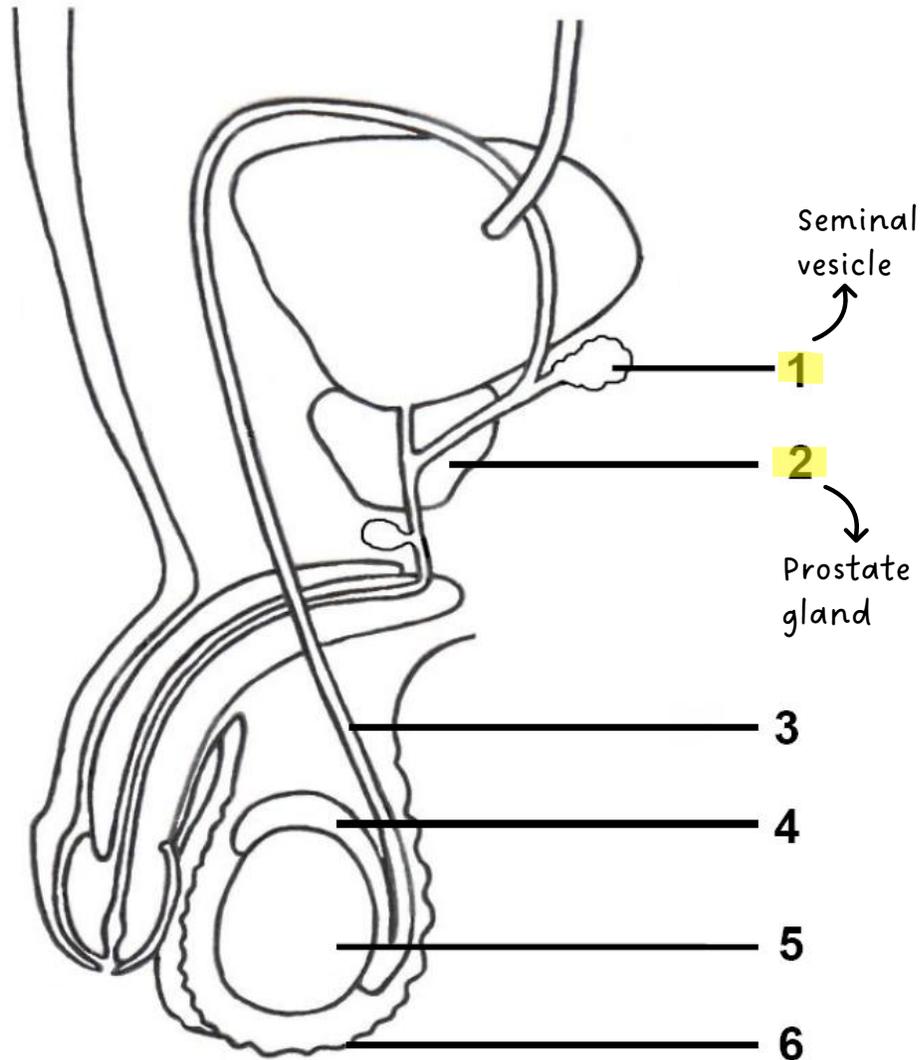


A man who had cancer underwent surgery to remove part **1** and part **2**. The man ...

**A** – will be able to release semen **not containing sperm** and therefore cannot reproduce

WRONG because: Sperm is produced in the testes and will not be affected by the removal of glands

Understand the consequences of certain **abnormalities and/or disease states** in the male reproductive system:



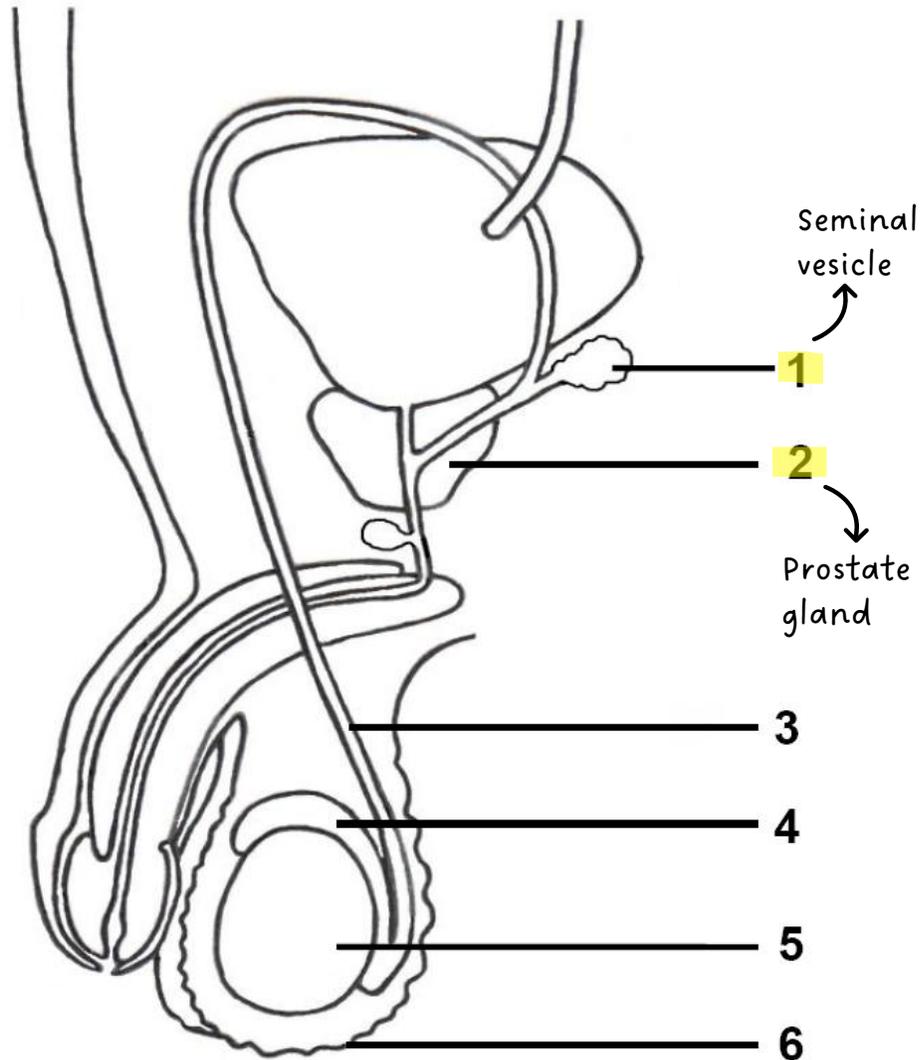
A man who had cancer underwent surgery to remove part **1** and part **2**. The man ...

