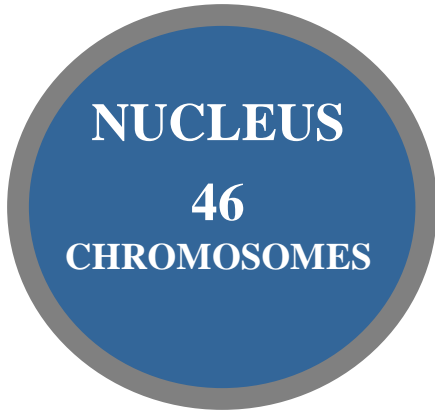
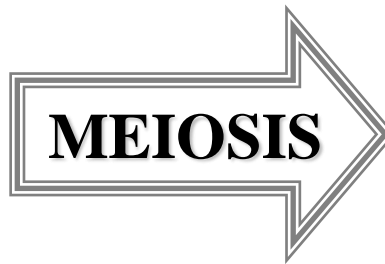


HUMAN CELL

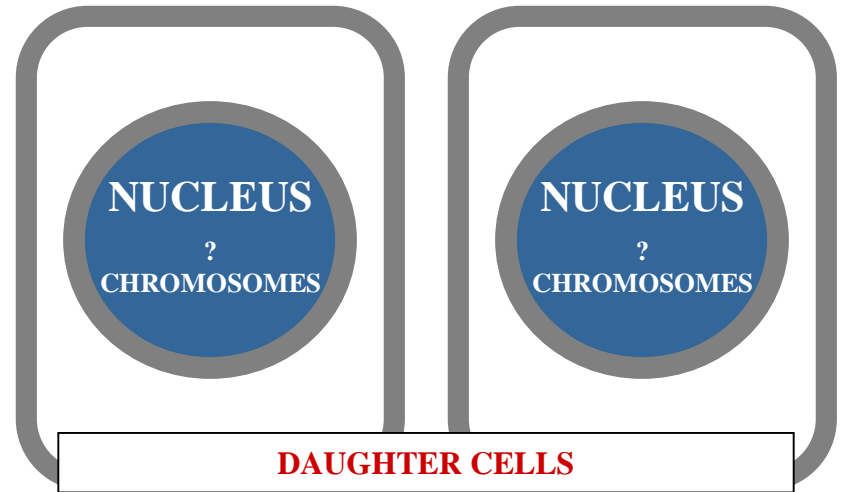
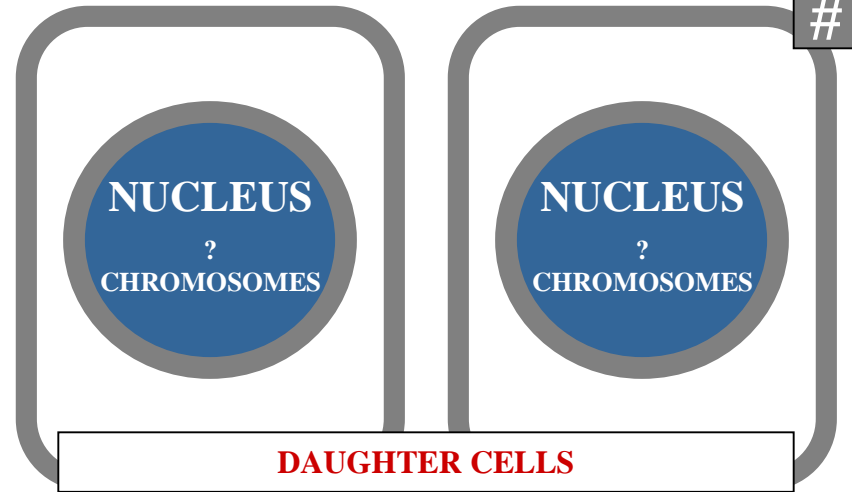


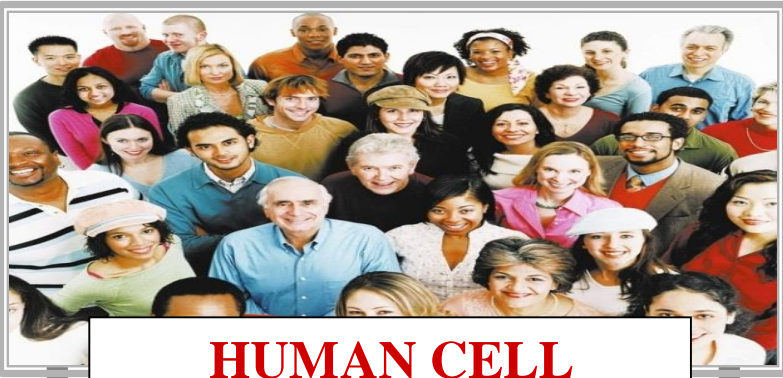
**YES CHROMOSOME
REDUCTION**

MOTHER CELL

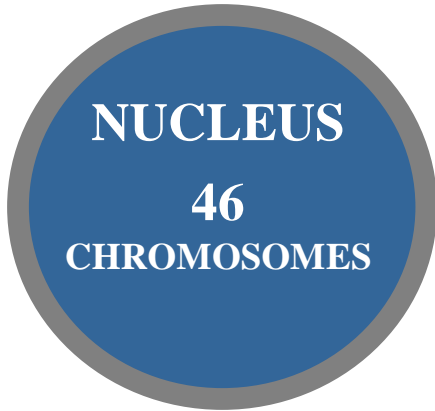


1/2 REDUCTION



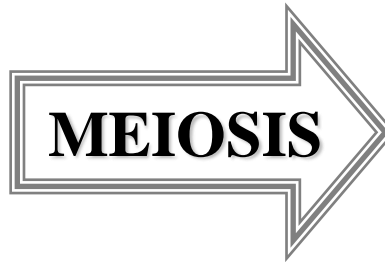


HUMAN CELL

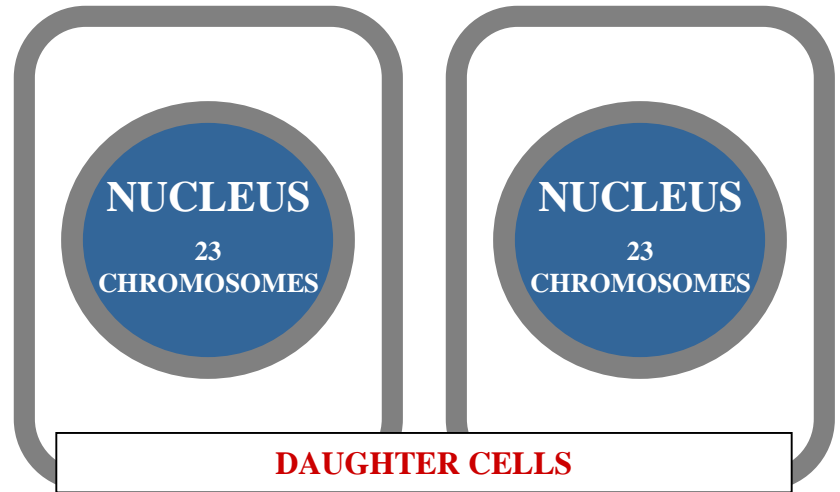
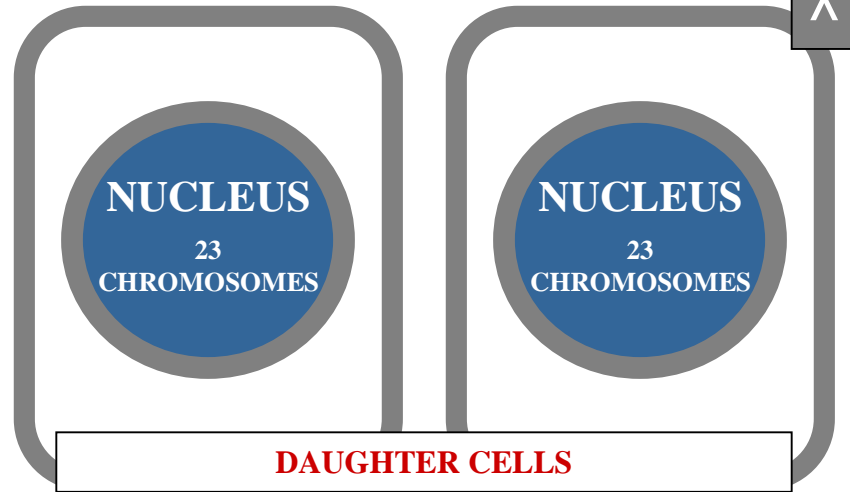


