

Underline the sections which relate to the diagrams you have.

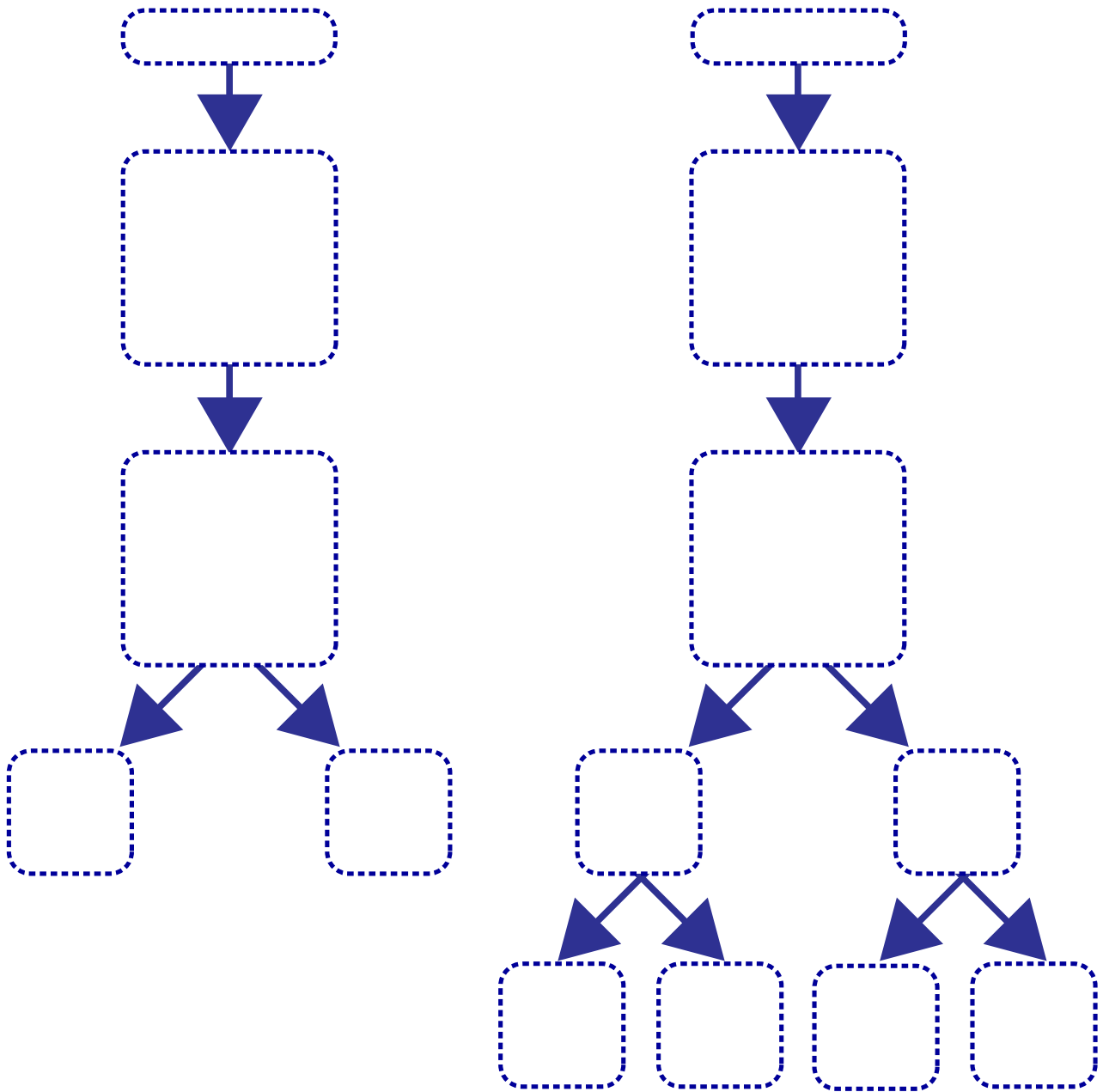
Mitosis


- Mitosis is a type of cell division which organisms use for growth and repair or replacement of old or damaged cells.
- In mitosis one cell (the mother cell) divides to form two new daughter cells.
- The daughter cells are genetically identical to the mother cell.
- The diploid mother cell (diploid means it has 2 sets of chromosomes) doubles its DNA so that it has one set for each new cell. This means that each daughter cell has a full set of chromosomes.

Meiosis


- Meiosis is the type of cell division which only occurs for the formation of sex cells (gametes) like eggs and sperm for sexual reproduction.
- The mother cell is a diploid cell and the DNA replicates, as in mitosis, but following this, there are two divisions resulting in four haploid (half the number of chromosomes of a diploid cell) daughter cells.
- Unlike mitosis, cells produced by meiosis are not genetically identical to the mother cell.
- This means that every egg or sperm contain half the DNA needed to form a human, so that when they join together at fertilisation, they form a new diploid cell.
- This then divides by mitosis to grow into a baby.

Arrange the diagrams in the order that you think they should go.







DNA replicates



DNA replicates



Mother cell



Mother cell

Meiosis

Mitosis

