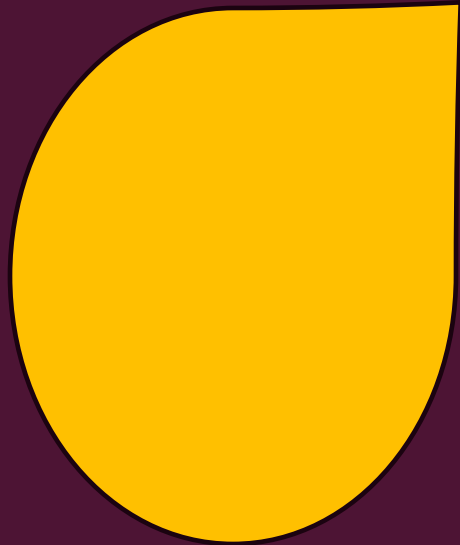

TYPES OF CLEAVAGES



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DEFINITION

- **A sequence of mitotic divisions in which the huge volume of egg cytoplasm gets divided into several smaller, nucleated cells is known as cleavage.**
- **The rapid mitotic division takes place during embryological development.**
- **The zygote undergoes rapid mitotic divisions and the single zygote into the multicellular structure is called a blastocyst.**

TYPES OF CLEAVAGES

Determinate

**Meroblastic
cleavage:**

Indeterminate

Holoblastic

DETERMINATE CLEAVAGE:

- **This type of cleavage mostly takes place in annelids, arthropods, and molluscs.**
- **The blastomere produced by the early development of an embryo can't develop into a fully developed embryo.**

INDETERMINATE CLEAVAGE:

Is also called regulative cleavage.

This type of cleavage takes place in invertebrates.

In this cleavage, the original cell in the embryo divides into two cells which on separation can develop into a whole organism.

MEROBLASTIC CLEAVAGE

This type of cleavage takes place in the zygote which contains a large concentration of yolk.

The zygote due to the presence of yolk undergoes partial cleavage.

HOLOBLASTIC CLEAVAGE

This type of cleavage takes place in which the concentration of yolk is not very large(iso lethal cell).

The zygote completely divides into blastomeres at each cleavage and the number of blastomeres goes on increasing.



**THANK
YOU!**

A graphic featuring the words "THANK YOU!" in a bold, stylized font. The word "THANK" is on the top line and "YOU!" is on the bottom line. The letters are yellow with a thick black outline. The exclamation point is red with a black outline. The text is surrounded by numerous short, black, radiating lines of varying lengths, creating a starburst or explosion effect. The entire graphic is centered on a white background.