**YES CHROMOSOME
REDUCTION**

MOTHER CELL



1/2 REDUCTION





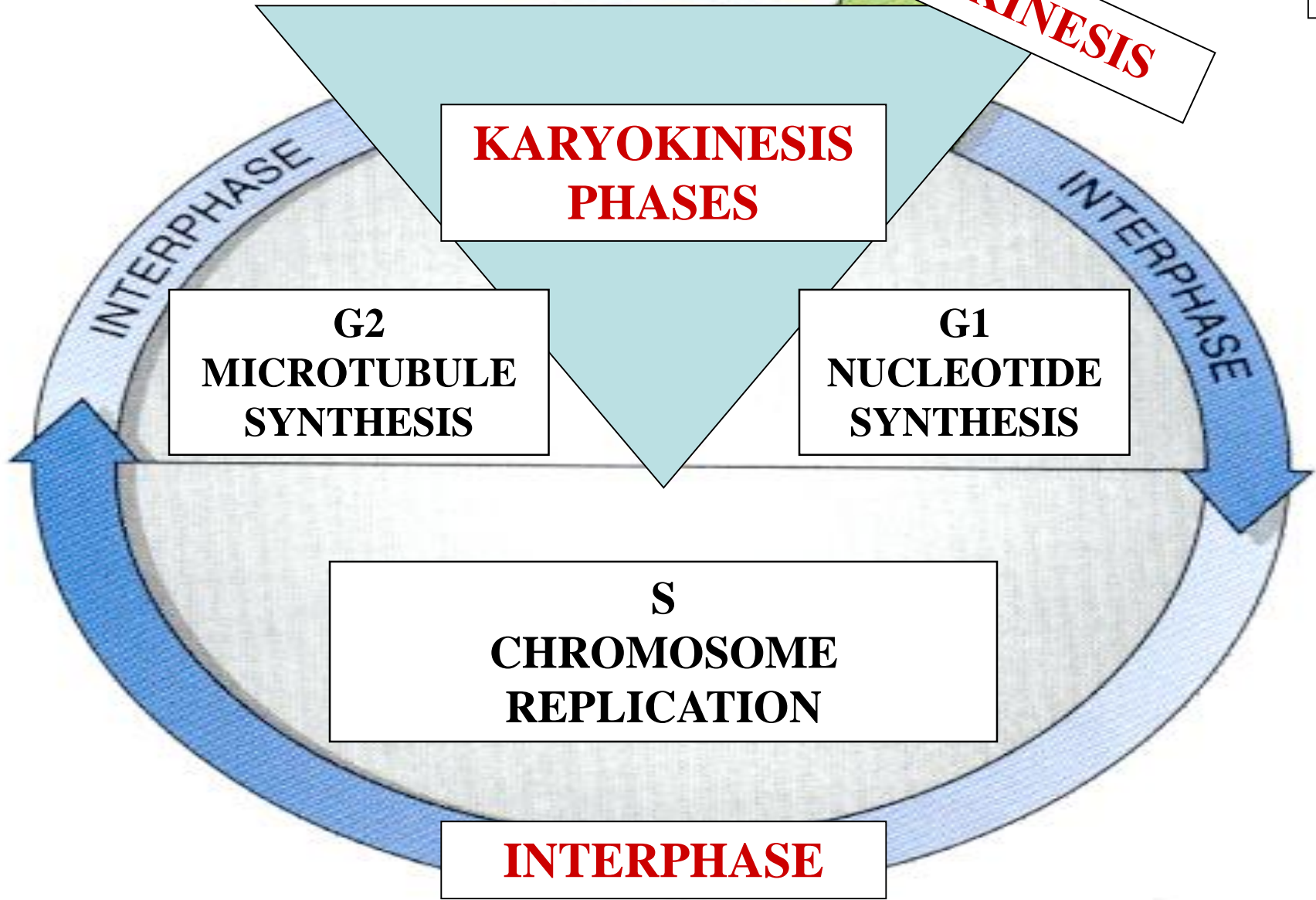
KARYOKINESIS

PHASES

TRUE PLT CELL CYCLE

+

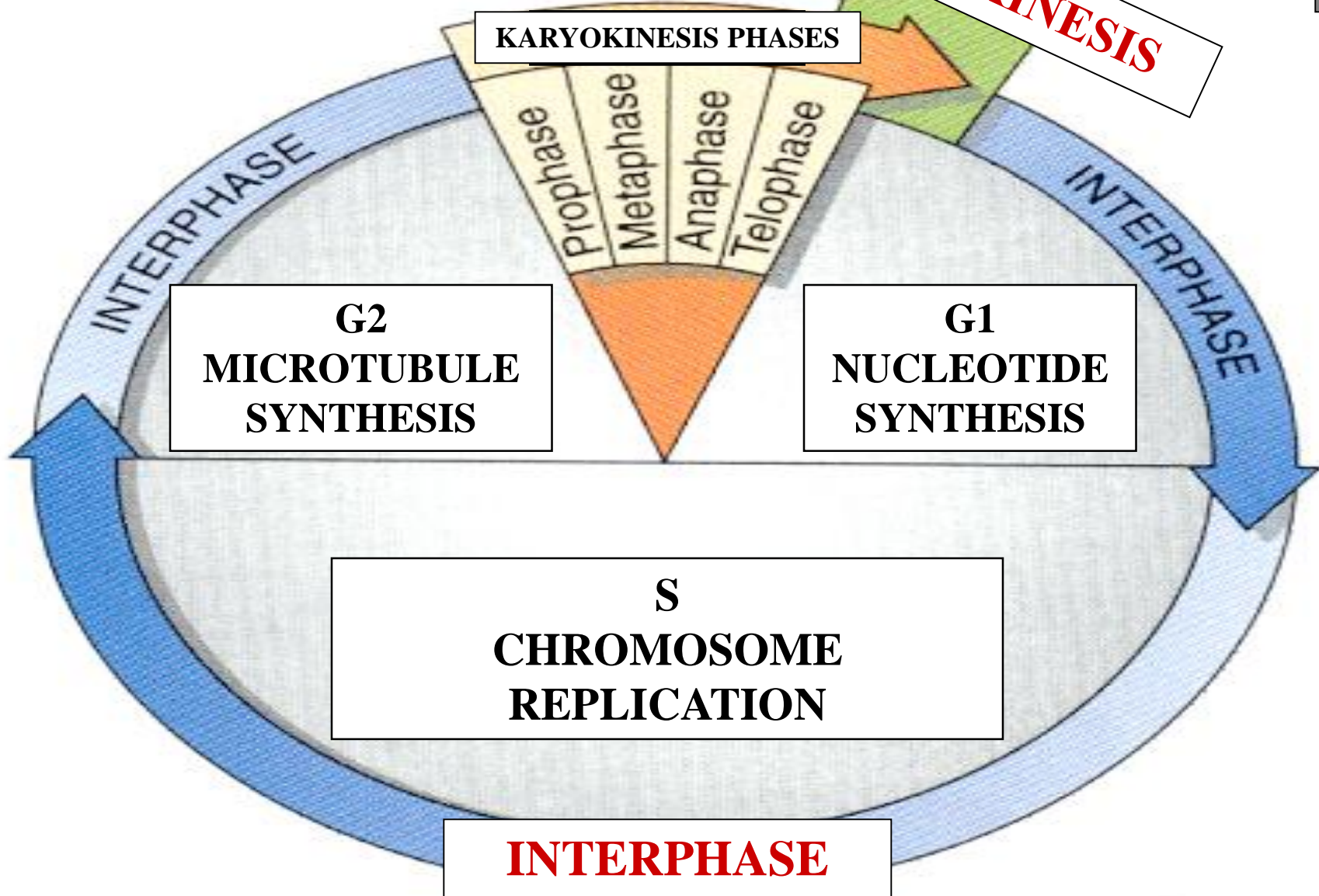
K



TRUE PLT CELL CYCLE

P

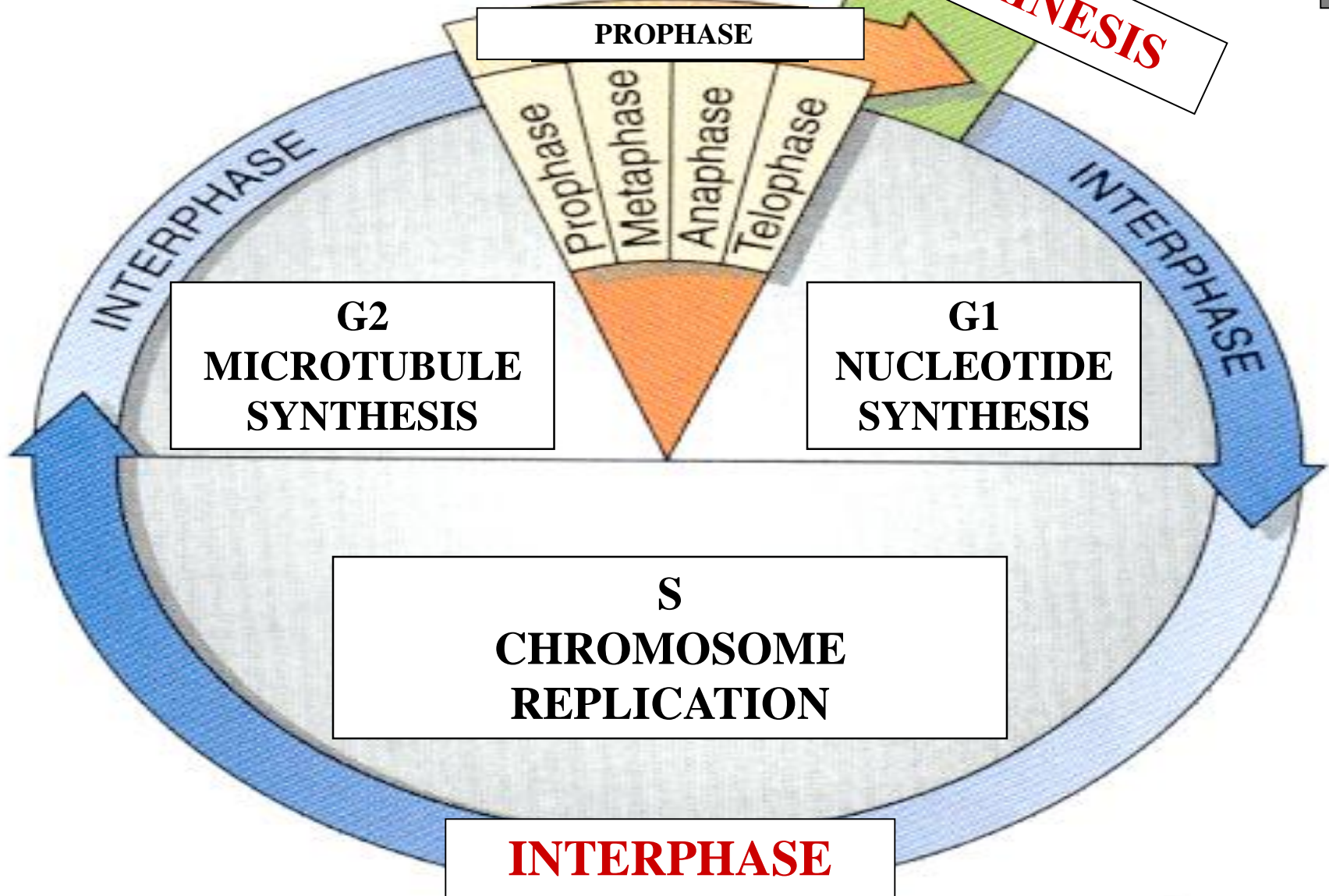
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TRUE PLT CELL CYCLE

M

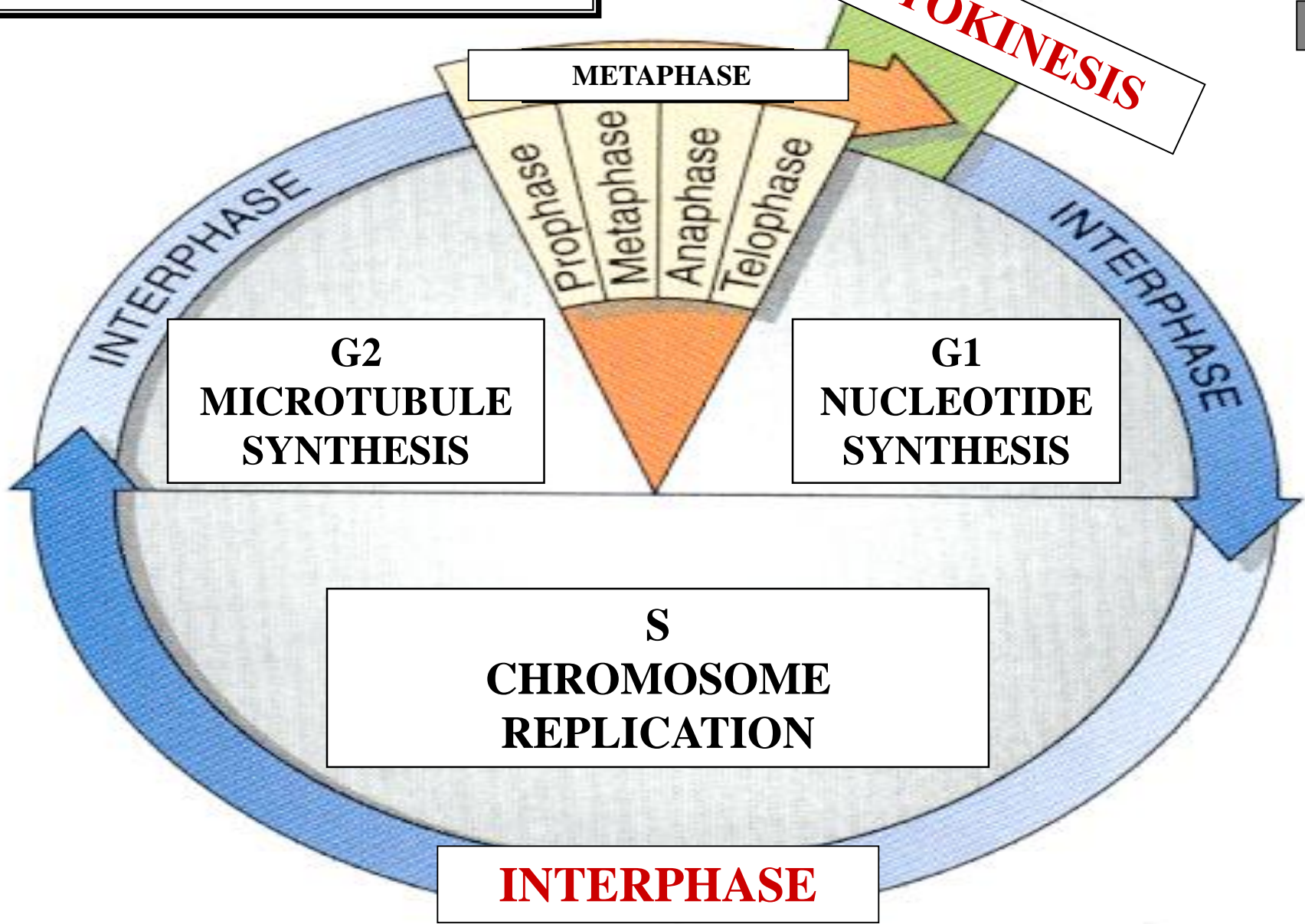
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TRUE PLT CELL CYCLE

A

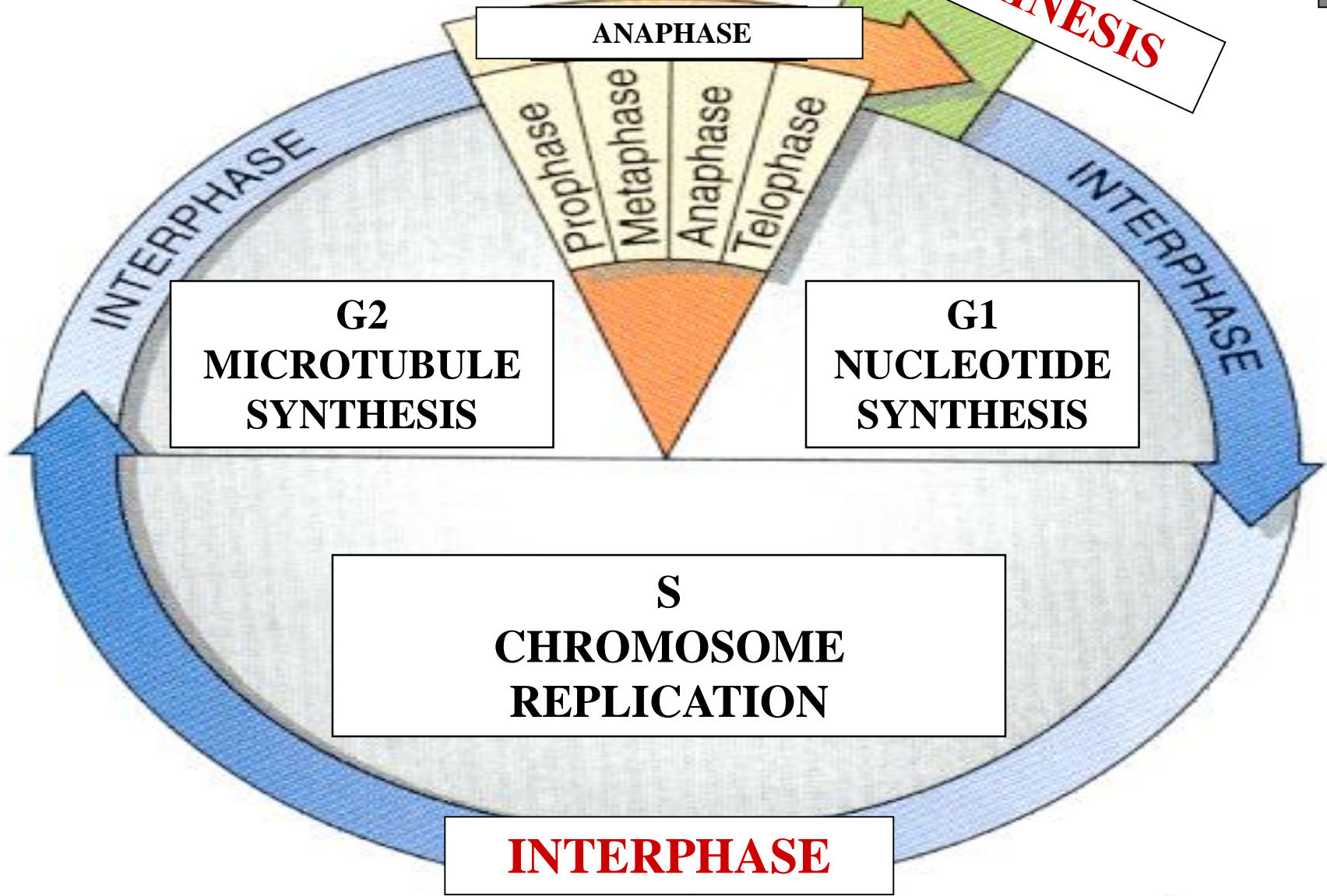
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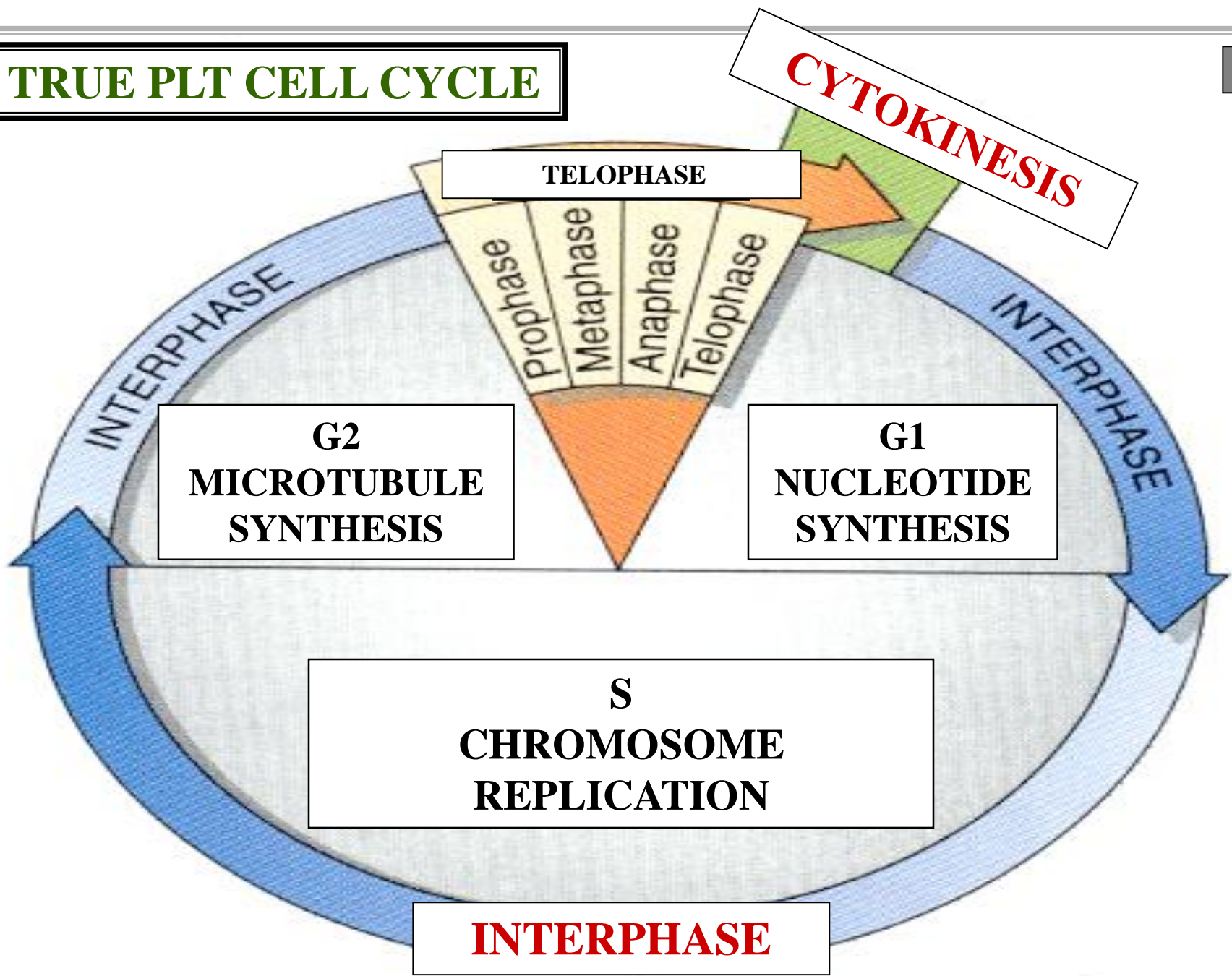
TRUE PLT CELL CYCLE