**A** – will be able to release semen **not containing sperm** and therefore cannot reproduce

**B** – cannot reproduce because he will **produce abnormal sperm**

**WRONG** because: Sperm is produced in the testes and therefore the removal of glands will not determine the normality/abnormality of the sperm

Understand the consequences of certain **abnormalities and/or disease states** in the male reproductive system:



A man who had cancer underwent surgery to remove part **1** and part **2**. The man ...

A – will be able to release semen **not containing sperm** and therefore cannot reproduce

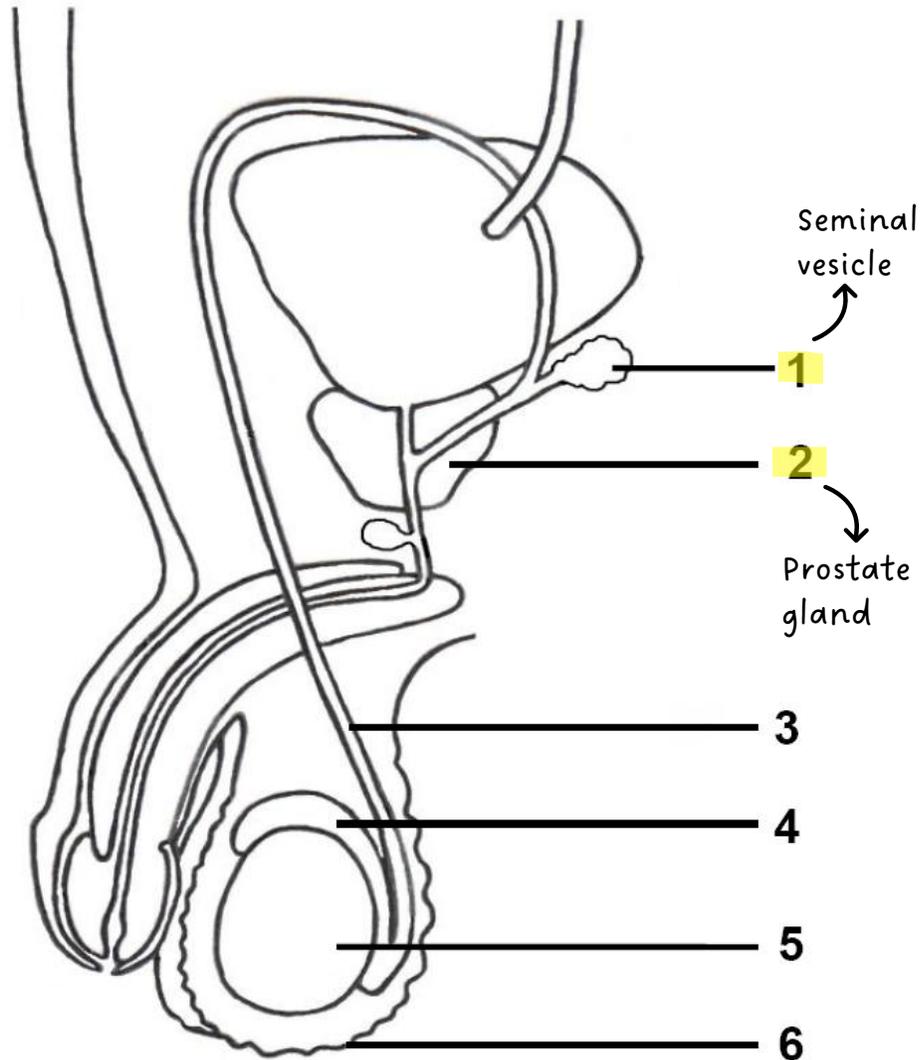
B – cannot reproduce because he will **produce abnormal sperm**

D – **will be able to reproduce** but his sperm will not be able to move fast as they will not have energy

WRONG because: gland secretions are vital for successful reproduction, therefore the man will not be able to reproduce



Understand the consequences of certain **abnormalities and/or disease states** in the male reproductive system:



A man who had cancer underwent surgery to remove part **1** and part **2**. The man ...

