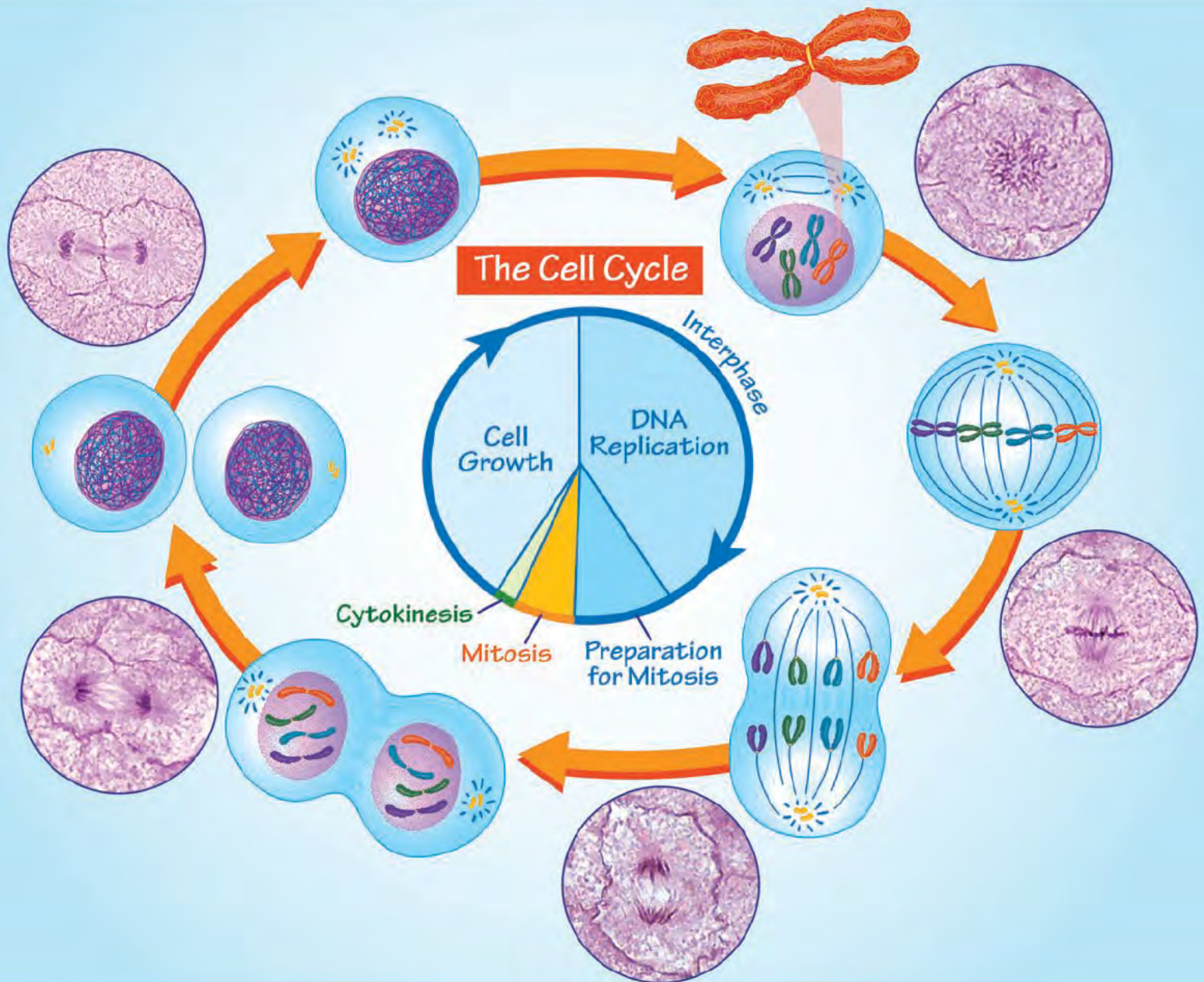


Mitosis: Cell Growth & Division *Learning Guide*



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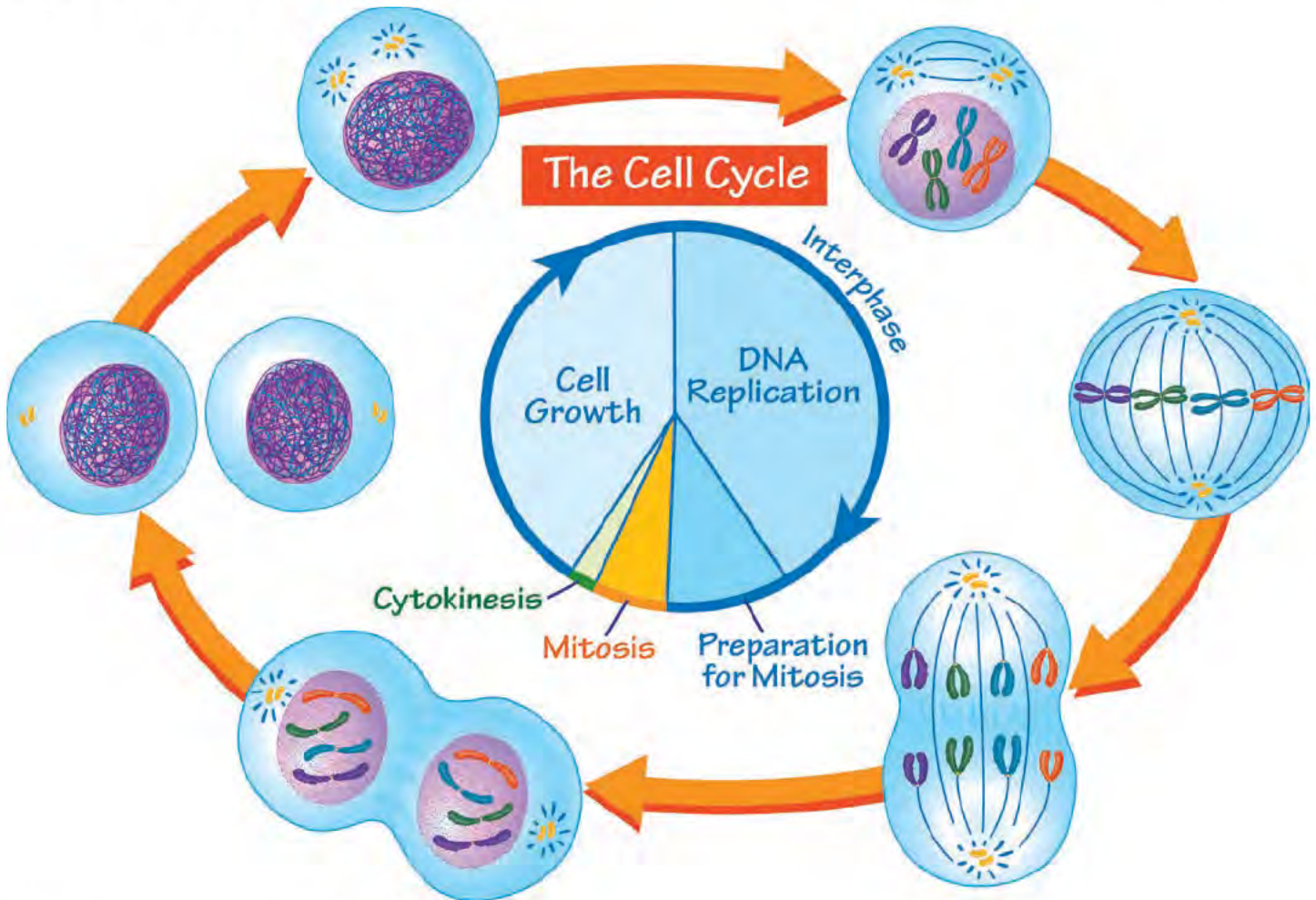
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THE CELL CYCLE

