



E - Bio Worksheet

Miracle of Life Questions

Watch the video, and answer these questions while you are watching. If you miss something, fill it in at the end.

THE PATH TRAVELED BY THE EGG

The egg travels through the _____ after being released from the _____.

The fertilized egg contains _____ from both parents.

The egg is surrounded by a cloud of _____.

These hairs, called _____ move the egg along towards the uterus.

It takes the egg ____ days to travel of _____ inches along the fallopian tube.

The egg must join with a sperm within _____ hours in order for conception to take place. If no sperm are present the egg _____.

WHEN SPERM ENTERS THE FEMALE BODY

Nearly ____ of the sperm will die almost immediately after entering the woman's body.

Sperm will remain viable (able to survive) only _____ hours.

The sperm have one goal: _____.

There are many barriers (things to overcome) for a sperm to reach the egg. Some of these are:

1. _____
2. _____
3. _____

SPERM ENTER THE FALLOPIAN TUBE

The fallopian tube has ____ openings; one leads to the _____ and the other to _____.

Of the 200 million sperm that enter, only about ____ ever reach the egg.

Only ____ sperm will enter and fertilize the egg.

Once inside the egg, the sperm undergoes a big change, it _____.

The genetic material is released from the _____.

Within ____ hours, the new cell begins to divide.

THE EMBRYO DEVELOPS INTO A FETUS

Once it has begun to divide the fertilized egg is called a _____.

As the zygote divides, it moves along the fallopian tube toward the _____.

Number of weeks since fertilization	Appearance of embryo/fetus
	has elongated (grown long) it is barely 1/10 th of an inch long
	has arm buds, and is curled it has the beginning of eyes
	nose begins to take shape
	leg buds appear embryo is less than ____ inch long it floats inside the fluid filled amniotic sac its _____ is clearly visible
	embryo is $\frac{3}{4}$ of an inch long can move its _____, where there are clearly defined fingers its _____ are visible eye lenses are formed
	fingers are clearly seen the _____ of the feet are clearly visible

	embryo is 2 ½ inches long
	it can bring its hands together and suck its thumb
	organs of senses are nearly formed
	turning inside the mother
	now a fetus that is 5 ½ inches long eyes are closed, but the fetus can see the _____ is the fetus' link to its mother, the source of its life.

All of its important features have been developed, but it will take another ____ weeks before it can survive outside its mother.

Related sites of interest:

1. Watch "The Miracle of Life" **on-line** at <http://www.pbs.org/wgbh/nova/miracle/program.html>
2. **Windows on the Womb** - explore many of the currently available screening techniques that are changing the nature of pregnancy and parenthood.
<http://www.pbs.org/wgbh/nova/miracle/windows.html>
3. **How is sex determined?** The following site illustrates the astonishing changes that occur during the first 16 weeks of development.
<http://www.pbs.org/wgbh/nova/miracle/determined.html>

Source: Paul Galpern, 2003 paul.galpern@utoronto.ca
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