A – will be able to release semen **not containing sperm** and therefore cannot reproduce

B – cannot reproduce because he will **produce abnormal sperm**

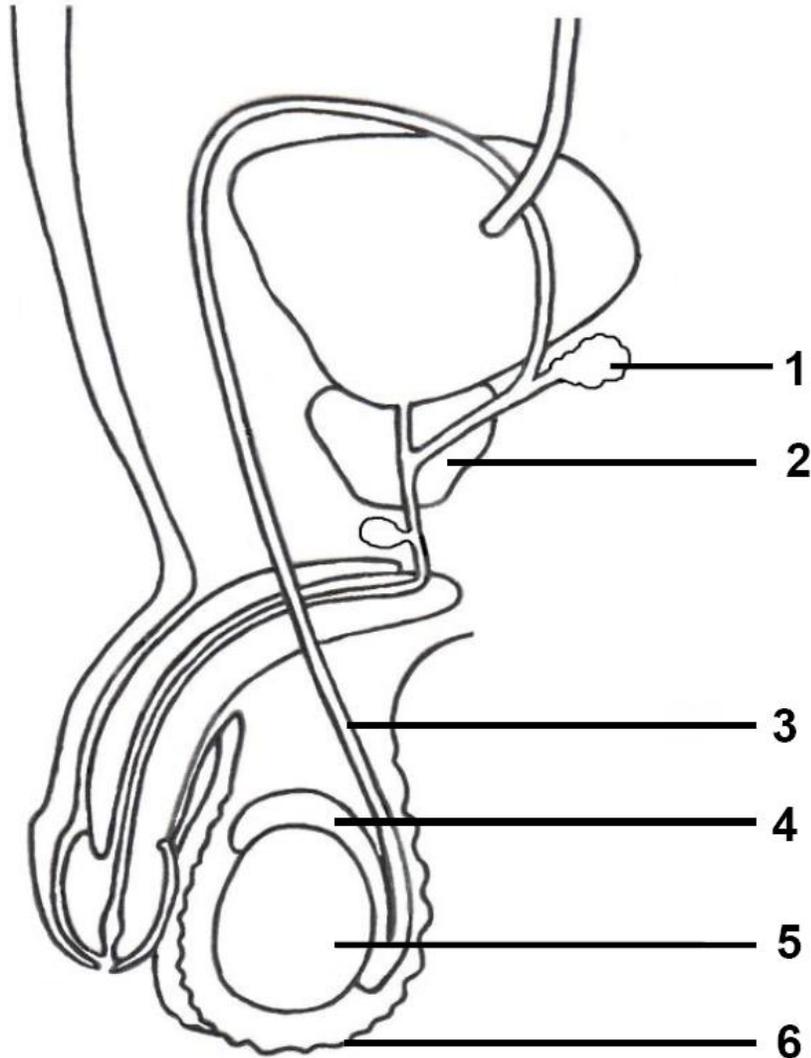
**C – cannot reproduce** as his sperm will not be able to survive the **acidic conditions of the vagina**

D – **will be able to reproduce** but his sperm will not be able to move fast as they will not have energy

**MOST CORRECT ANSWER** because: glands 1 and 2 are required to neutralise the acidic pH of the vagina AND therefore the man will not be able to reproduce



Understand the consequences of certain **abnormalities and/or disease states** in the male reproductive system:

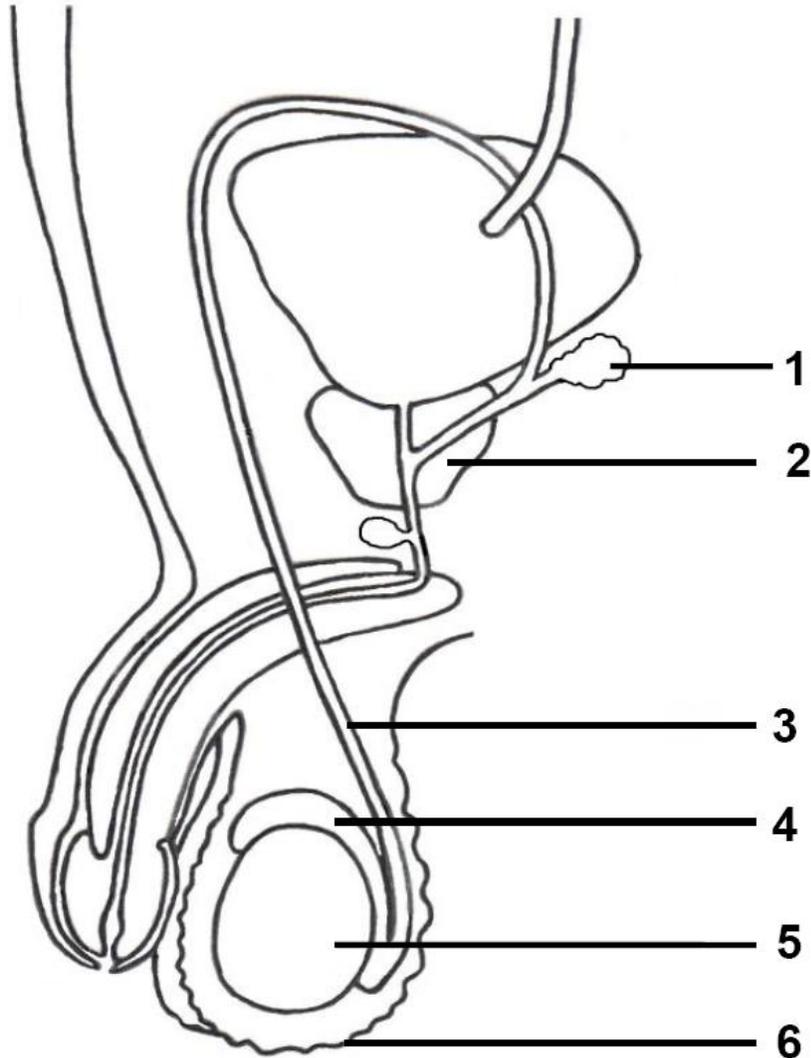


**Cryptorchidism is a medical condition where one or both of a boy's testes have not descended into their proper position in the scrotum before birth.**

