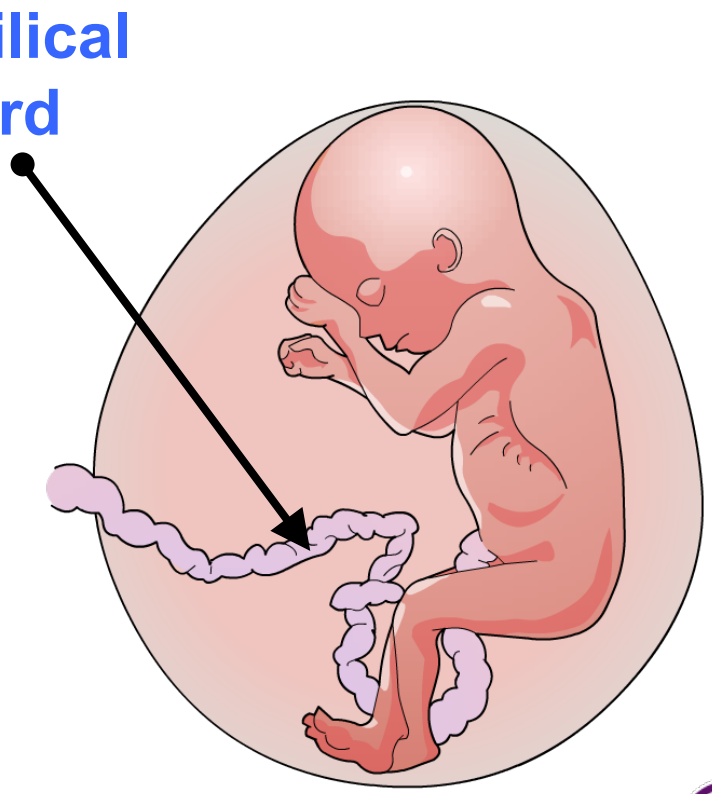
Embryo Development and Birth

The placenta

How does an embryo receive food and oxygen and how does it get rid of waste?

An embryo forms a structure called the **placenta**, which attaches to the uterine wall.

The **umbilical cord** joins the fetus to the placenta.



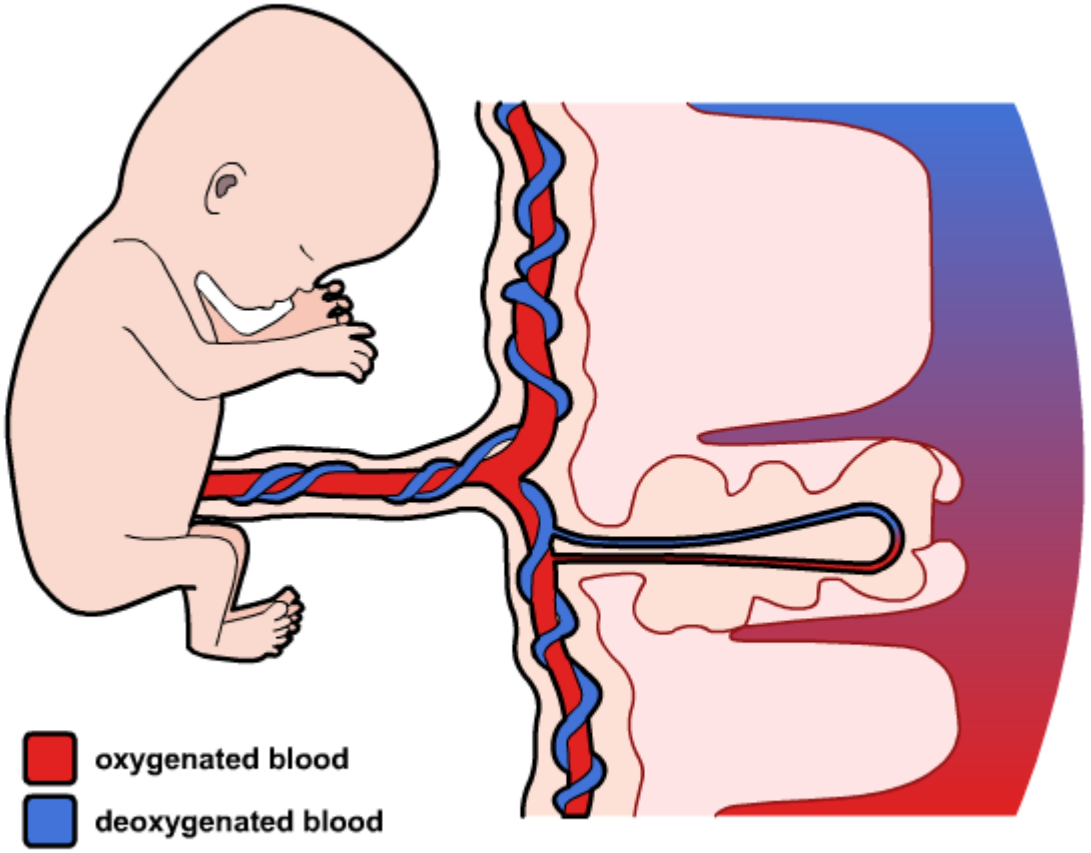
In the placenta, food and oxygen diffuse from the mother's blood into the blood of the fetus.

