What do you understand by sexual reproduction?

Sexual reproduction: It is the most important factor for promoting genetic variability in populations. Mechanisms that favor out-breeding further promote variability in populations.

There are basically two ways by which animals can reproduce: (i) **asexual reproduction** (‘A’ absence, i.e., absence of sexual method): It is a type of reproduction in which new individuals are produced by non-sexual or vegetative methods, without involving the two sexes and (ii) **sexual reproduction:** This is another type of reproductive method in which male and female sex cells (**gametes**) fuse to form a new individual (***zygote***). It is seen in higher animals like horse, dog, man, cat, etc.

**Sexual Reproduction**

The basic precondition for this type of reproduction is fusion of male gametes known as “**sperms**” and female gametes—the “**ova**” or eggs, to form the **zygote** or embryo. In simple terms, zygote is a “fertilised ovum” or fertilised egg. The **union or fusion** of male and female gametes to form a zygote, during sexual reproduction, is called **fertilisation**.

**Sexual Reproduction leads to increased genetic variation in population**

because offsprings receive genes from both the parents, which get mixed during fertilisation (**meiosis**). Further by providing genetic variation, sexual reproduction leads to **origin of new species, i.e., evolution.**

Sexual reproduction: It is the most important factor for promoting genetic variability in populations. Mechanisms that favor out-breeding further promote variability in populations.

Meiosis and fertilisation occur during sexual reproduction. Therefore **sexual reproduction** causes variation.

Humans look a bit like each of the parents this is because they share genetic information with both of them. This mixing comes about because of sexual reproduction which involves the joining of two sex cells or gametes in the process called fertilization.

male and female humans have different reproductive systems during puberty the reproductive organs developed to enable the production of offspring

The testes are kept outside the body in the scrotum thus keeps them cooler and is better to form sperm production.

the sperm ducts carry sperm from the testes to the urethra which is a tube running down the inside of the penis.

the other sperm is mixed with secretion from glands to produce a liquid called semen semen helps carry the sperm into the female reproductive system.

here's the female reproductive system the female gametes eggs or OVA are released from the ovaries one is released every month by a process called ovulation.

when a baby girl is born she already has all of the eggs she will ever release inside her ovaries during puberty the monthly cycle of an ink maturing and being released starts this is part of the menstrual cycle.

After ovulation the egg travels along a tube called the fallopian tube or oviduct away from the ovary and towards the uterus which is also known as the womb.

During sexual intercourse also called copulation semen is ejaculated from the penis into the woman's vagina and swim up through the cervix and uterus.

if a sperm manages to reach the egg in the fallopian tube then fertilization will occur.

The egg only survives for 24 hours after ovulation but sperm can survive for up to 5 days this means that there is about 6 days during a cycle in which a sperm and egg can meet and the female can become pregnant.

The fertilized egg called the zygote will start to divide on reaching the uterus. This cluster of cells will settle into the lining, if the egg is not fertilized.

It will leave the uterus along the lining and menstruation also known as a period will occur once inside the uterus in a pregnant woman.

The wall of cells will continue to divide and differentiate to form different types of cells, some will form structures in the embryo and others the placenta.

placenta is an organ and it's where the exchange of substance between the mother and embryo occurs.

Nutrients and oxygen will pass from the mother's blood into the embryos blood in the percenter blood vessels in the umbilical cord transport these to the embryo waste products like carbon dioxide will pause from the embryo to the mother where they are excreted at the end of week 8 after fertilization the embryo is called the fetus now it has all the organs including the heart and brain but it is only stole the size of a grape the fetus continues to develop for the entire pregnancy also called gestation so it can survive independently of its mother this is normally between 38 and 42 weeks in this video you have learnt about sexual reproduction in humans and how the male and female sexual reproductive organs are used to form and grow a fetus ready to be born.

1. Types of Sexual reproduction
2. Sexual and asexual reproduction
   1. Difference between sexual and asexual reproduction
3. Sexual reproduction single celled organisms
4. Syngamy in Multicellular organisms
   1. Different types of Syngamy
      1. Plant syngamy
      2. Animal syngamy
      3. Human syngamy
5. Advantage of sexual reproduction