**Explain how cryptorchidism will influence fertility if not corrected.**

*2025 Free State September P1*

Understand the consequences of certain **abnormalities and/or disease states** in the male reproductive system:



**Cryptorchidism is a medical condition where one or both of a boy's testes have not descended into their proper position in the scrotum before birth.**

**Explain how cryptorchidism will influence fertility if not corrected.**

*2025 Free State September P1*

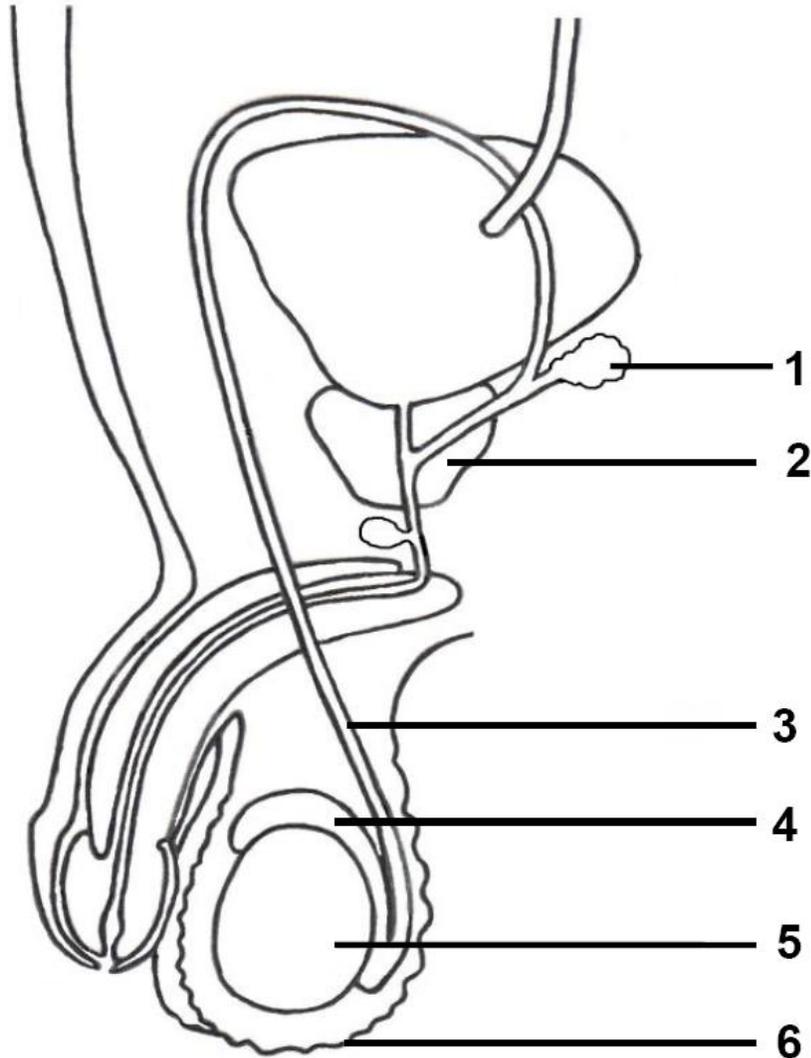
**Normally:**

- Scrotum keeps the testes below body temperature
- To ensure optimal temperature for sperm production / production of healthy/normal sperm
- Sperm production occurs normally and produces a high number of sperm
- Male is therefore fertile

Consider the consequences if this does not occur to formulate the answer.



Understand the consequences of certain **abnormalities and/or disease states** in the male reproductive system:



**Cryptorchidism is a medical condition where one or both of a boy's testes have not descended into their proper position in the scrotum before birth.**