T

+



TRUE PLT CELL CYCLE



CYTOKINESIS

CYTOKINESIS

CYTOKINESIS



CYTOPLASM DIVISION

CYTOKINESIS

CYTOKINESIS

TYPES

CYTOKINESIS

FURROWING

CYTOKINESIS

CYTOKINESIS



FURROWING
CELL PLATE

CYTOKINESIS



CYTOKINESIS

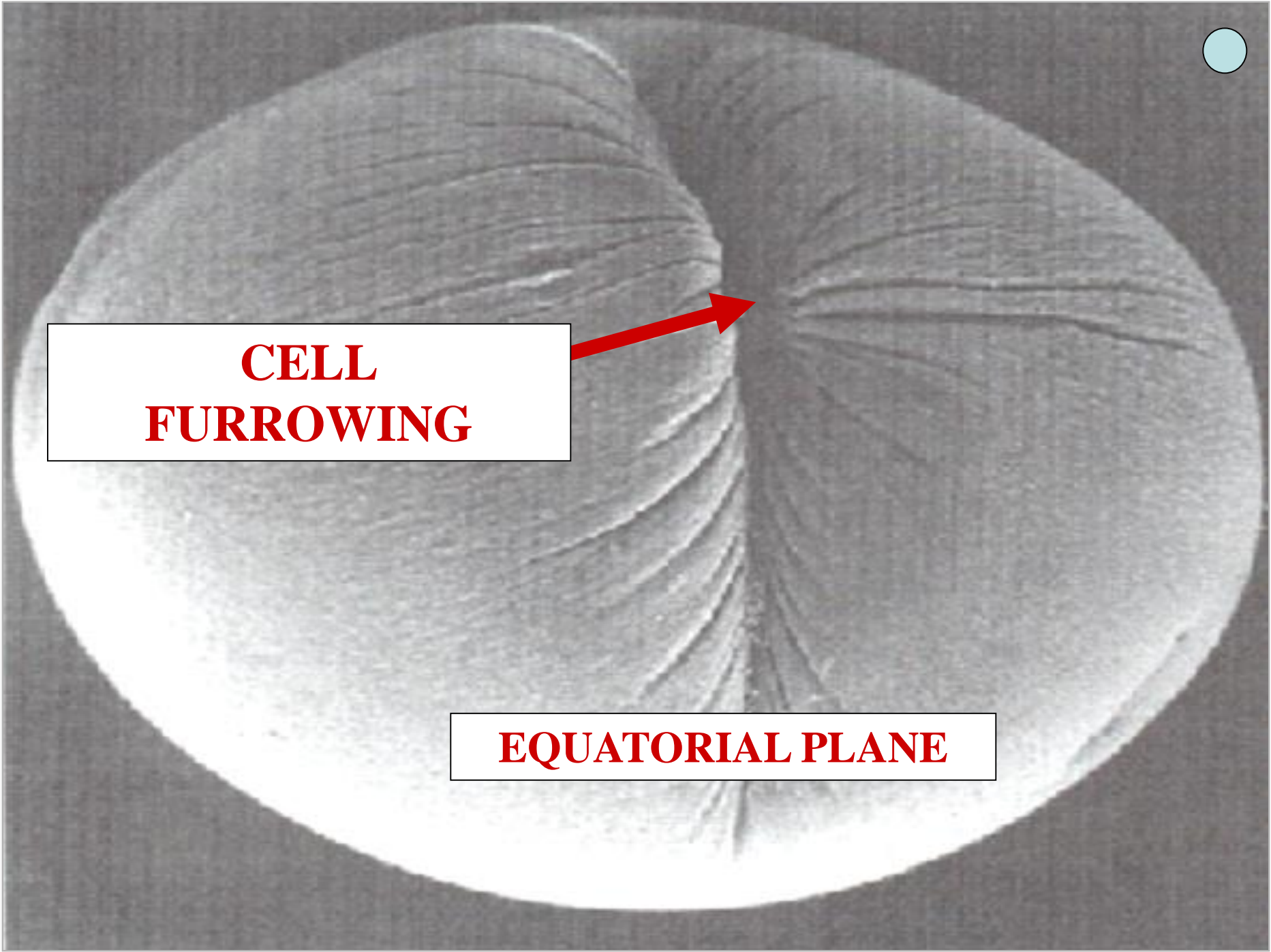
FURROWING



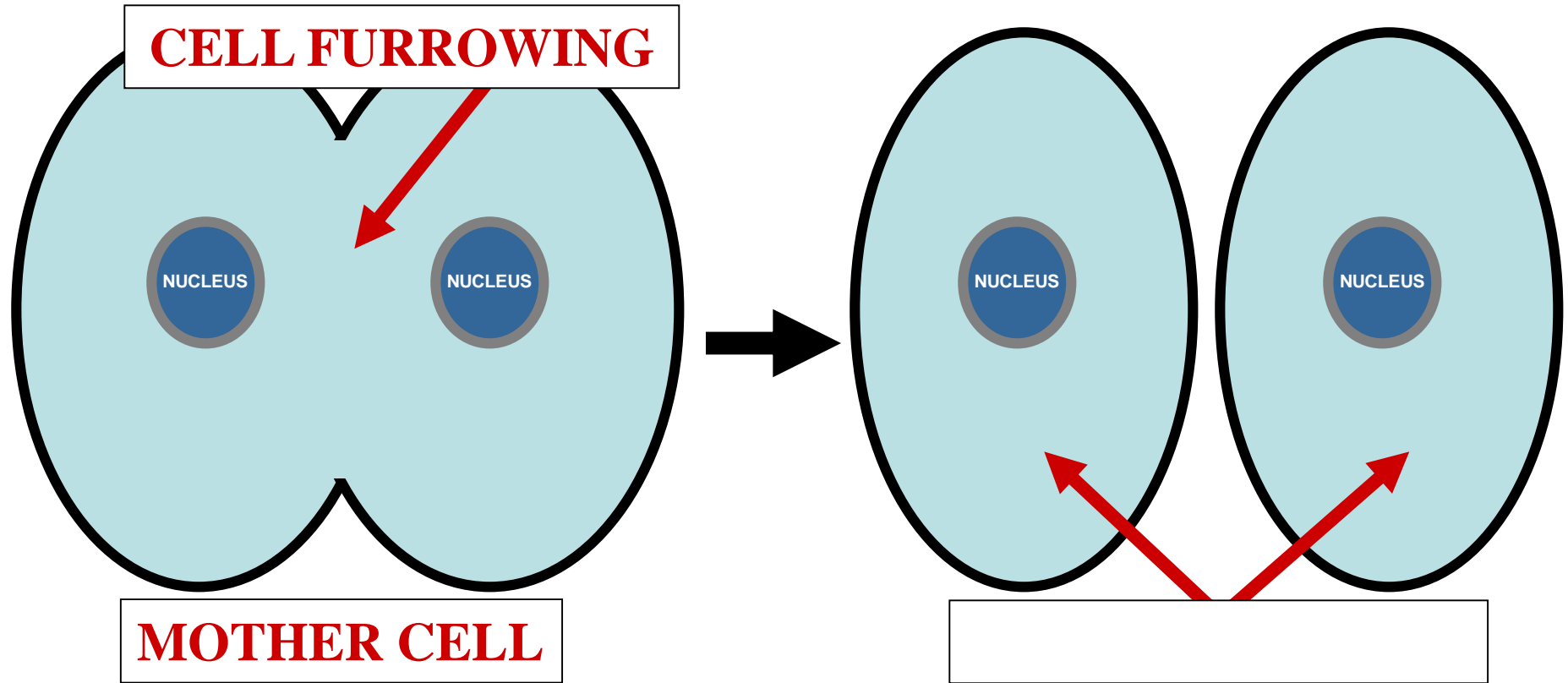
**CELL
FURROWING**



EQUATORIAL PLANE

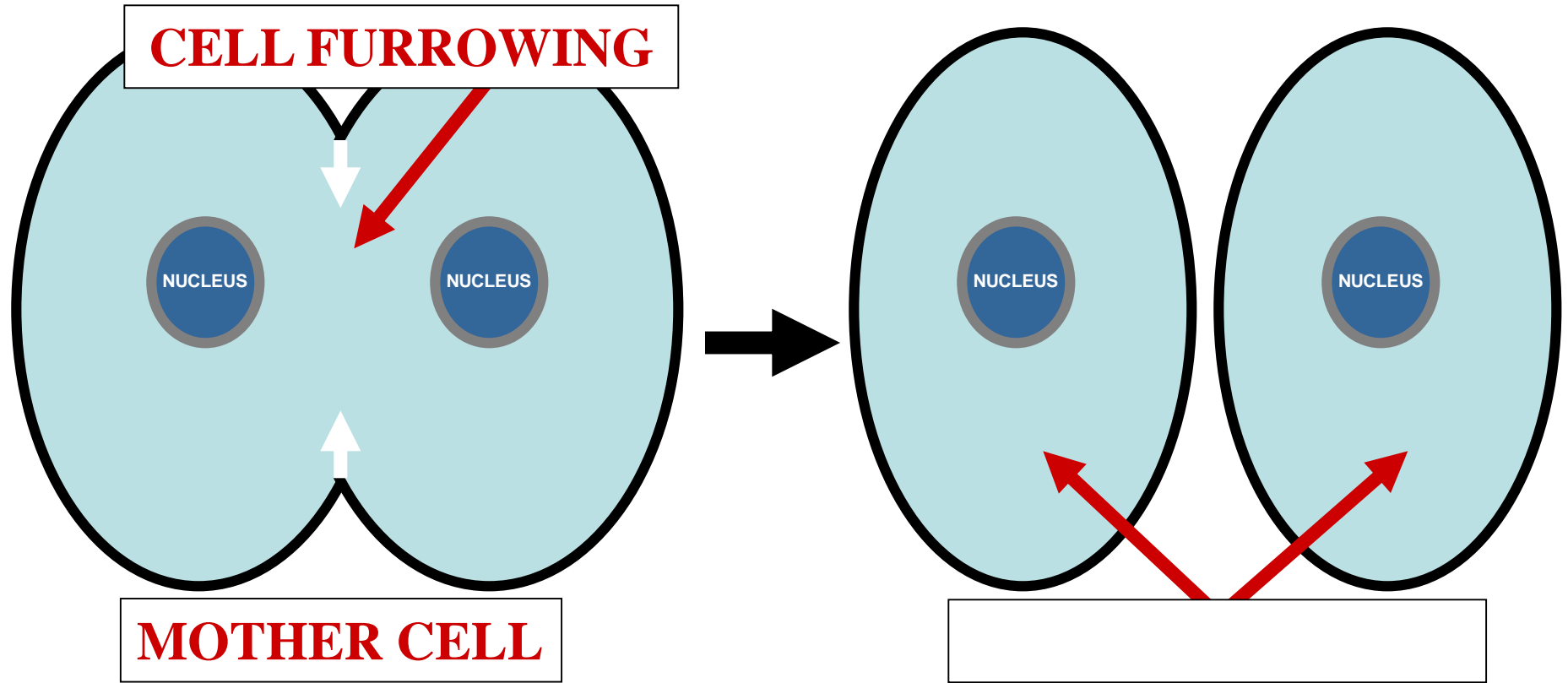


CYTOKINESIS FURROWING



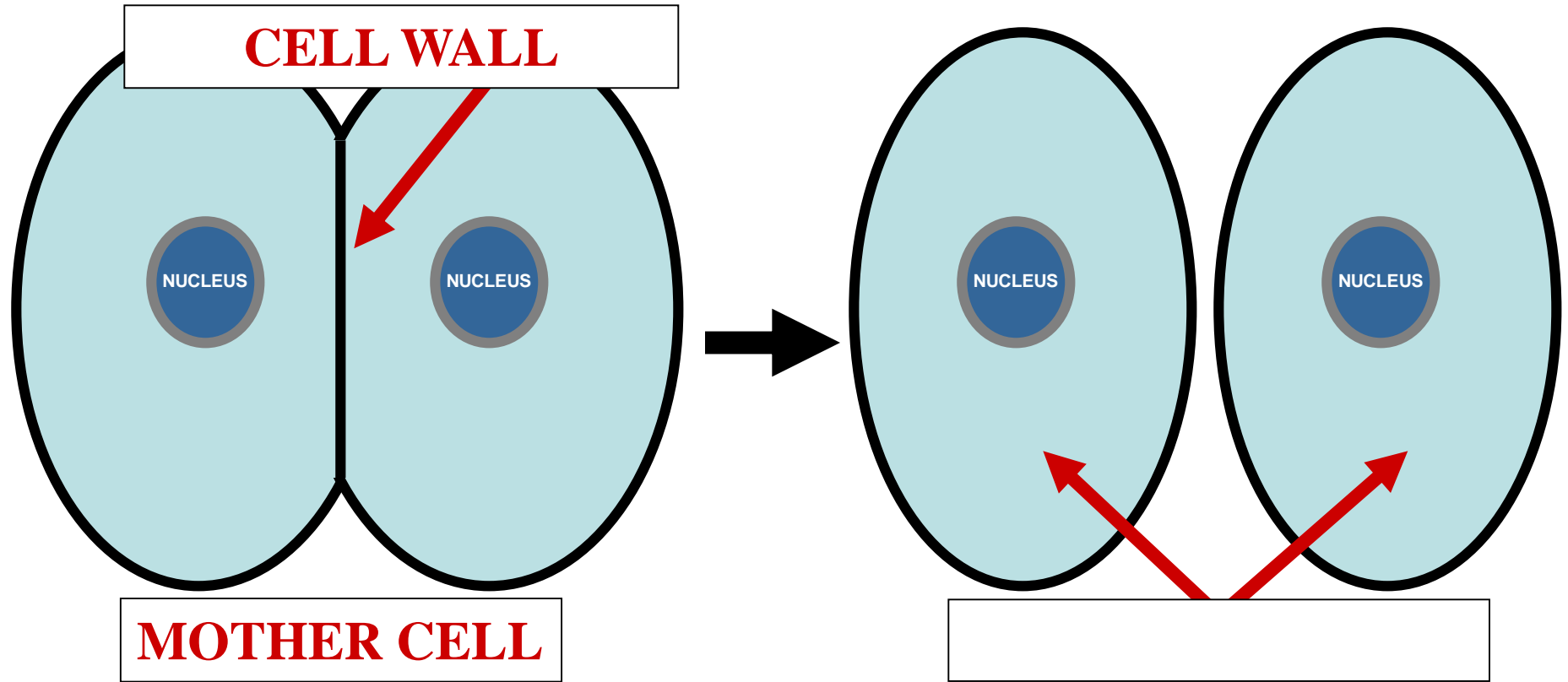
CYTOKINESIS FURROWING