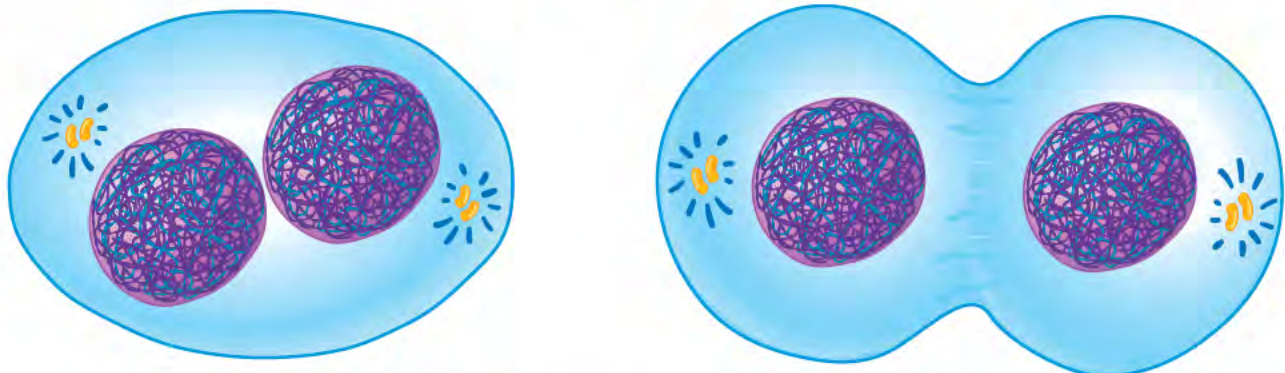
Life Cycle of a Cell

The life cycle of a cell is called the **cell cycle**. The cell cycle is a series of events that take place in a cell from one division to the next.