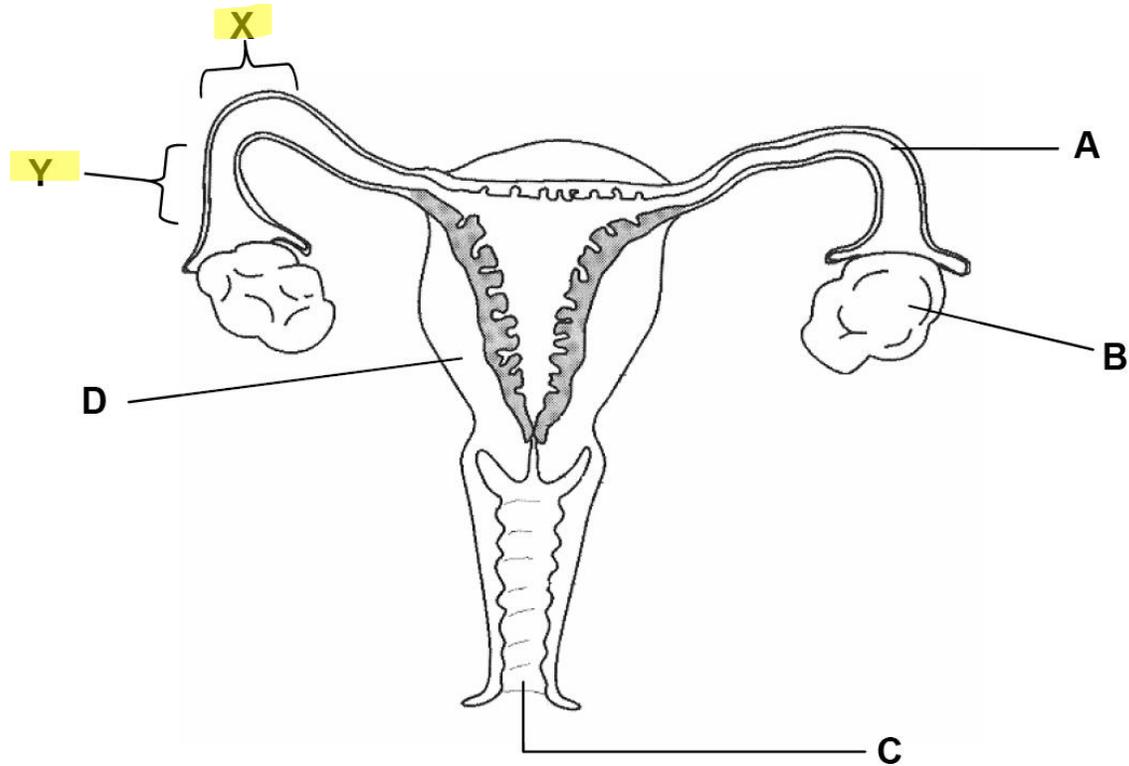
**Explain how cryptorchidism will influence fertility if not corrected.**

*2025 Free State September P1*

- Undescended **testicle** will be **at body temperature**
- **Sperm production** will be **lower** / sperm can denature
- **Less sperm** will be **produced**/ low sperm count
- **Lower** chance of **fertilisation** / infertility

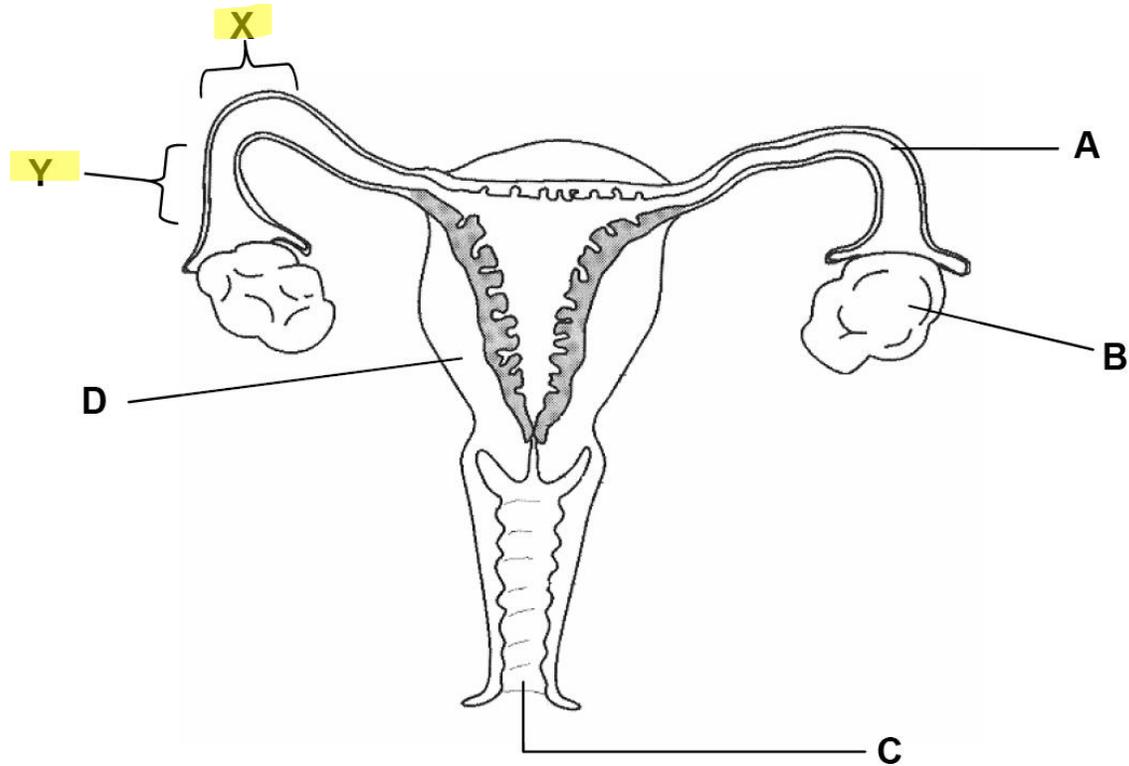


Understand the consequences of certain **abnormalities and/or disease states** in the female reproductive system:



Fertilisation usually takes place at **Y**.  
Why will a blockage at **X** prevent fertilisation at **Y**?