CYTOKINESIS FURROWING



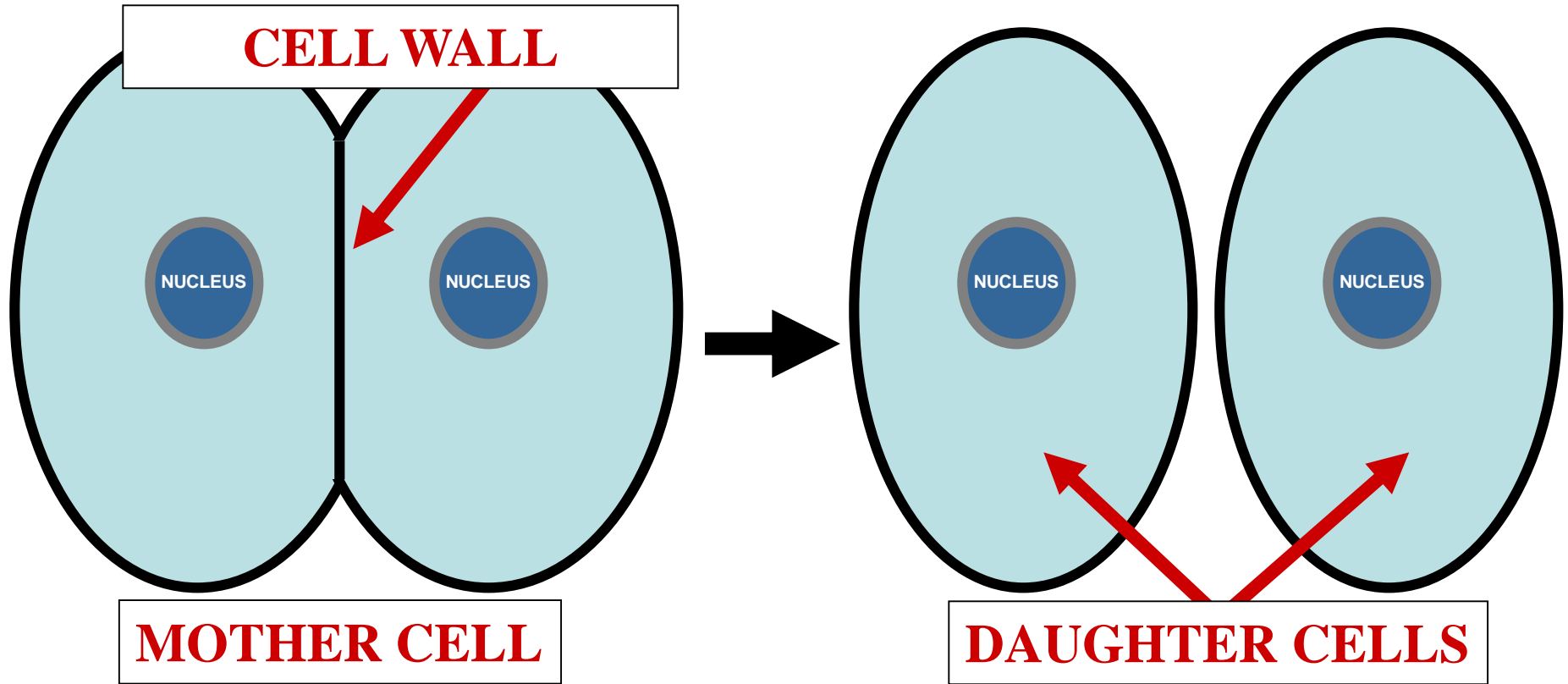
CYTOKINESIS FURROWING

CYTOKINESIS FURROWING



CYTOKINESIS FURROWING

CYTOKINESIS FURROWING



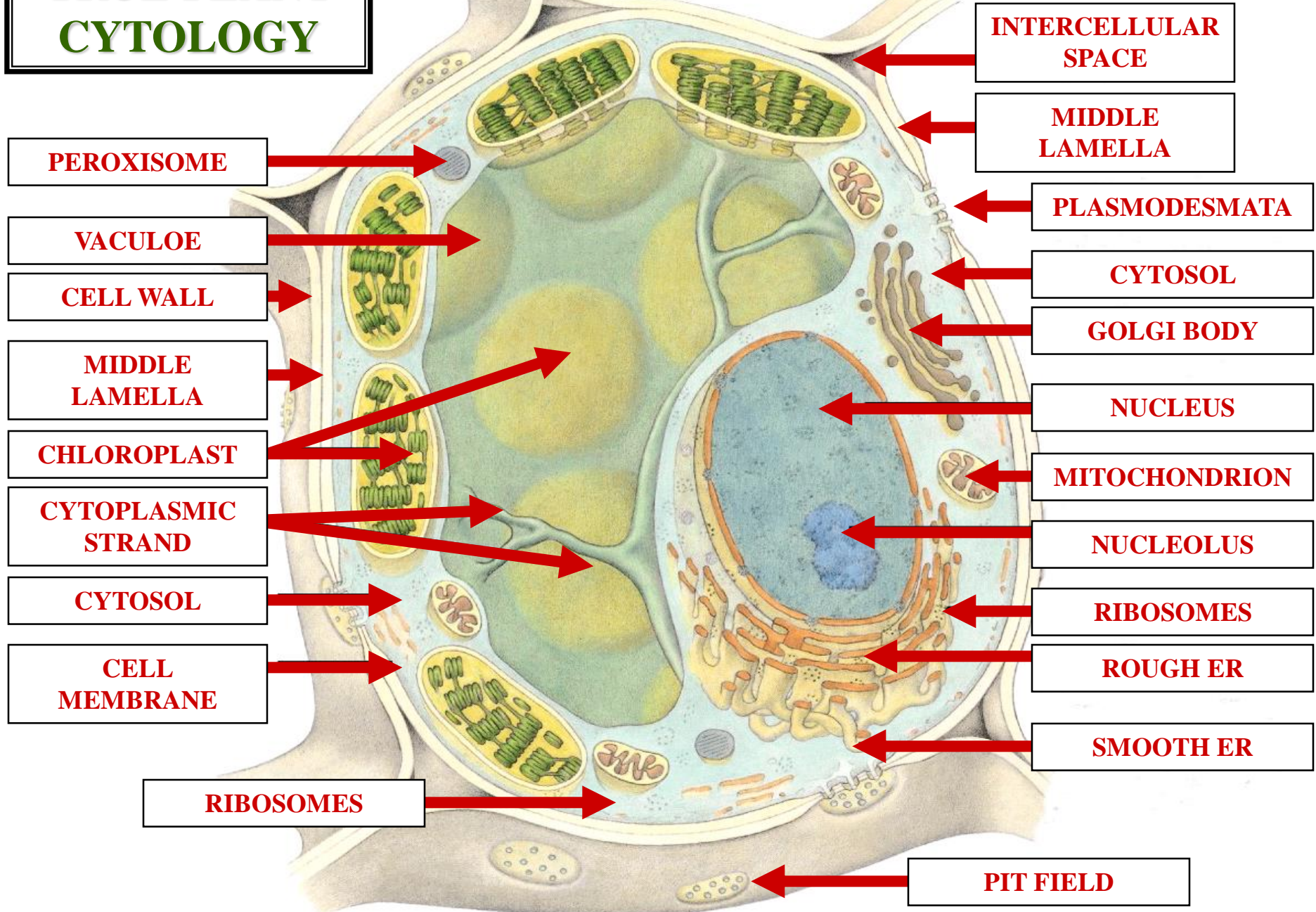
CYTOKINESIS FURROWING



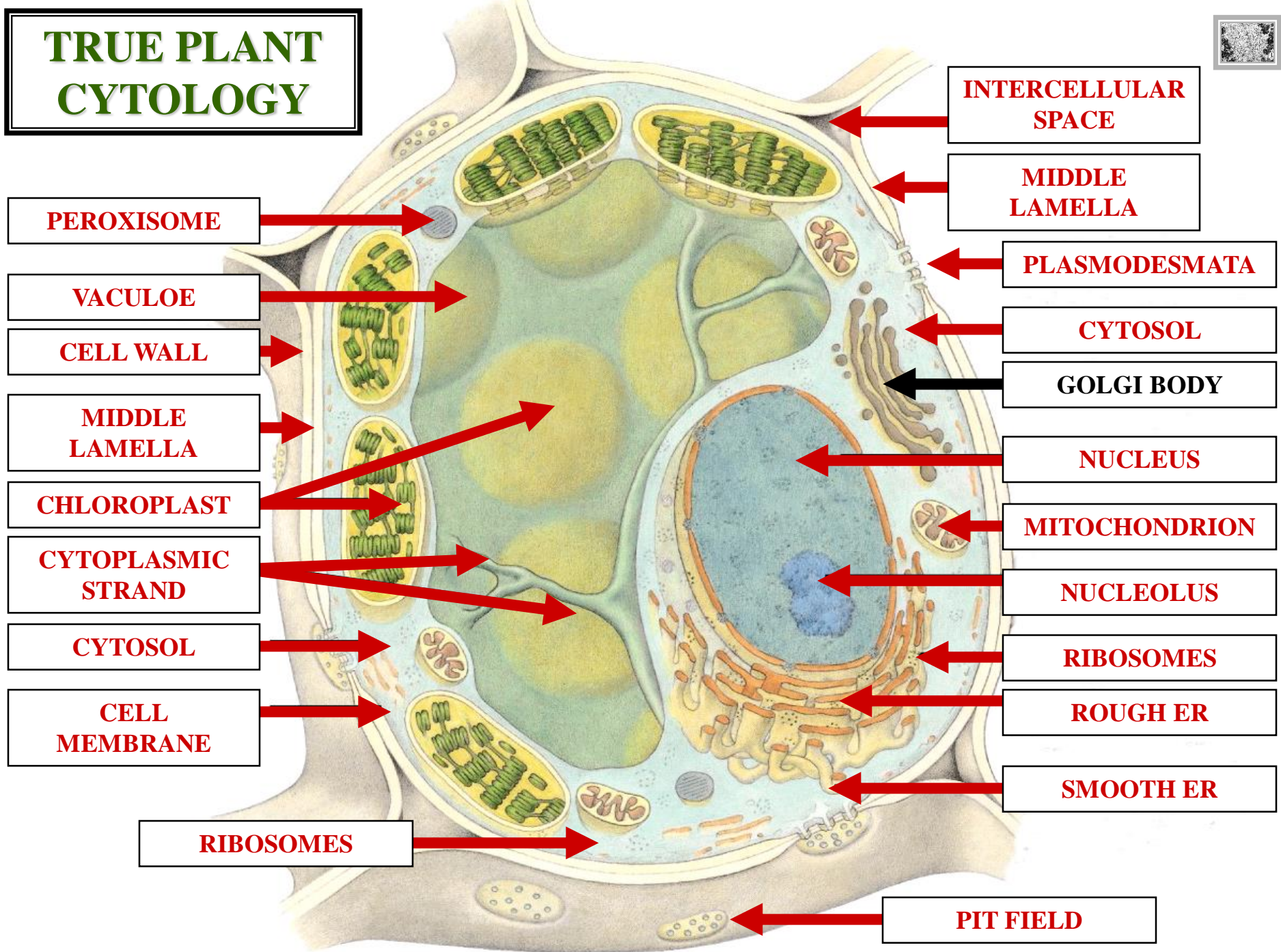
CELL PLATE FORMATION

TRUE PLANT CYTOLOGY

G



TRUE PLANT CYTOLOGY



CHROMATIN

CELL PLATE

CHROMATIN

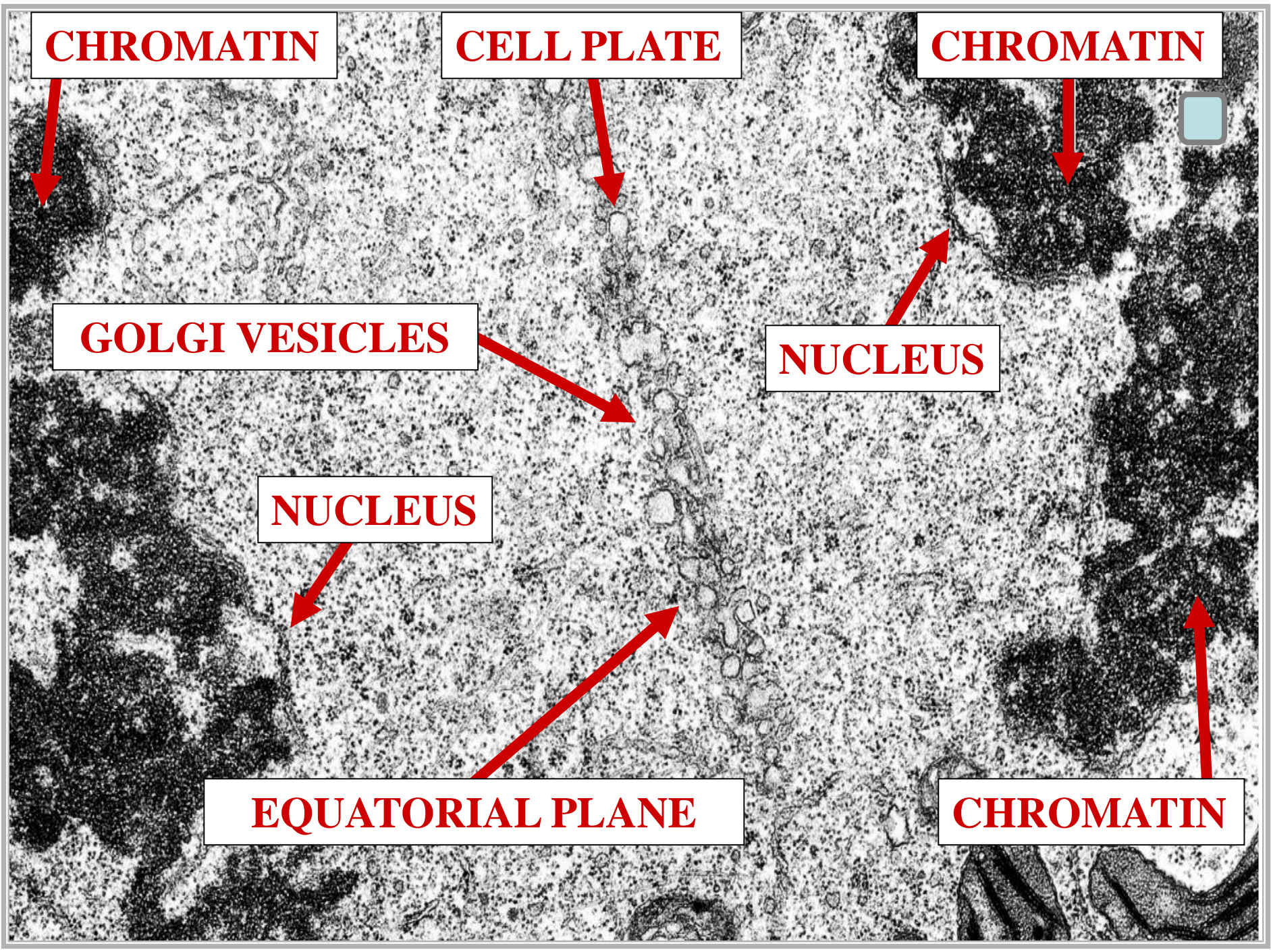
GOLGI VESICLES

NUCLEUS

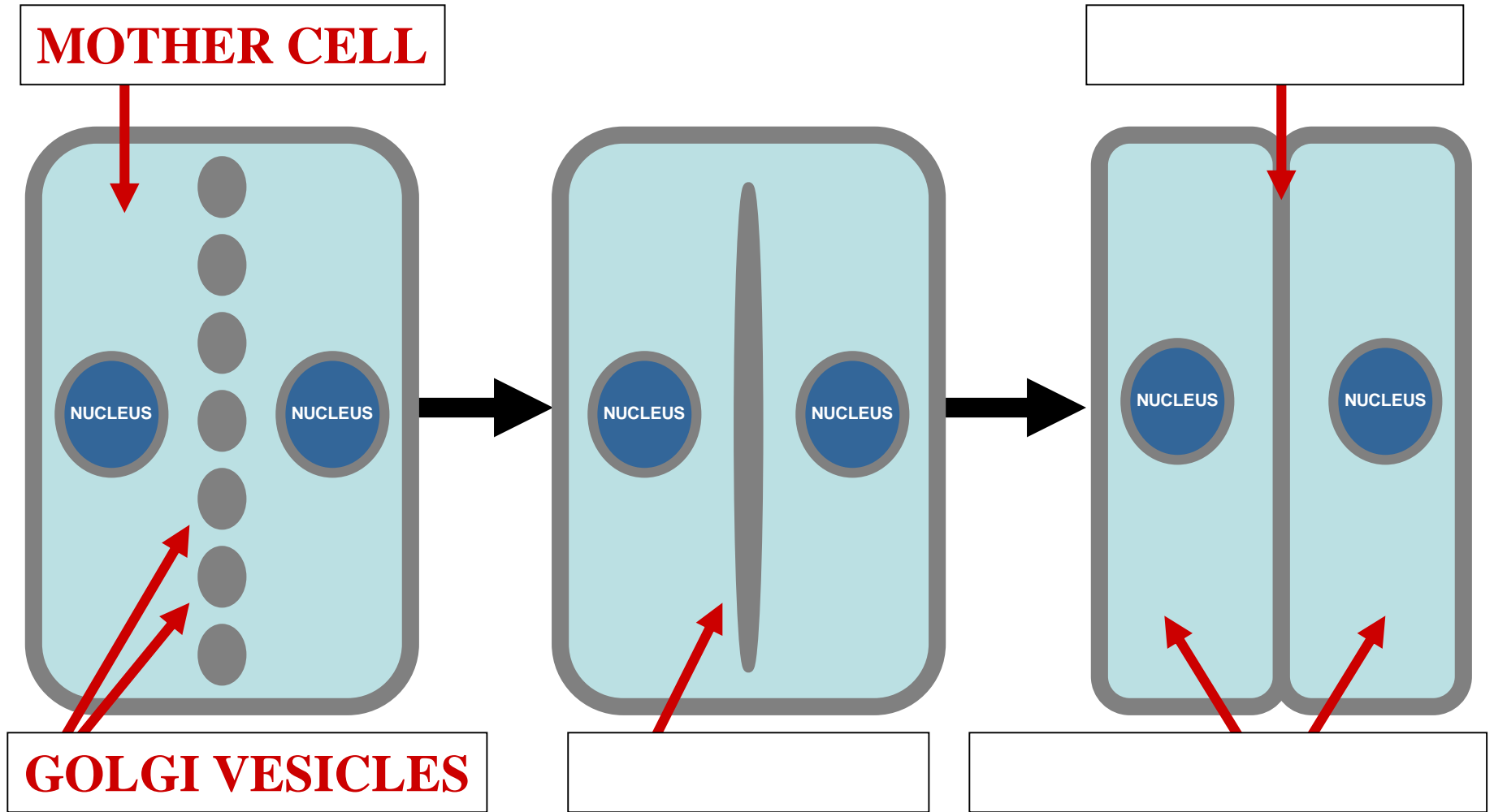
NUCLEUS