Two Steps of Cell Division

Cells divide in two steps – **mitosis** and **cytokinesis** (division of cytoplasm). First, during **mitosis** the nucleus of the cell divides, and then during **cytokinesis**, the cytoplasm divides.



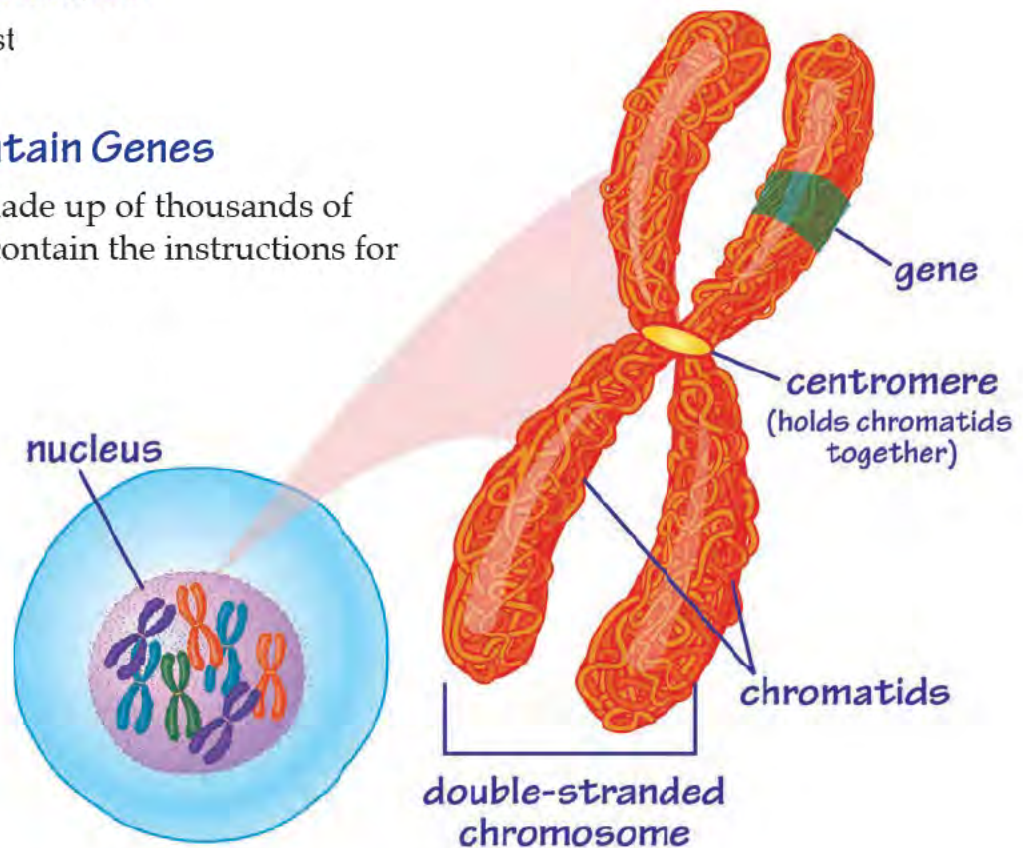
CHROMOSOMES

Location of Chromosomes

The cell **nucleus** of most

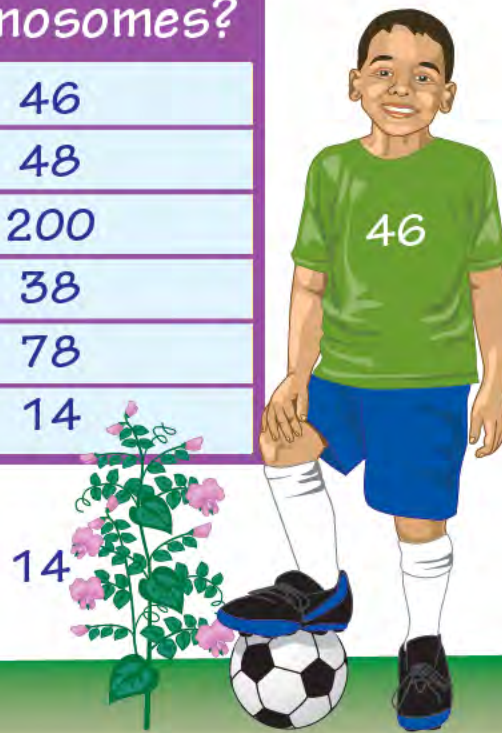
Chromosomes Contain Genes

Each **chromosome** is made up of thousands of different **genes** which contain the instructions for an organism's **traits**.



How many chromosomes?

Human	46
Gorilla	48
Crayfish	200
Cat	38
Dog	78
Pea plant	14



Species & Chromosome Number

The number of **chromosomes** is unique for each species.