Understand the consequences of certain **abnormalities and/or disease states** in the female reproductive system:



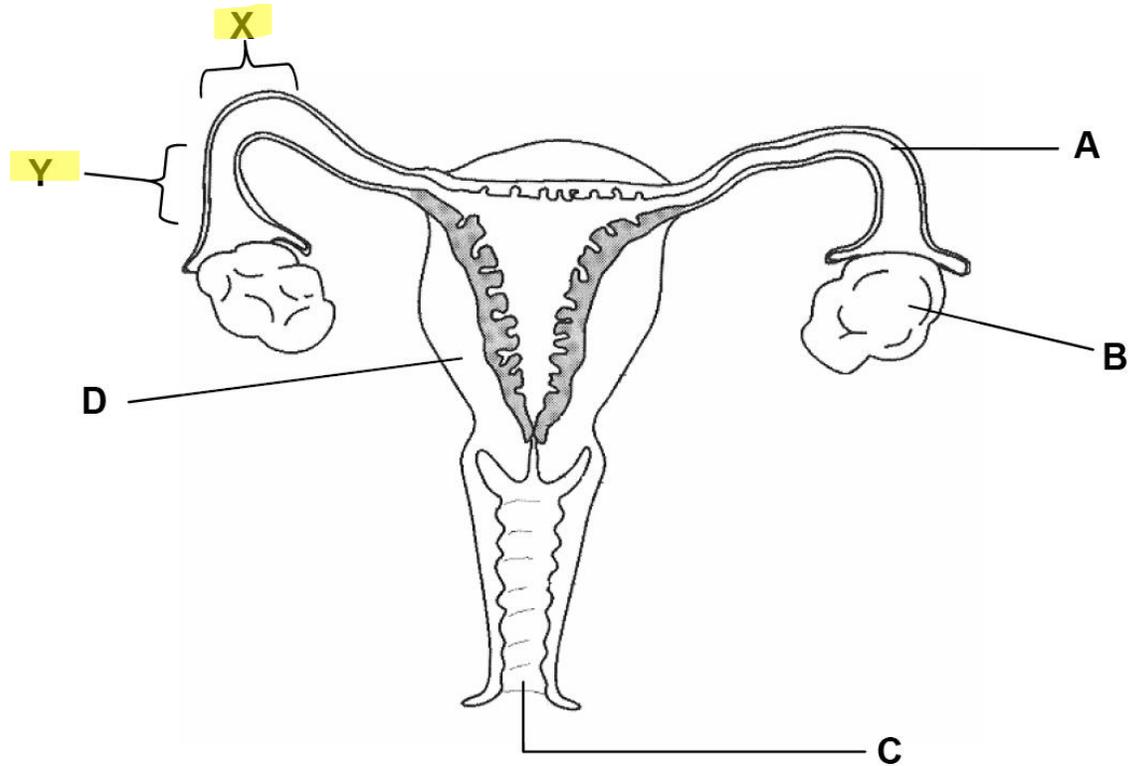
Fertilisation usually takes place at **Y**.

Why will a blockage at **X** prevent fertilisation at **Y**?

- Sperm will be prevented from reaching the ovum OR
- prevents the ovum from travelling along the Fallopian tube



Understand the consequences of certain **abnormalities and/or disease states** in the female reproductive system:

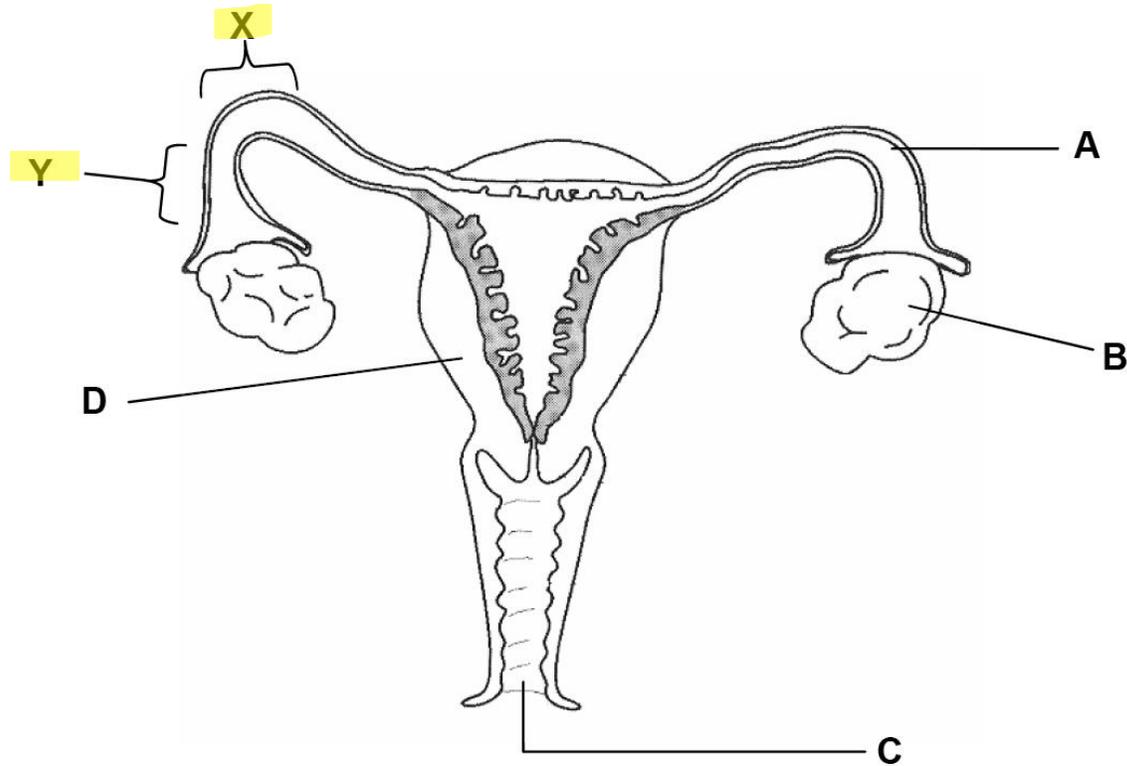


Fertilisation usually takes place at **Y**.