EQUATORIAL PLANE

CHROMATIN

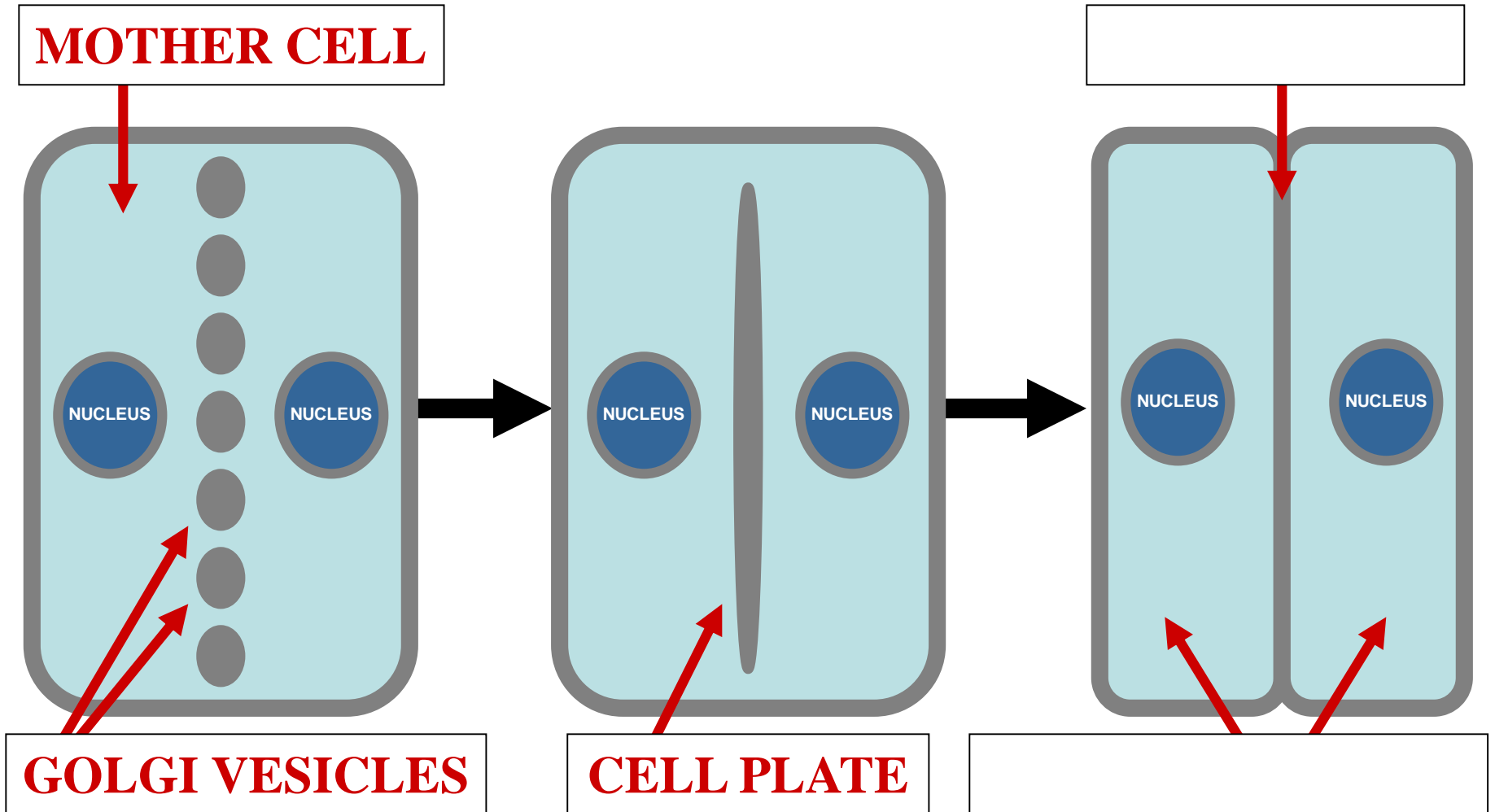


CYTOKINESIS CELL PLATE



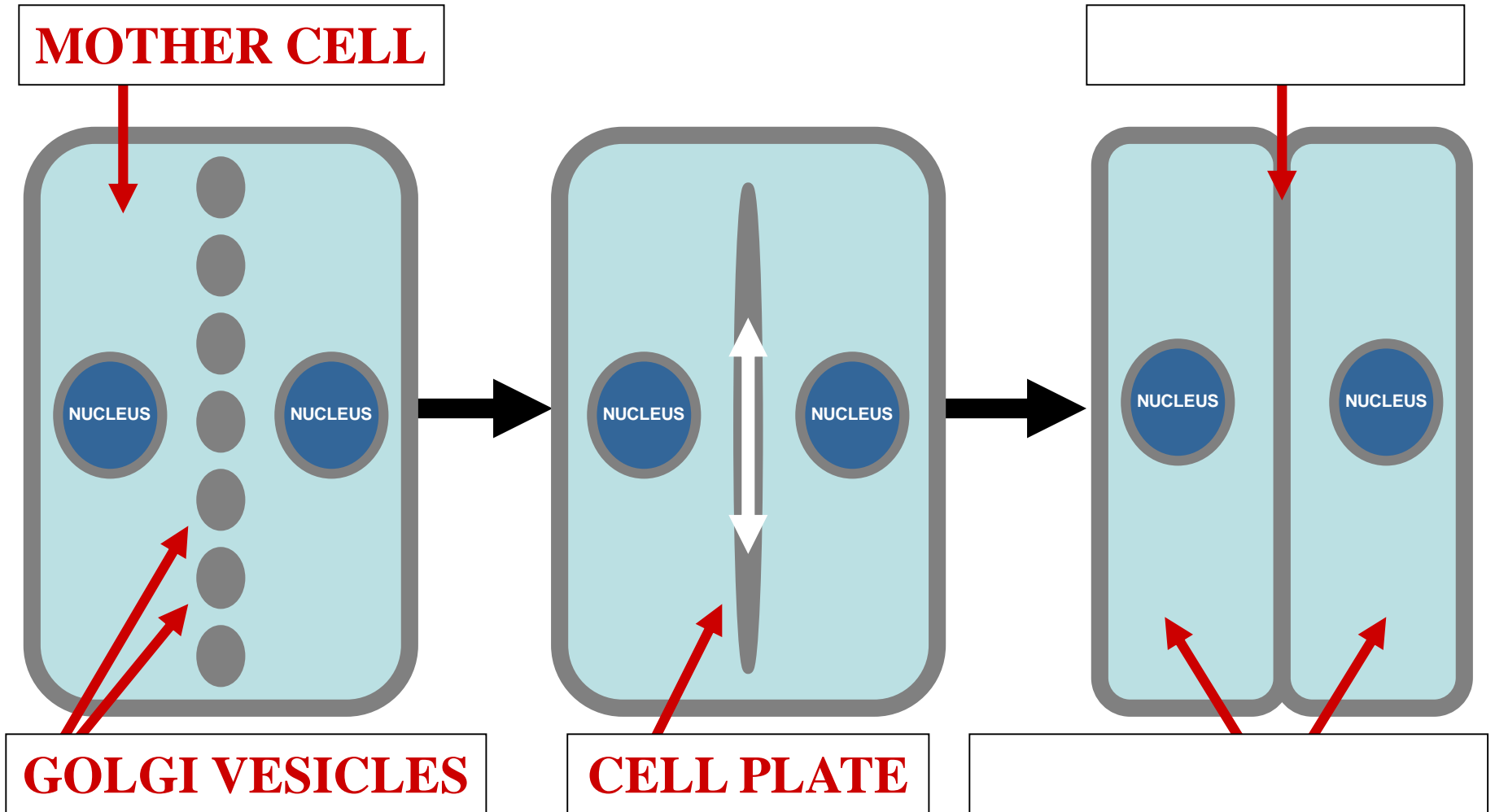
CYTOKINESIS

CELL PLATE

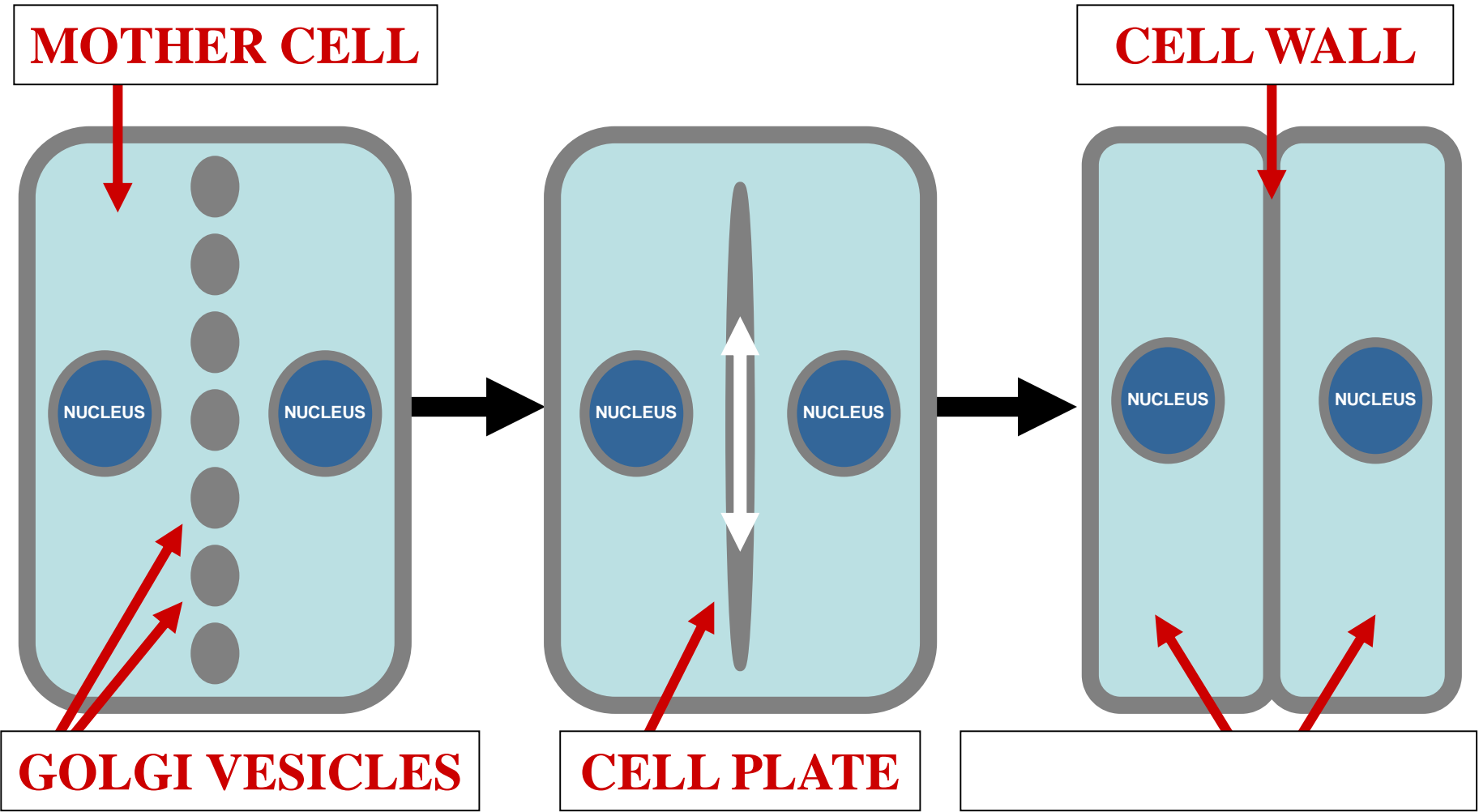


CYTOKINESIS

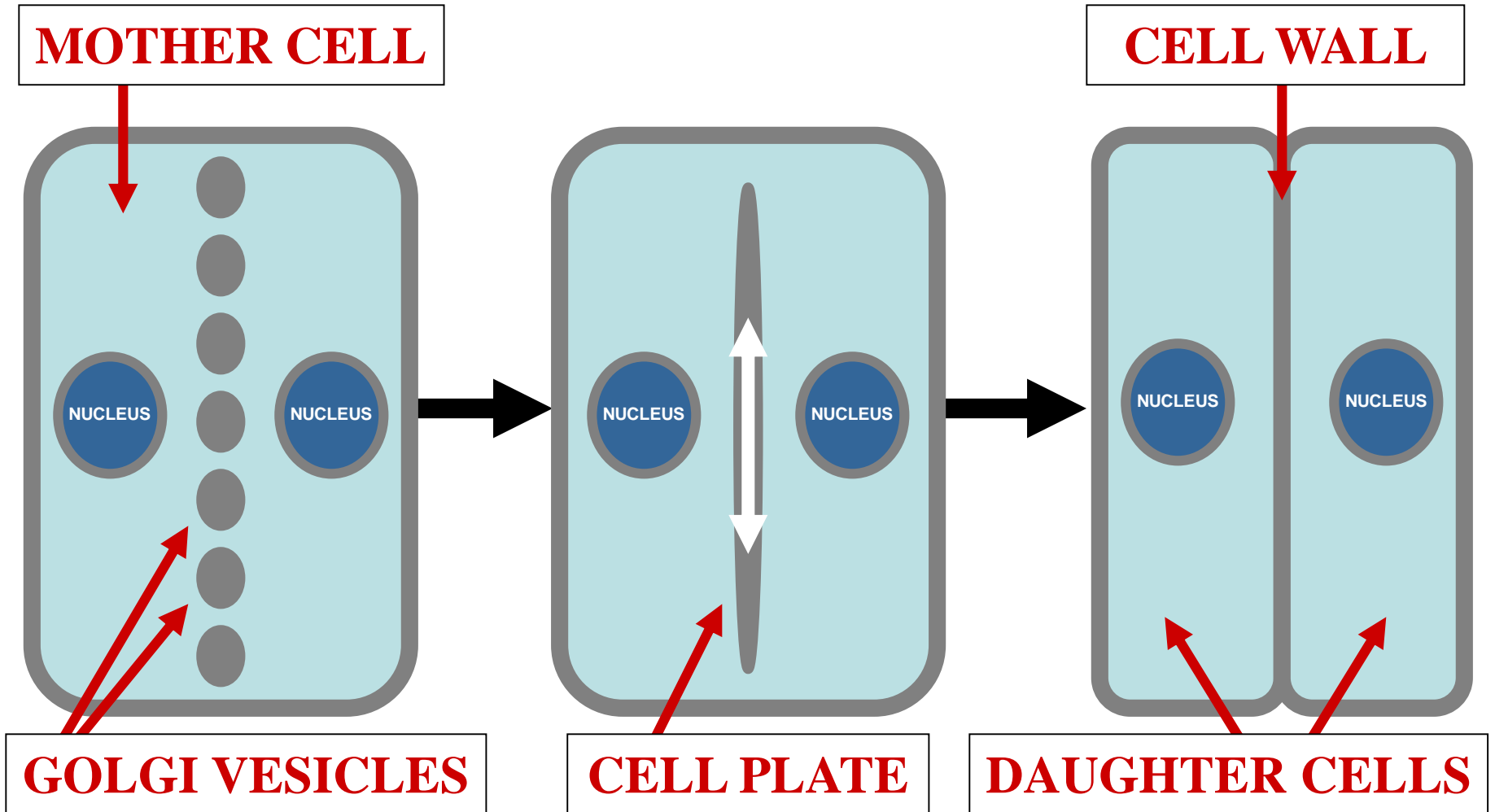
CELL PLATE



CYTOKINESIS CELL PLATE



CYTOKINESIS CELL PLATE





TRUE PLANT CELL CYCLE STAGES SUMMARY

TRUE PLT CELL CYCLE

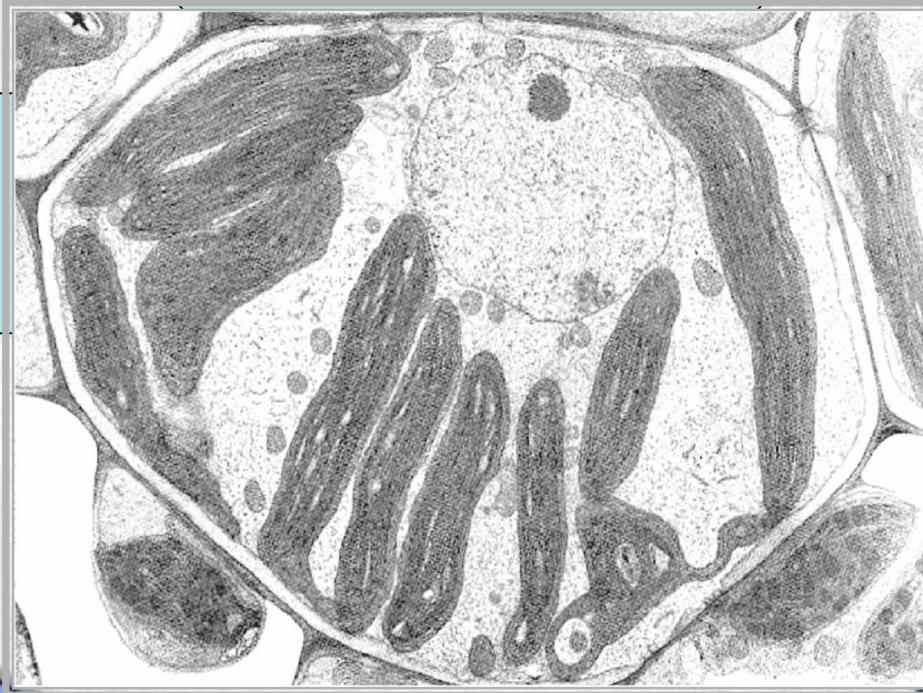
I

STAGE

STAGE

INTERPHASE

INTERPHASE



STAGE

TRUE PLT CELL CYCLE

