

Name:
Science Class:
Teacher:
Hand in day:

# Y7 Science

## Term 2: Homework Booklet

### Biology

	Hand in Date	Parents Signature
<b>Reproduction</b>		
Homework 1		
Homework 2		
Homework 3		
Homework 4		

## Reproduction: Homework 1

### Comprehension Task:

Reproduction is one of the 7 life processes. It means to **make more** of the same kind of organism as themselves.

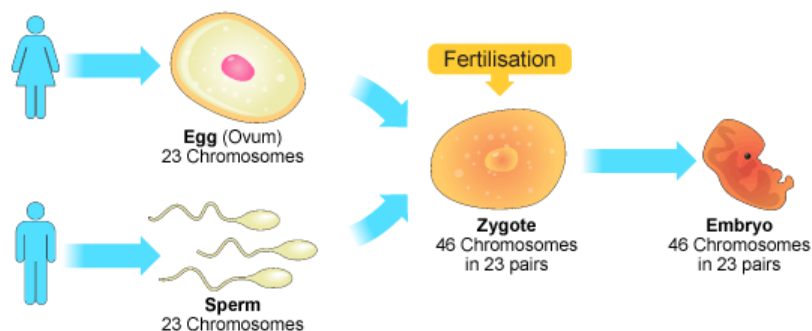
Humans typically reproduce through **sexual reproduction**. Sexual reproduction involves the joining of **two sex cells** (gametes) during fertilisation.

Organisms produced by sexual reproduction have **two parents** and are **genetically similar to both** but not identical to either.

**Gametes** are the sex cells:

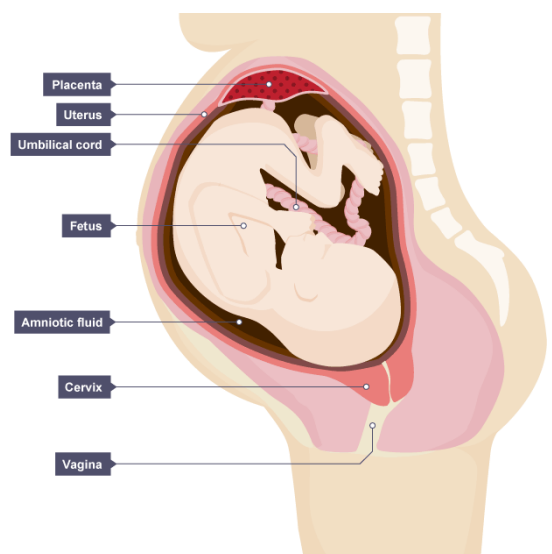
- **eggs** are the female gametes and are found in the **ovaries** of the female reproductive system
- **sperm** are the male gametes and are made in the **testes** of the male reproductive system.

**Fertilisation** is the fusion of the nucleus of a male gamete with the nucleus of a female gamete, producing a new cell called a **zygote**. The nucleus of the sperm cell fuses with the nucleus of the egg cell.



The zygote (fertilised egg) divides to form a ball of cells called an **embryo**. The embryo attaches to the lining of the uterus. It begins to develop into a **foetus** and finally into a **baby**.

In humans, fertilisation happens inside the woman's body. This is a process called **internal fertilisation**.