Carbon dioxide and waste products diffuse from the blood of the fetus into the mother's blood.

How does the placenta work?

During gestation oxygen, nutrients, carbon dioxide and waste pass between the maternal and fetal blood, but the two blood supplies do not physically mix.

Click "**play**" to find out more.



From embryo to fetus

In the earliest stages of development, a human baby is called an **embryo**.

After the first eight weeks of pregnancy, a human embryo is then called a **fetus**.

At this stage, the fetus has all the main human features.

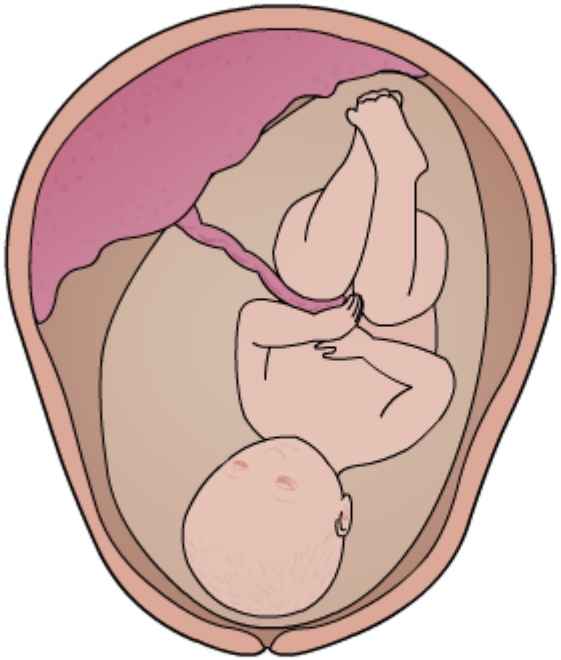
The fetus continues to develop and grow inside its mother's uterus for a total of 40 weeks.

What are the stages of development?

How does a baby develop during gestation?

Humans begin life as a single cell, but cell division and differentiation during gestation give them a visibly human shape. After nine months of gestation, a baby is developed enough to survive outside the womb.

Click "**start**" to find out more.



start

The stages of pregnancy

What is the order of stages in pregnancy?

4 weeks

The fetus is growing hair, nails and eyelashes.

The fetus is 30 cm long and its brain is very active.

The fetus is 7 cm long and all body parts are present.

The embryo is called a fetus and has human features.

The embryo is 2 mm long and its heart is beating.

40 weeks

The fetus is fully developed and ready to be born.

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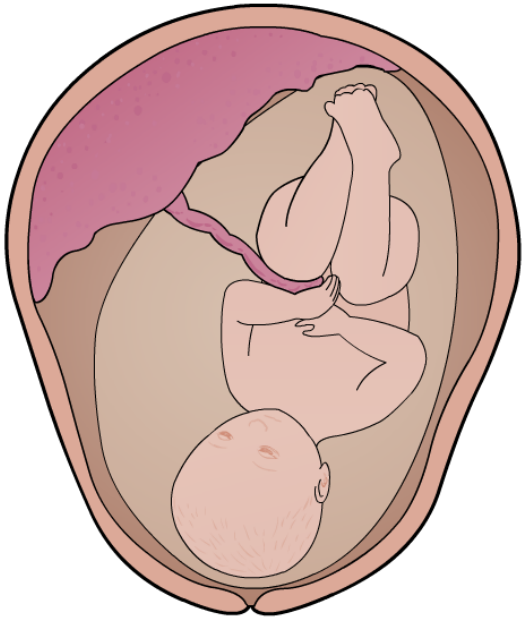
C solve

Birth

After 40 weeks of gestation, the baby is ready to be born. At this point, the head usually lies just above the cervix.



Birth begins with small contractions of the uterus wall, which gradually become stronger and more frequent.

Eventually the contractions cause the amnion to break and the fluid escapes. The cervix then widens and dilates as the baby is pushed through the vagina.

After a few minutes, the placenta comes away from the uterus wall. This is pushed out as the afterbirth.