Why will a blockage at **X** not necessarily lead to infertility?



Understand the consequences of certain **abnormalities and/or disease states** in the female reproductive system:



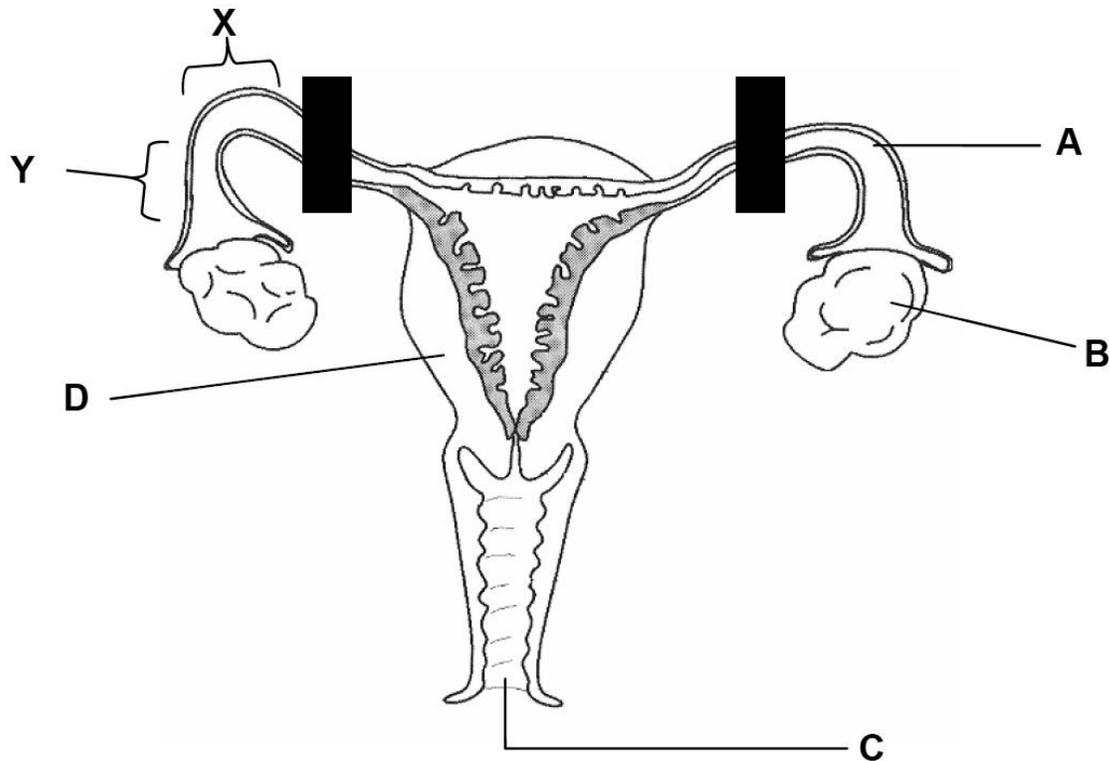
Fertilisation usually takes place at **Y**.

Why will a blockage at **X** not necessarily lead to infertility?

- **A female has two ovaries**
- **If the one Fallopian tube is blocked, an egg produced in the other ovary can still be fertilised in the other Fallopian tube**



Understand the consequences of certain **abnormalities and/or disease states** in the female reproductive system:



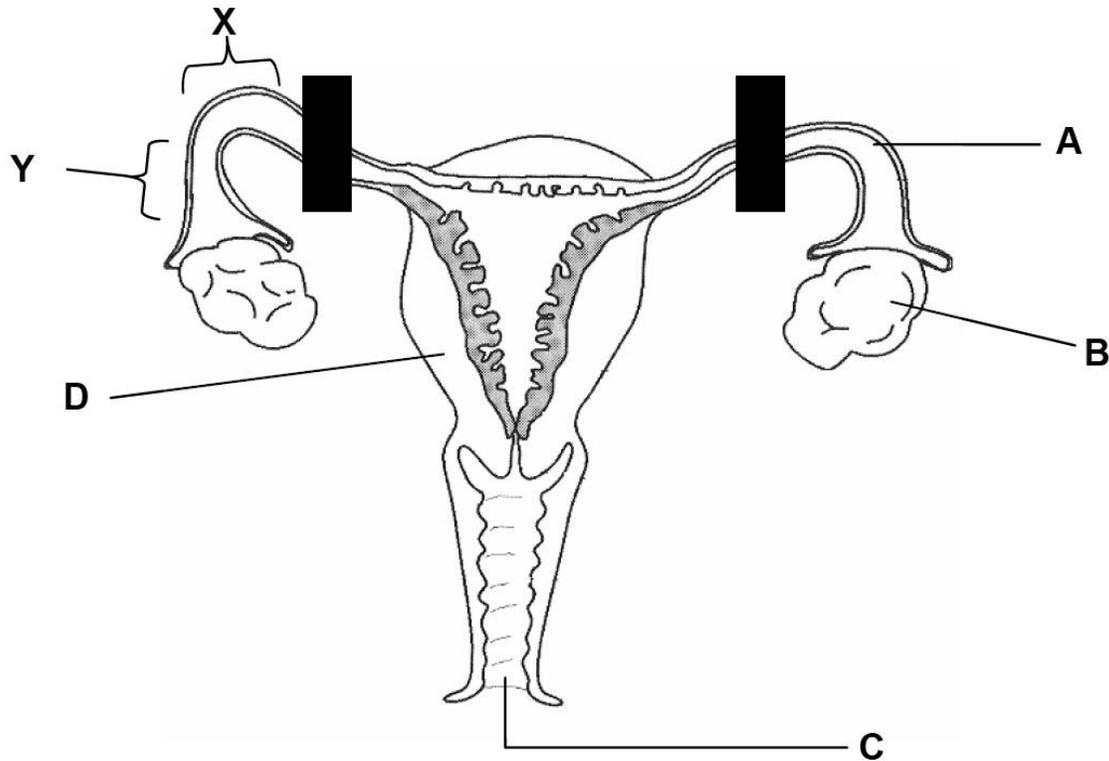
Tubal ligation is an irreversible birth control method in which the fallopian tube portion is tied or cut, clipped or removed. Tubal ligation may lead to menstrual irregularities (interference of blood supply to the ovaries which in the end interferes with the functioning of the ovaries).