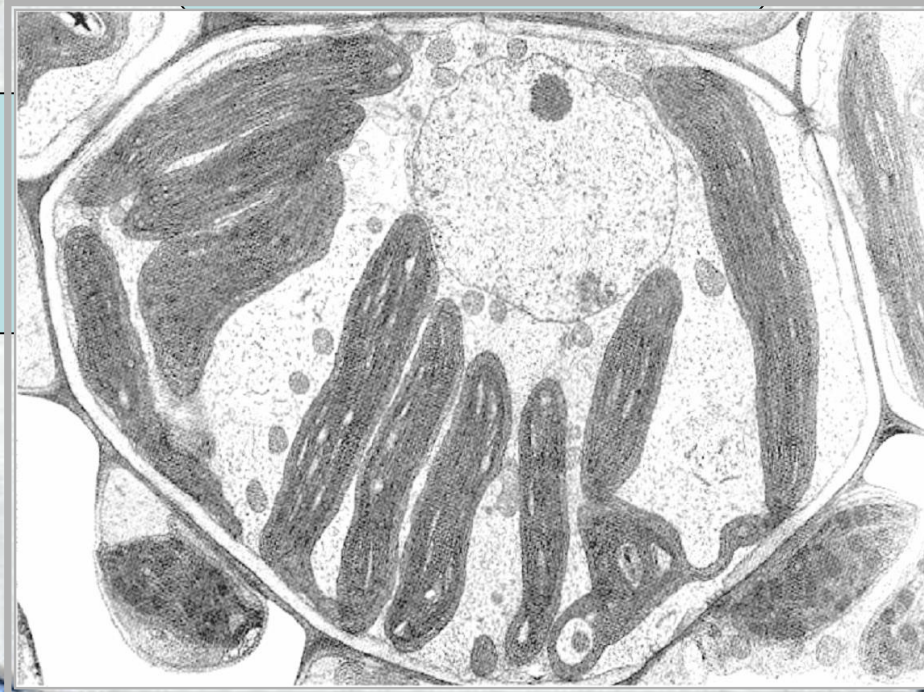
K

STAGE

STAGE

INTERPHASE

INTERPHASE



INTERPHASE

TRUE PLT CELL CYCLE

C

STAGE

KARYOKINESIS

INTERPHASE

INTERPHASE



INTERPHASE

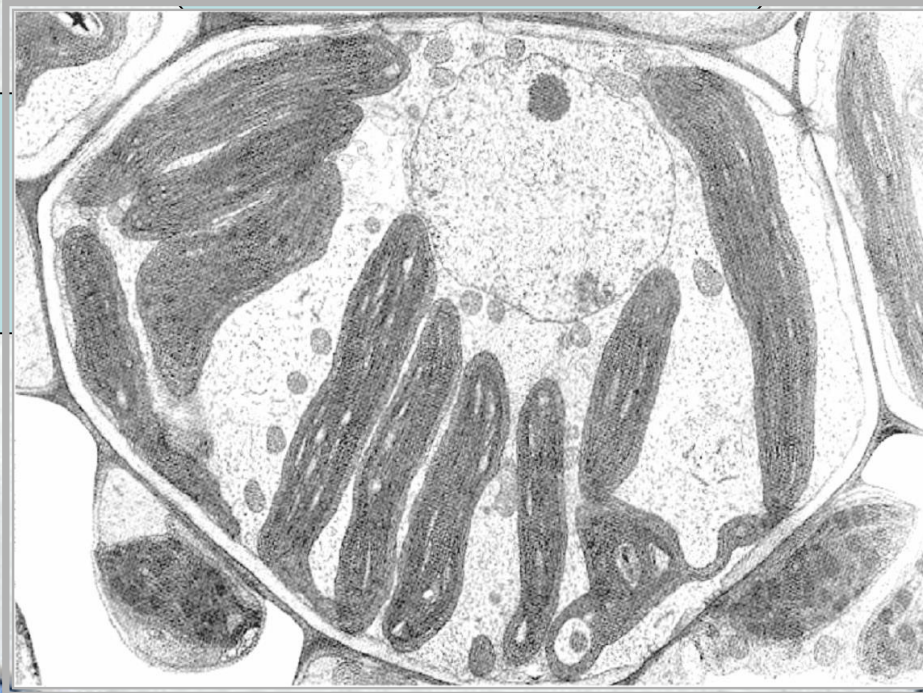
TRUE PLT CELL CYCLE

CYTOKINESIS

KARYOKINESIS

INTERPHASE

INTERPHASE

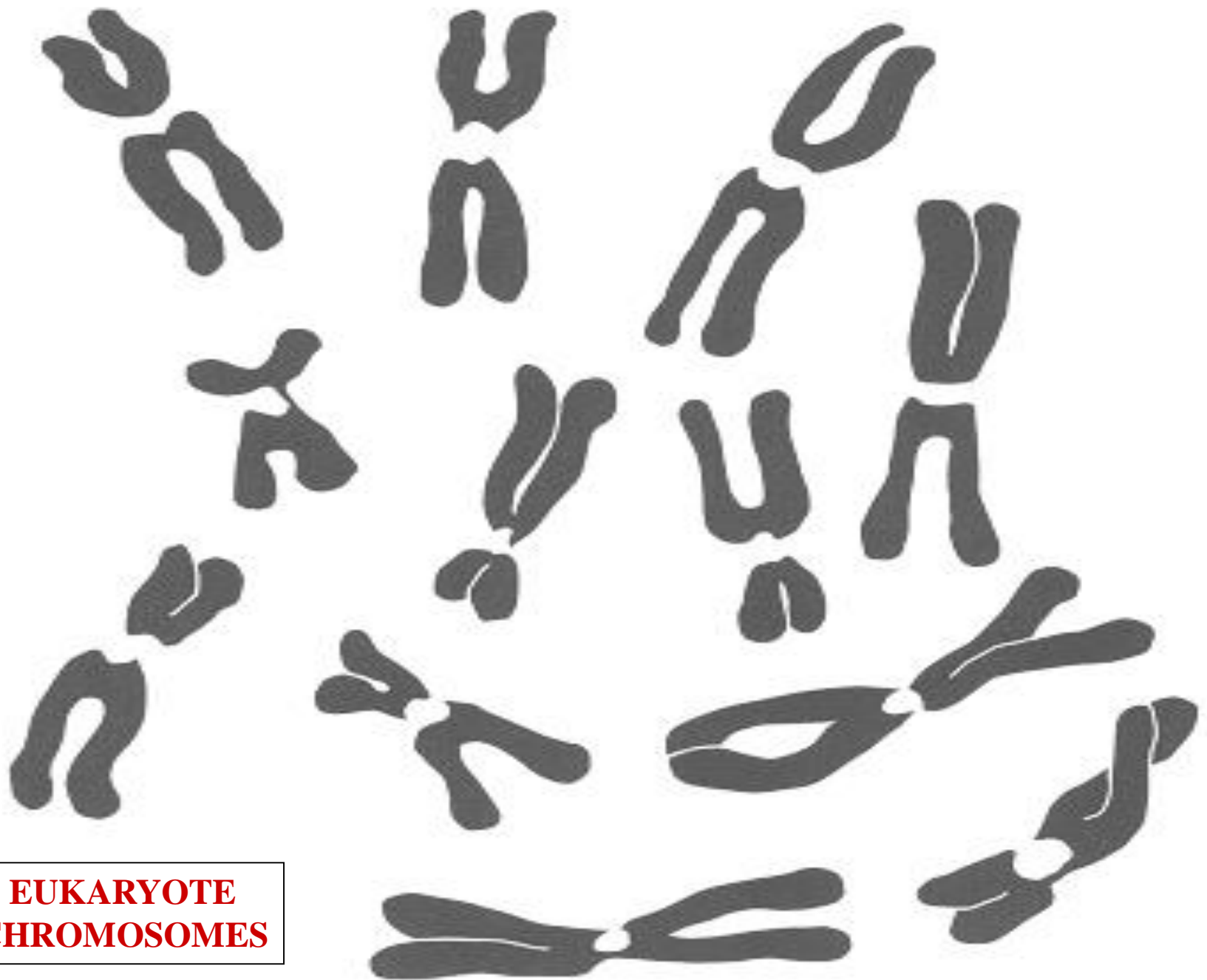


INTERPHASE





EUKARYOTE CHROMOSOME



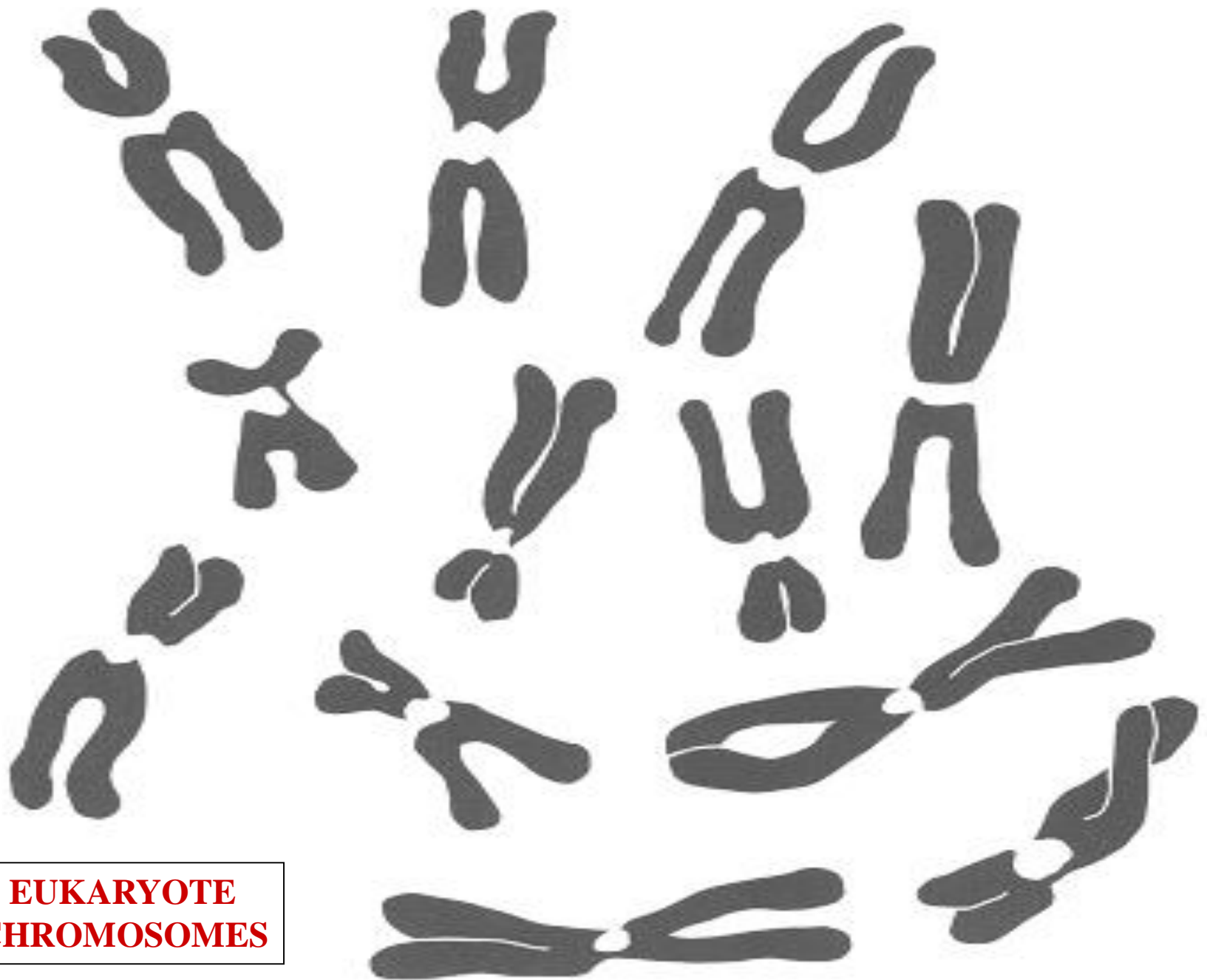
**EUKARYOTE
CHROMOSOMES**



**LINEAR
CHROMOSOMES**



