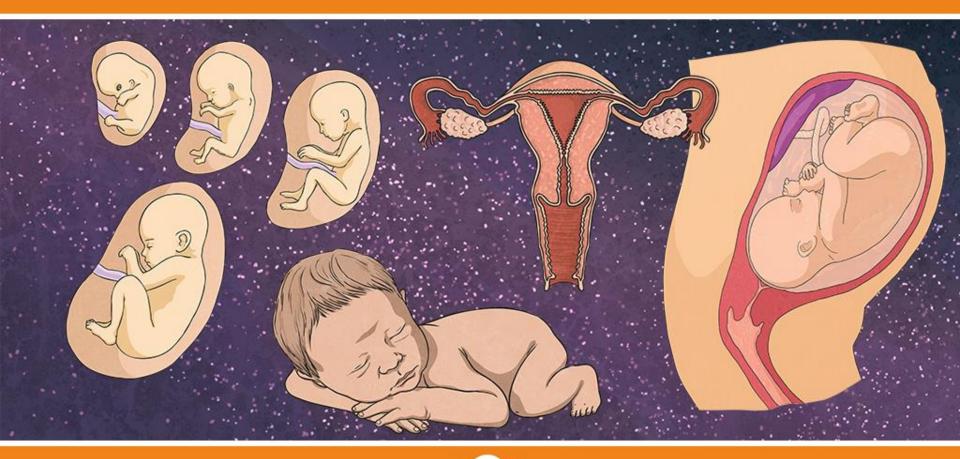


# **PSHE and Citizenship**

Health and Wellbeing | Growing Up

# Human Reproduction









#### Aim

• I can describe the process of human reproduction, from conception to birth.

#### Success Criteria

- I can use the appropriate scientific vocabulary when talking about human reproduction.
- I can describe how a baby grows inside the womb.
- I can explain how a baby is born.

# The Big Questions



# Reconnecting

# **Human Reproduction**



Using what you already know about human reproduction, see if you can complete the following statements with your partner.

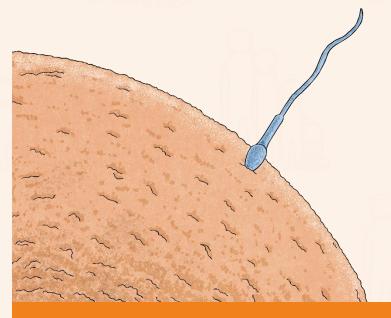
- A male produces <u>sperm</u> in his testicles.
- Once a month, the female's body releases an **egg**.
- A male and a female in a loving relationship might decide to have <u>sexual</u> <u>intercourse</u> to try to make a baby.
- Only <u>one</u> sperm can fertilise the egg.
- A fertilised egg takes <u>nine</u> months to grow into a baby.
- The female carries the baby inside her <u>womb (uterus)</u>.
- Two people who want to have sexual intercourse but do not want to make a baby, might use a method of \_contraception\_, such as a condom or a pill.



# Exploring



Human reproduction is amazing!



From a sperm fertilising an egg (otherwise known as **conception**)...



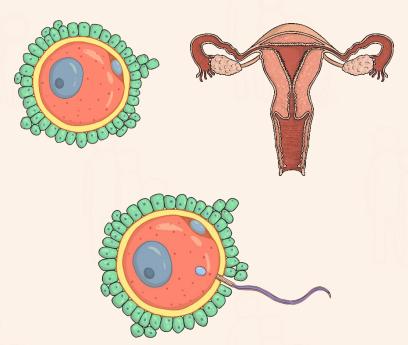
to the **birth** of a baby.



If a male and a female want to conceive a baby, they have sexual intercourse. The male's penis ejaculates sperm, which race to find the female's egg.

The female's body releases one egg once a month. The egg only lives for about 12 – 24 hours but sperm can live for 5 – 7 days.

If a sperm reaches the egg, the egg is fertilised, starting a new life form.



If the couple do not want to conceive a baby, they can use contraception to stop the sperm reaching the egg.





Some couples conceive a baby differently. Same-sex couples and some heterosexual couples are not able to conceive a baby this way.

Doctors can remove a female's eggs from her body and the eggs can be fertilised with sperm outside of her body.

Once an embryo has formed, the doctors can place it back inside the female's uterus so she can continue the pregnancy until the baby is ready to be born.



Some females have a problem with their uterus and may not be able to carry a baby inside them. In this case, they may use something called **surrogacy**.

The egg is fertilised by the sperm outside of the female's body and once an embryo has formed, it is placed inside the body of another female who has agreed to carry the baby inside her until it's ready to be born. It is often a sister or close friend of the couple who does this for them.





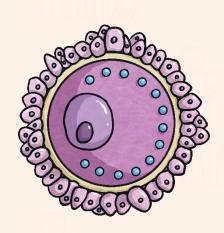
Let's take a closer look at the whole journey from **conception** to **birth**. This video shows the most common type of conception, when a male's sperm fertilises the egg inside the female's body.

