

Video “The miracle of life”

Answer the following questions about human development.

Fewer than 50 % of all fertilized eggs actually develop into an embryo.

In humans, the ovum (“egg”) is fertilized by the sperm in the fallopian tube.

How many days does it take the zygote to get from there to the uterus? 5 days

Why is the **blastocyst** in danger when gets to the uterus?

The mother's body thinks it is a foreign body so her immune system attacks.

How does the **blastocyst** combat this threat?

It secretes chemicals to calm the mother's immune system and implants.

Gastrulation is when the cells begin to organize into the three layers of germ tissue that create all the structures of an organism. *Where and when* does gastrulation occur?

2 weeks, deep inside the mother's uterus.

Where does the fetus get nutrition? placenta

When does the placenta begin to form? when the blastocyst entered into the uterus

A gene on this chromosome causes male and female gonads to differentiate. SRY on male y-chromosome.

When does an embryo become a fetus? 2 months

What is the first organ to begin working? the heart

When will a fetus first respond to light? 5/6 months

When will a fetus first respond to sounds? 5/6 months

The mother's blood supply increases by 50 % during pregnancy.

What is the fetus' main job in the final months of pregnancy? to grow

What are 2 reasons fat is so important to the fetus in the last few months of pregnancy?

Laying down a myelin sheath in the brain and building a fat reserve.

What are 2 reasons human birth can be particularly dangerous?

The baby's large head (for a larger brain) and the mother's narrow hips (to walk upright).