EUKARYOTE CHROMOSOME COMPOSITION



**EUKARYOTE
CHROMOSOMES**



**COMPOSITION
CHROMATIN**

CHROMATIN

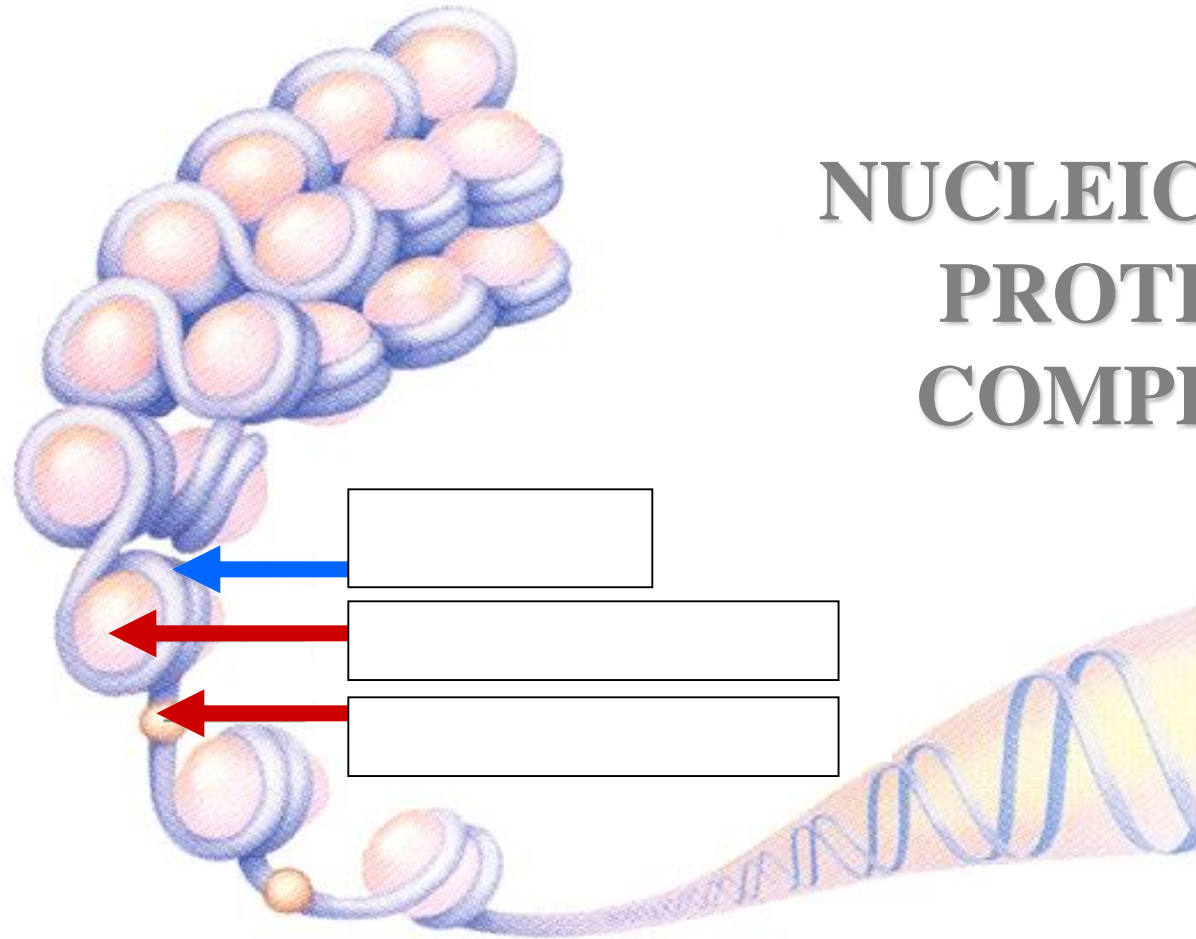
CHROMATIN



NUCLEIC ACID
PROTEIN
COMPLEX

CHROMATIN

EUKARYOTE CHROMOSOME



NUCLEIC ACID
PROTEIN
COMPLEX

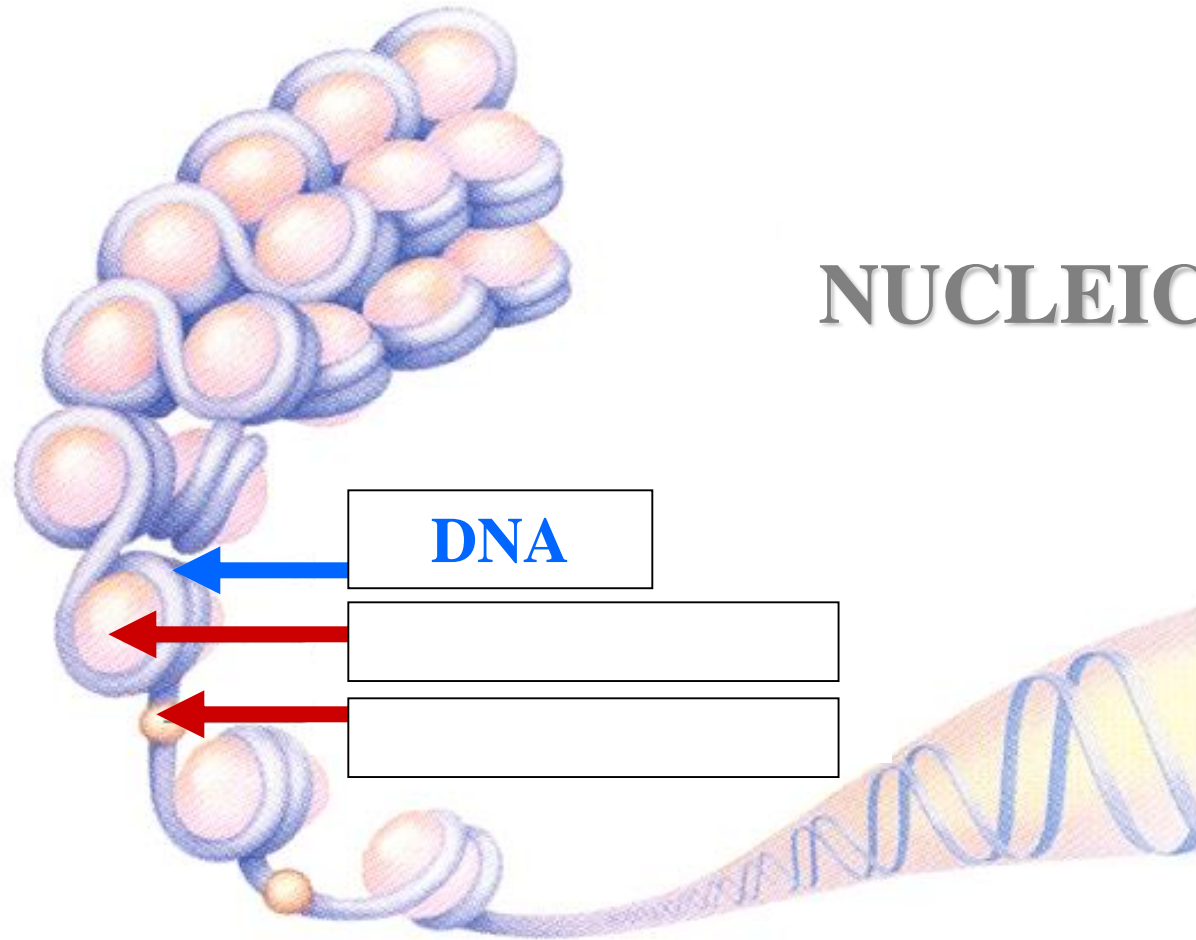
CHROMATIN



D

NUCLEIC ACID

EUKARYOTE CHROMOSOME

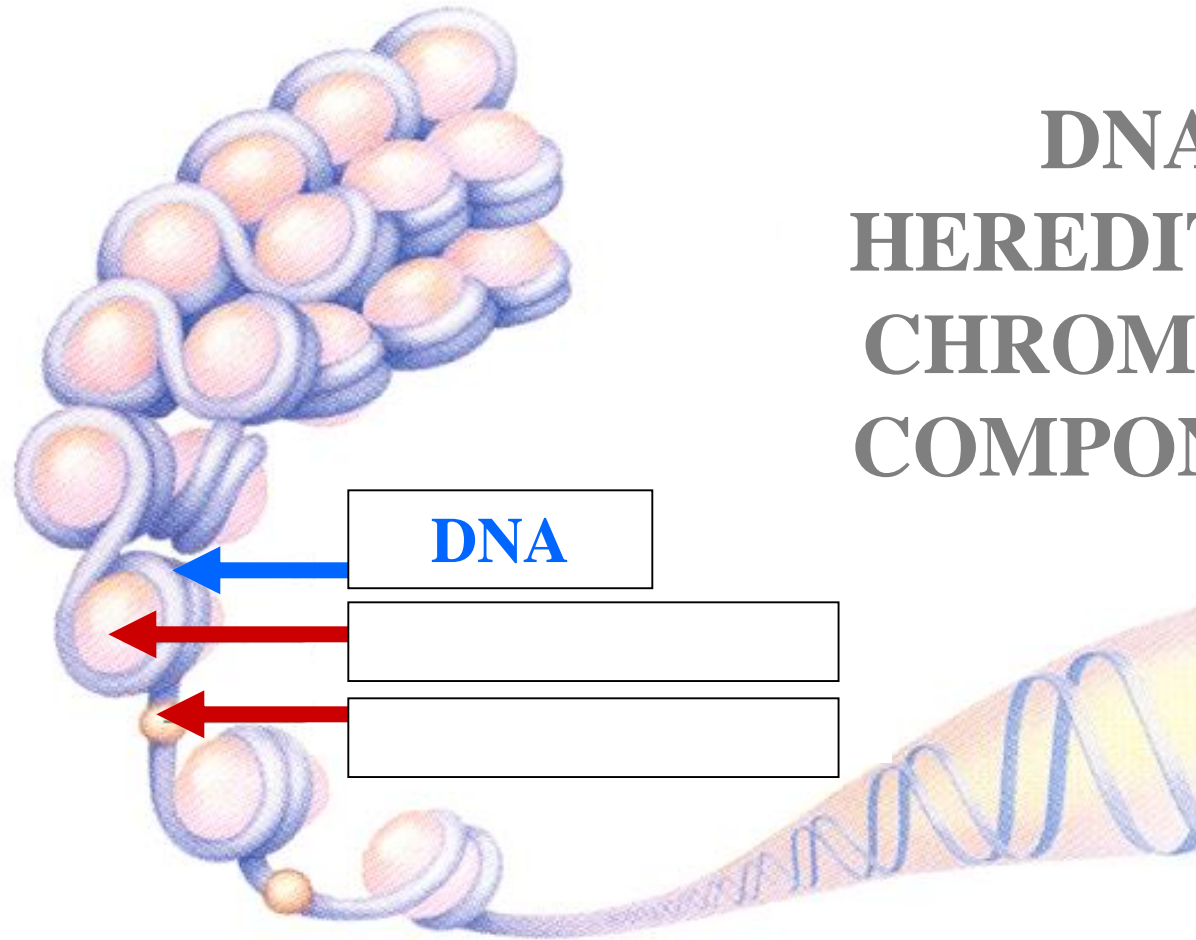


NUCLEIC ACID

DNA

CHROMATIN

EUKARYOTE CHROMOSOME



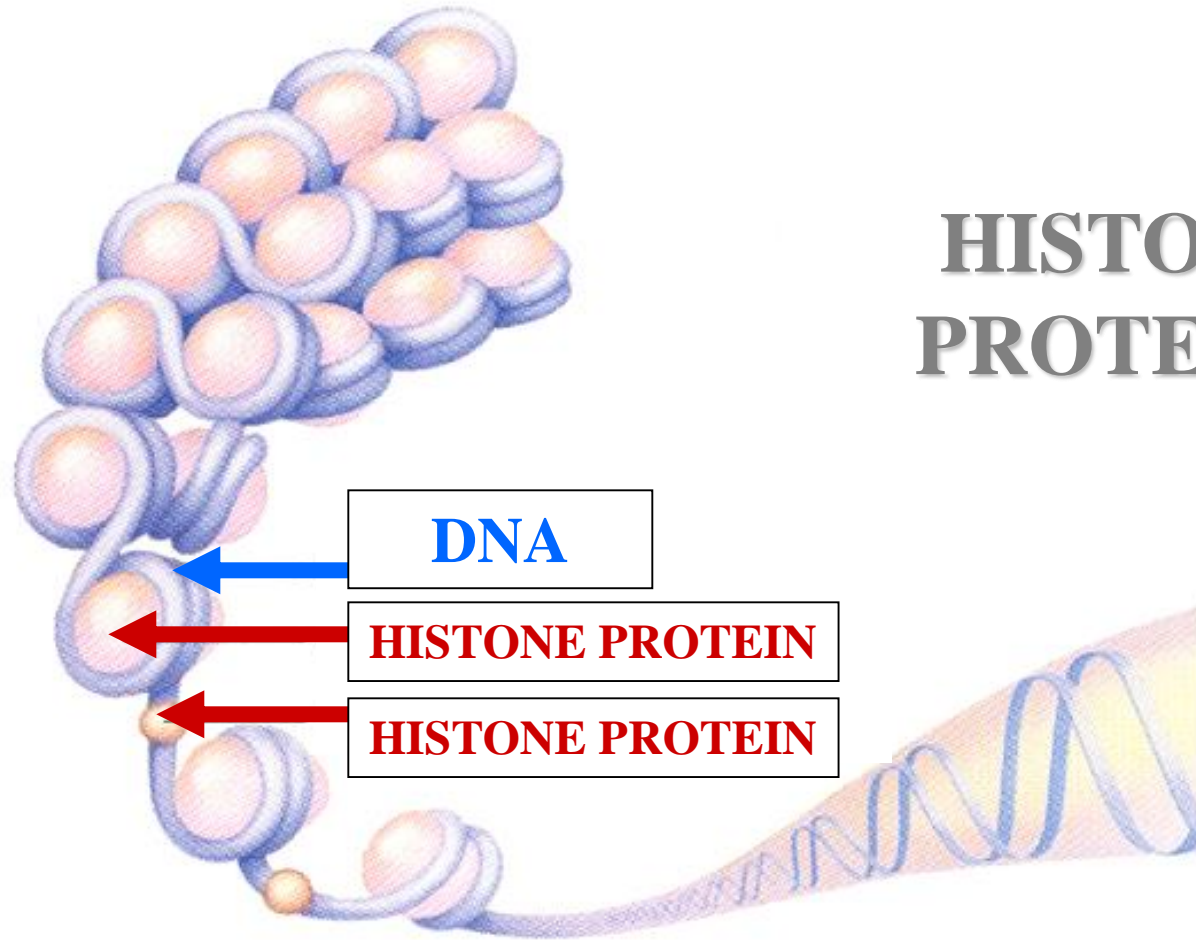
DNA
HEREDITARY
CHROMATIN
