

3.1 and 3.2 Methods of Sexual Reproduction

The joining of two gametes is called fertilization

Sperm (___) + egg (___) = zygote (___)

_____ is the main positive from sexual reproduction.

_____ means variation, or different types of the same thing. This is possible due to having pairs of chromosomes

(_____ chromosomes)

Different forms of the same gene are called _____

Sometimes an _____ masks the effect of another.

These are called _____.

_____ are only seen if both copies of the chromosome have the recessive trait.

Let's look at a *simplified* example using eye colour

Brown eye gene + Brown eye gene = _____

Brown eye gene + Blue eye gene = _____

Blue eye gene + Blue eye gene = _____

In this example, the Brown eye gene is a _____.

The Blue eye gene is a _____.

| | Advantages | Disadvantages |
|-----------------------------|-------------------|----------------------|
| Asexual reproduction | * | * |
| | * | |
| | * | |
| | | |
| Sexual reproduction | * | * |
| | | * |

Methods of sexual reproduction

_____ is when two unicellular organisms exchange bits of DNA. The exchanged piece of DNA is called a

_____.

This is important because it is one of the ways bacteria can pass on resistance to _____.

After _____, the bacteria return to _____

reproduction by _____.

A _____ is an organism that has both male and female parts. This approach is useful when a species doesn't come across other members of that species very often. In this case, when another member of the species comes along, both individuals can reproduce. Two examples of hermaphrodite

species are _____ and _____. Other

_____ like _____ produce eggs at one time and sperm at others. This helps to avoid fertilizing one's self.

_____ are reproductive structures. They often contain both male and female parts. Check out pg. 85 in the textbook for a picture of a flower including the parts you will need to know. In flowering plants, the _____ cells are located in _____. The process of fertilizing a flower is _____. Most _____ needs help either from insects, the wind, or other animals.

In many organisms there are two _____: _____ and _____. Males produce _____ and females produce _____. There are two main types of fertilization:

_____ **fertilization:** when the sperm and egg unite _____ the body. Examples: salmon, sea urchins, coral. (tends to occur in water dwelling species)

_____ **fertilization:** when the sperm and egg unite _____ the body. Examples: most land creatures.

We'll look at the structures necessary for internal fertilization in the next section.