When the blood supply of the ovaries is disturbed, follicles are incapable of growing properly and the corpus luteum growth is affected too. Women who underwent tubal ligation also have higher levels of FSH.

Explain why women who underwent tubal ligation also have a higher level of FSH.

2025 Free State September P1

Understand the consequences of certain **abnormalities and/or disease states** in the female reproductive system:



Tubal ligation is an irreversible birth control method in which the fallopian tube portion is tied or cut, clipped or removed. Tubal ligation may lead to menstrual irregularities (interference of blood supply to the ovaries which in the end interferes with the functioning of the ovaries).

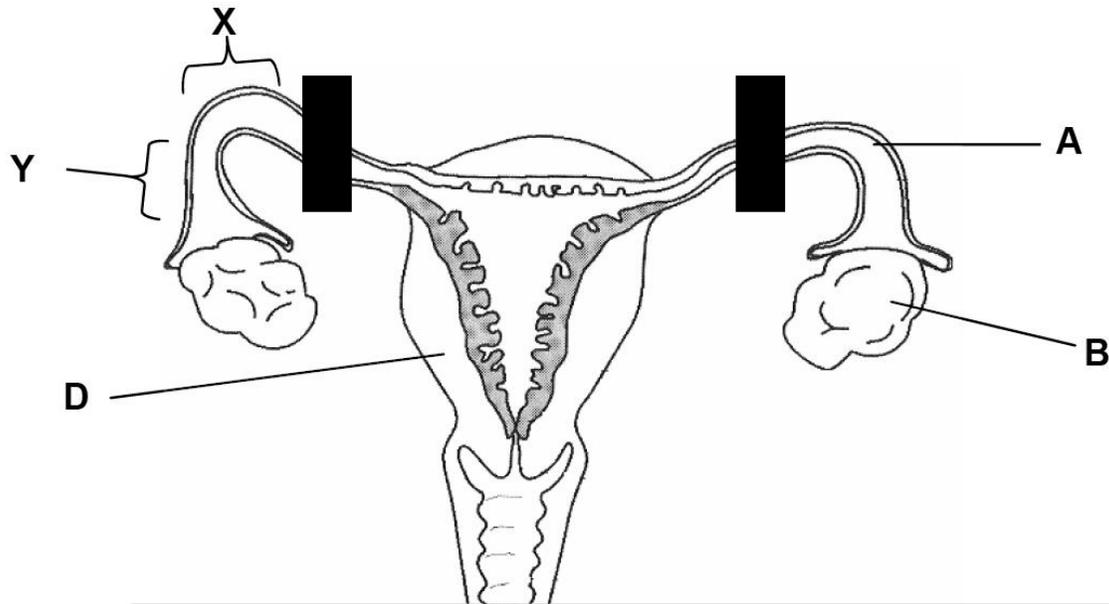
When the blood supply of the ovaries is disturbed, **follicles are incapable of growing properly and the corpus luteum growth is affected too.** Women who underwent tubal ligation also have higher levels of FSH.

**Explain why women who underwent tubal ligation also have a higher level of FSH.**

2025 Free State September P1

Consider how the follicles/corpus luteum affects FSH secretion to formulate your answer.

Understand the consequences of certain **abnormalities and/or disease states** in the female reproductive system:



Tubal ligation is an irreversible birth control method in which the fallopian tube portion is tied or cut, clipped or removed. Tubal ligation may lead to menstrual irregularities (interference of blood supply to the ovaries which in the end interferes with the functioning of the ovaries).

When the blood supply of the ovaries is disturbed, **follicles are incapable of growing properly and the corpus luteum growth is affected too.** Women who underwent tubal ligation also have higher levels of FSH.

**Explain why women who underwent tubal ligation also have a higher level of FSH.**

2025 Free State September P1

- **Disturbance in blood supply of ovaries means that follicles are incapable of growing properly**
- **Therefore, the corpus luteum does not develop fully either**
- **Less / No progesterone secreted**
- **Low levels of progesterone**
- **Stimulates pituitary gland**
- **to secrete more FSH**
- **levels of FSH in the blood increases / is higher**

consequences



**END**