Watch the video carefully and feel free to jot down any questions you have about the development of the **foetus** (this is what the baby is called before it is born).





Wow! From just two cells (a sperm and an egg) to 37.2 trillion cells in a human being!







embryo



foetus

The rate of growth is extremely rapid. The egg cell measures 0.12mm in diameter and a newborn baby is approximately 50cm.

#### What a Foetus Needs



The mother's body knows exactly what to do and when to do it, as well as knowing how to provide the foetus with everything it needs to develop and grow.

#### What a Foetus Needs



twinkl.com

With your partner, can you think of three things a foetus needs in order to grow and develop inside the womb?

oxygen

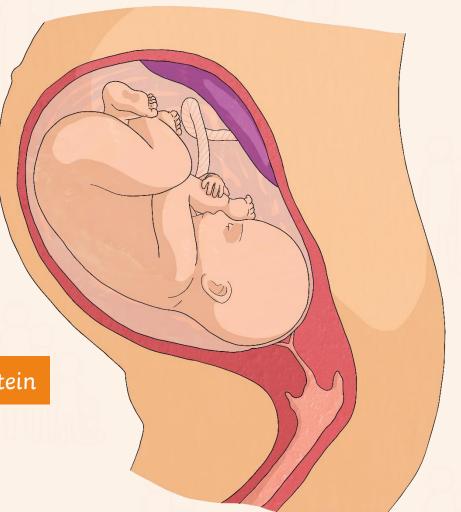
minerals

fats

vitamins

protection

protein

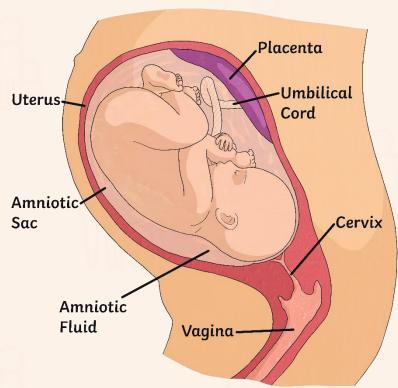


#### What a Foetus Needs



In the uterus, the foetus is protected inside an **amniotic sac**, which is filled with **amniotic fluid**.

All the **nutrients** that the foetus needs while it is inside the womb (or uterus) are passed from the mother's body to the foetus. The mother's body creates a **placenta**. Nutrients and oxygen pass from the placenta to the baby through the **umbilical cord**.



The umbilical cord also carries waste substances, such as carbon dioxide, away from the baby to the placenta.

# How a Baby Is Born



After nine months of growing inside its mother, the baby is ready to be born.

The muscles in the uterus push the baby out. This is called **labour**. The baby comes out (usually head first) from the mother's vagina.



## How a Baby Is Born



Some babies are born through a caesarean section (or C-section for short). This is when the baby cannot be delivered through the vagina, for example the baby may be breech (meaning it is feet first in the womb, rather than head first ready to be born).



In a C-section, an incision is made through the woman's tummy and into her womb. It is a common operation and is safe for both the mother and the baby.



# Consolidating

# The Journey from Conception to Birth



It really is amazing that the human body can create new life from one sperm and one egg.

Use this	blank template to crea	te a comic strip that	shows the journey of c	onception to birth.	
	-     -			<u> </u>	
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Using the comic strip and the images and vocabulary sheet provided, can you retell the journey from conception to birth?

# Reflecting

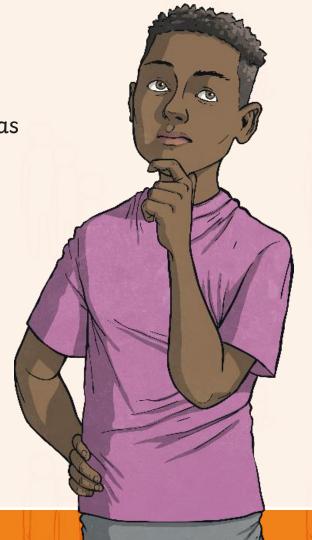
### What I Would Like to Know



Can you believe that you all started out as two cells – a sperm and an egg meeting?

The way you developed inside the womb was the start of you being who you are now.

Are you like anyone else in your family?
Maybe you look like a parent, grandparent
or sibling or perhaps you share some
personality traits with someone you are
related to?



## What I Would Like to Know



Perhaps you would like to talk to your parents about yourself, before and after you were born. Were you their first baby? Did they find out the sex of the baby? How long did it take them to choose a name for you? Were you born early, late or on the day you were due? How much did you weigh?

There is an awful lot to find out. Think about some questions you might like to ask your parents.

# The Big Questions



#### Aim

• I can describe the process of human reproduction, from conception to birth.

#### Success Criteria

- I can use the appropriate scientific vocabulary when talking about human reproduction.
- I can explain what contraception is.
- I can describe how a baby grows inside the womb.
- I can explain how a baby is born.

