

# Human Reproduction Revision Mat **Answers**

**Key Words**  
Write each key word from the box next to the correct definition.

egg cell	fertilisation	hormone
menstruation	oestrogen	ovulation
puberty	sperm cell	testosterone

Definition	Key Word
The fusion of male and female gametes.	<b>fertilisation</b>
The process of releasing blood and tissue from the lining of the uterus as part of the menstrual cycle.	<b>menstruation</b>
A chemical that is produced naturally within the body and released into the bloodstream to send messages to other parts of the body.	<b>hormone</b>
The female sex cell, produced by the ovaries.	<b>egg cell</b>
The main male reproductive hormone produced by the testes. It stimulates sperm production.	<b>testosterone</b>
The period of time when a person becomes sexually mature. It causes physical changes that affect males and females differently.	<b>puberty</b>
The male sex cell, produced by the testes.	<b>sperm cell</b>
The release of a mature egg cell from an ovary.	<b>ovulation</b>
The main female reproductive hormone, produced by the ovaries. It is involved in thickening the uterus lining.	<b>oestrogen</b>

**Male Reproductive System**  
The parts of the male reproductive system are shown below. Complete the missing labels.

Draw **one** line from each part of the male reproductive system to the correct function.

gland	Carries sperm cells from the testes to the urethra.
penis	Produces fluids that mix with sperm cells to make semen.
scrotum	Produces sperm cells and releases the male sex hormone testosterone.
sperm duct	A bag of skin that contains the testes.
testis	A tube that carries urine and semen. It has a ring of muscle to keep these fluids separate.
urethra	Allows urine and semen to pass out of the male body.

**Female Reproductive System**  
The parts of the female reproductive system are shown below. Complete the missing labels.

Draw **one** line from each part of the female reproductive system to the correct function.

cervix	Where the baby develops during pregnancy.
ovary	Contains hundreds of undeveloped egg cells. Every month, an egg cell matures and is released.
oviduct	A blood-rich layer of tissue in which an embryo implants. This tissue is lost each month during menstruation.
uterus	A ring of muscle at the lower end of the uterus. This keeps the baby in place during pregnancy.
uterus lining	A muscular tube that leads from the cervix to the outside of the body.
vagina	Carries egg cells from the ovaries to the uterus.

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**Sperm Cells**

Explain how each adaptation of a sperm cell helps it to carry out its function.



**Adaptation:** long tail

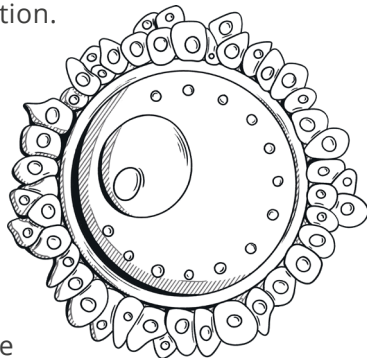
**Explanation:**  
the tail allows the sperm cell to move towards the egg cell to fertilise it

**Adaptation:** many mitochondria

**Explanation:**  
mitochondria release energy to allow the cell to move towards the egg cell

**Egg Cells**

Explain how each adaptation of an egg cell helps it to carry out its function.



**Adaptation:** large size

**Explanation:**  
the large size increases the chance of fertilisation and provides space for nutrients to be stored to support the developing embryo

**Adaptation:** cell membrane changes after fertilisation

**Explanation:**  
this stops any other sperm cells from entering the egg cell

**Puberty**

Place one tick in each row to show whether each change that takes place during puberty affects males, females, or both.

Change	Male	Female	Both
breasts develop		✓	
facial hair grows	✓		
growth spurts			✓
hips widen		✓	
menstrual cycle starts		✓	
mood changes			✓
penis and testes get bigger	✓		
pubic hair grows			✓
testes start to produce sperm cells	✓		
underarm hair grows			✓
vaginal discharge is produced		✓	

**Human Reproduction**

Number the stages in the process leading up to pregnancy in the correct order. The first one has been done for you.

2	Sperm cells travel through the female reproductive system to meet the egg cell in the oviduct.
6	The embryo implants in the lining of the uterus. The female is now pregnant.
1	During sexual intercourse, semen is released from the penis into the vagina. This is called ejaculation.
4	The nucleus of the sperm cell fuses with the nucleus of the egg cell in a process called fertilisation.
3	One sperm cell penetrates the egg cell membrane and enters the cytoplasm.
5	The fertilised egg cell travels down the oviduct, dividing many times along the way to form a ball of cells called an embryo.

**Effect of Maternal Lifestyle**

Name the structure that allows substances such as oxygen and glucose to pass from the mother's blood to the baby's blood during pregnancy.

**placenta**

Which of the following lifestyle factors may lead to low birthweight and premature birth?

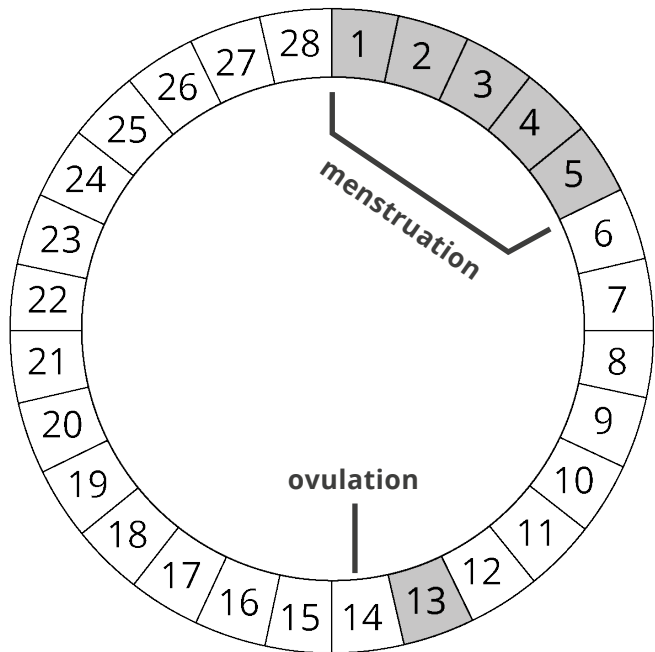
Tick **two** boxes.

- drinking alcohol ☒
- drinking fizzy drinks ☐
- eating lots of carbohydrates ☐
- eating lots of fruits and vegetables ☐
- smoking cigarettes ☒
- taking drugs prescribed by a doctor ☐

**The Menstrual Cycle**

The average length of the menstrual cycle is 28 days. Label on the diagram where the following processes occur:

- ovulation
- menstruation



**Development of a Baby**

What is the average length of gestation in humans? Tick one box.

- 28 days ☐
- 28 weeks ☐
- 40 weeks ☒
- 12 months ☐

What is the name given to a developing baby up to the end of the eighth week after conception?

**embryo**

What is the name given to a developing baby more than eight weeks after conception?

**foetus**

Draw one line from each week in the development of a baby to the correct description.