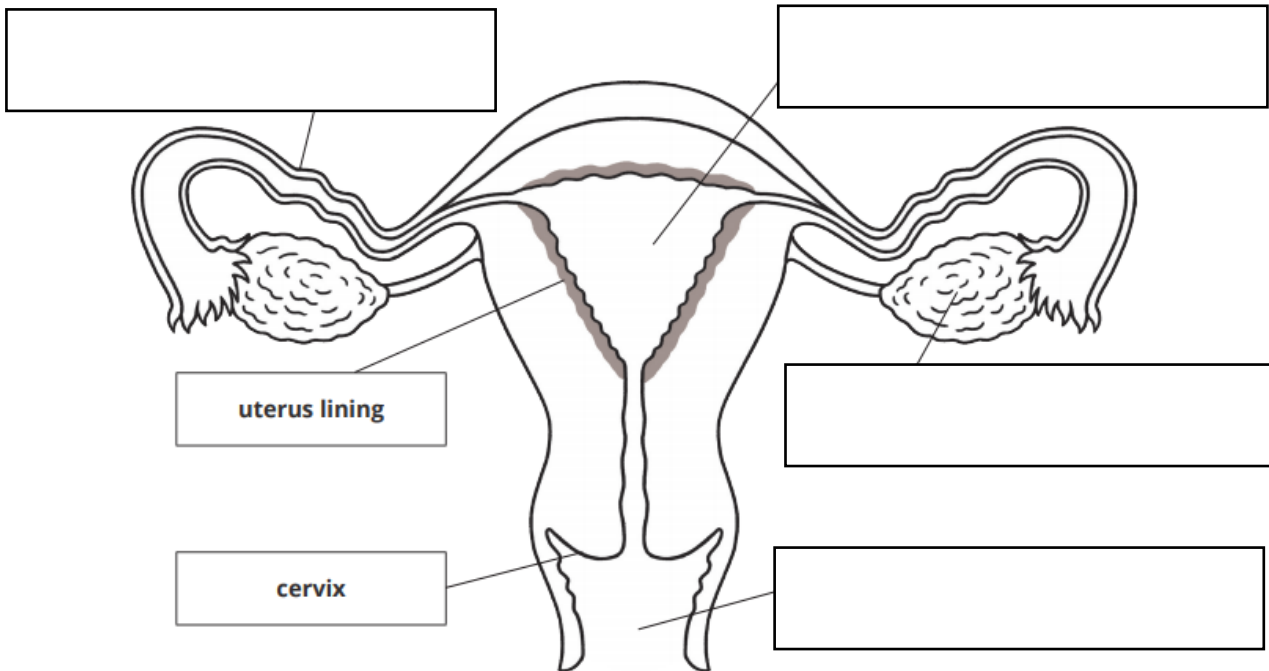


## Questions

1. How many parents do organisms have when produced by sexual reproduction?
2. What are gametes?
3. What is the name of the female gamete?
4. Where is the female gamete found?
5. What is the name of the male gamete?
6. Where is the male gamete made?
7. What is fertilisation?
8. What is a zygote?
9. What is an embryo?
10. What is meant by internal fertilisation?

## Reproduction: Homework 2

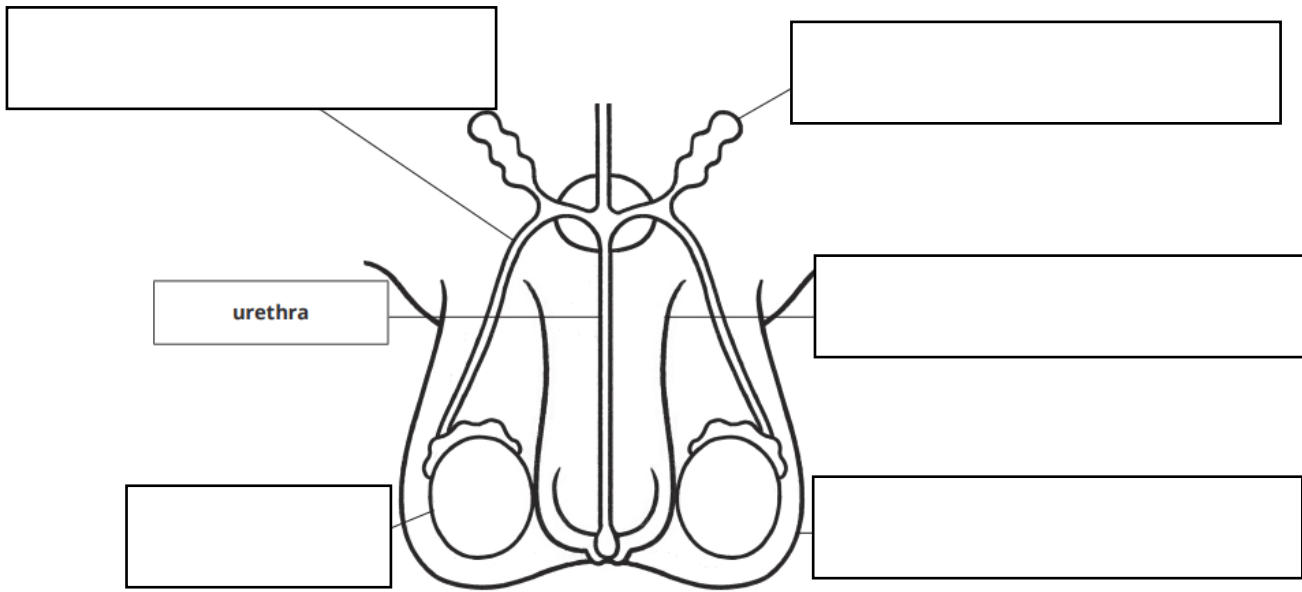
Label the missing structures of the **female reproductive system**:



Complete the table to give the function of each structure:

Structure	Function
Ovary	
Oviduct	
Uterus	
Cervix	
Vagina	

Label the missing structures of the **male reproductive system**:



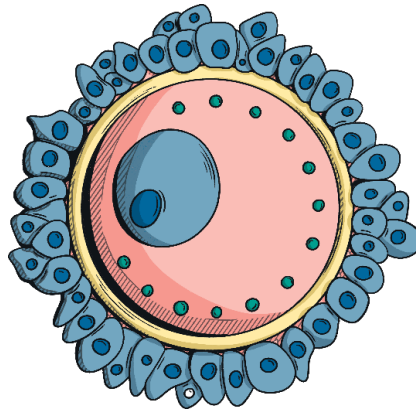
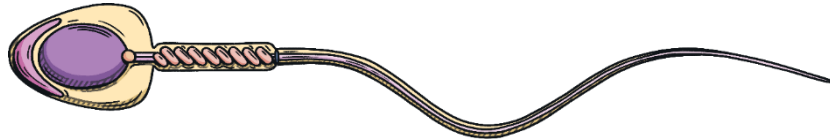
Complete the table to give the function of each structure:

Structure	Function
Testes	
Scrotum	
Glands	
Sperm duct	
Penis	

### Reproduction: Homework 3

Use the terms to label the adaptations of the sex cells below:

Egg Cell    Cytoplasm    Nucleus    Sperm Cell    Large Size    Cell  
Membrane    Tail    Nucleus    Mitochondria    Acrosome



### Questions

1. Why does a sperm cell need a tail?
2. Why do sperm cells need lots of mitochondria?
3. What does the acrosome contain and why is this needed by the sperm?
4. Why does an egg cell have a large cytoplasm?
5. What is the definition of fertilisation?

## **Reproduction: Homework 4**

**Puberty** is a period in a person's life when they become sexually mature.

This means that when a person has finished puberty they are capable of reproduction. This happens at different times for different people.

**1. Complete the table by listing a minimum of three physical changes that happen during puberty to females, both females and males and males:**

<b>Females</b>	<b>Both</b>	<b>Males</b>

**2. What is the name of the hormone that causes these changes in males?**

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**3. What is the name of the hormone that causes these changes in females?**

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The **menstrual cycle** is a process that occurs in the female reproductive system.

It involves the building up of the uterus lining and the release of an egg cell from the ovary in preparation for fertilisation.

**4. Use the key words in the box to complete the descriptions of each stage of the menstrual cycle.**

### Key Words

egg cell    menstruation    ovulation    fertilised    ovary    uterus  
fertilisation    oviduct    vagina