COMPONENT

CHROMATIN



PROTEINS

EUKARYOTE CHROMOSOME



**HISTONE
PROTEINS**

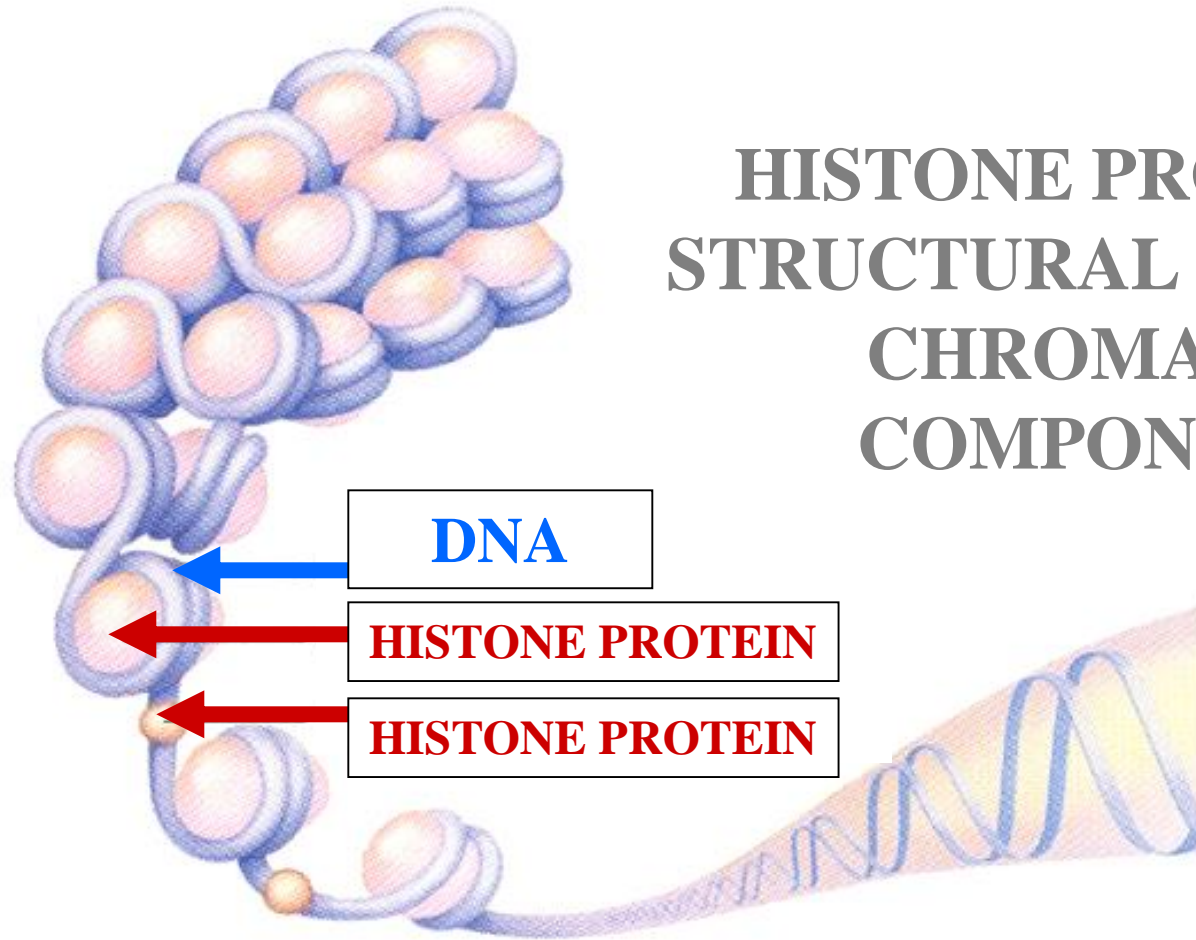
DNA

HISTONE PROTEIN

HISTONE PROTEIN

CHROMATIN

EUKARYOTE CHROMOSOME



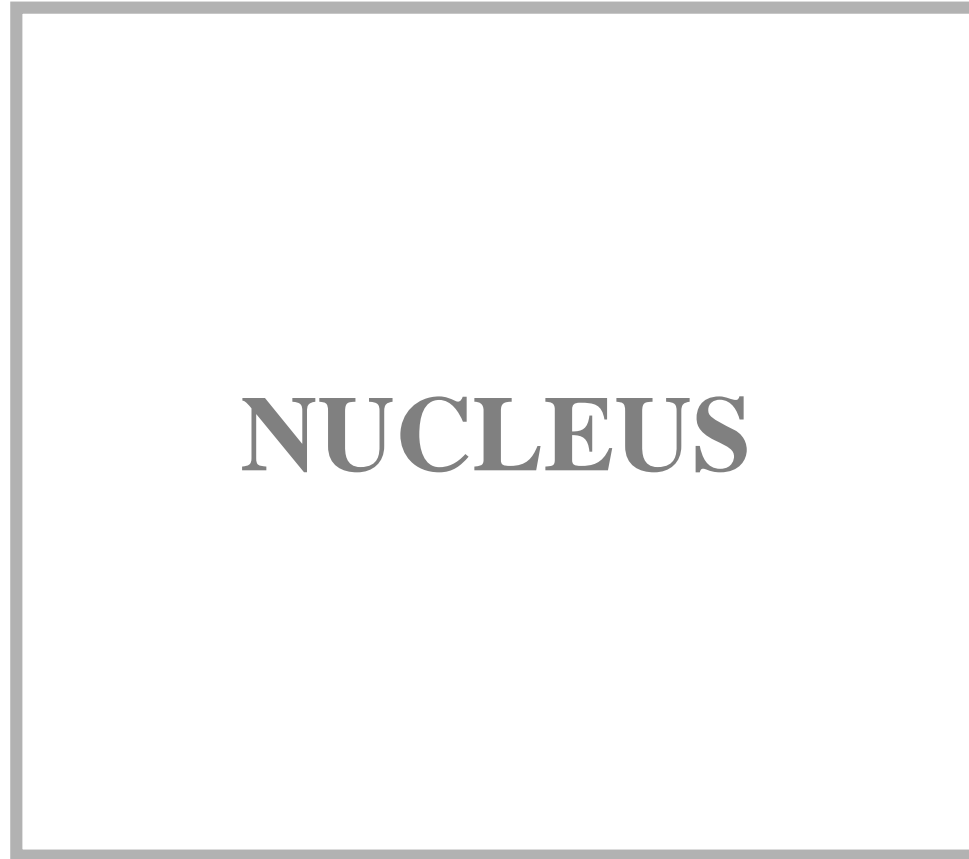
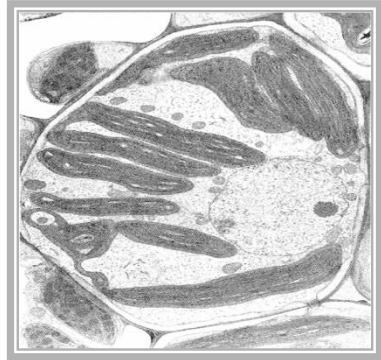
HISTONE PROTEINS
STRUCTURAL SUPPORT
CHROMATIN
COMPONENT

CHROMATIN

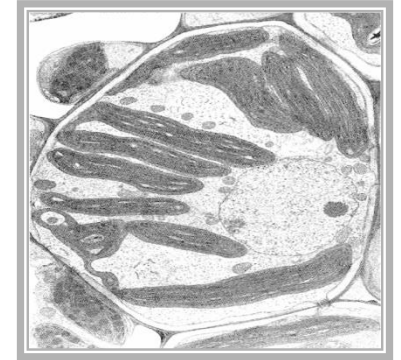


EUKARYOTE CHROMOSOME TERMS

TRUE PLANT CELL

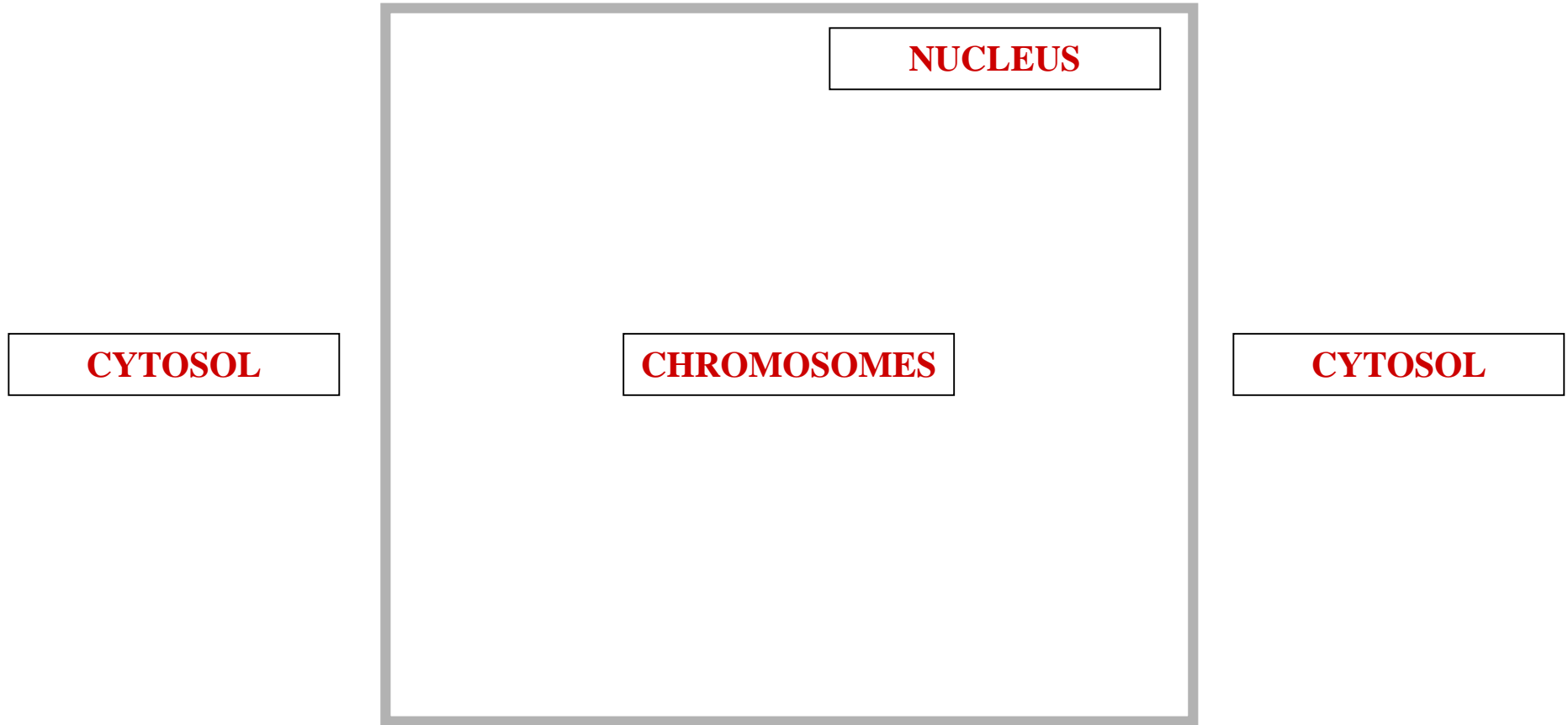


NUCLEUS



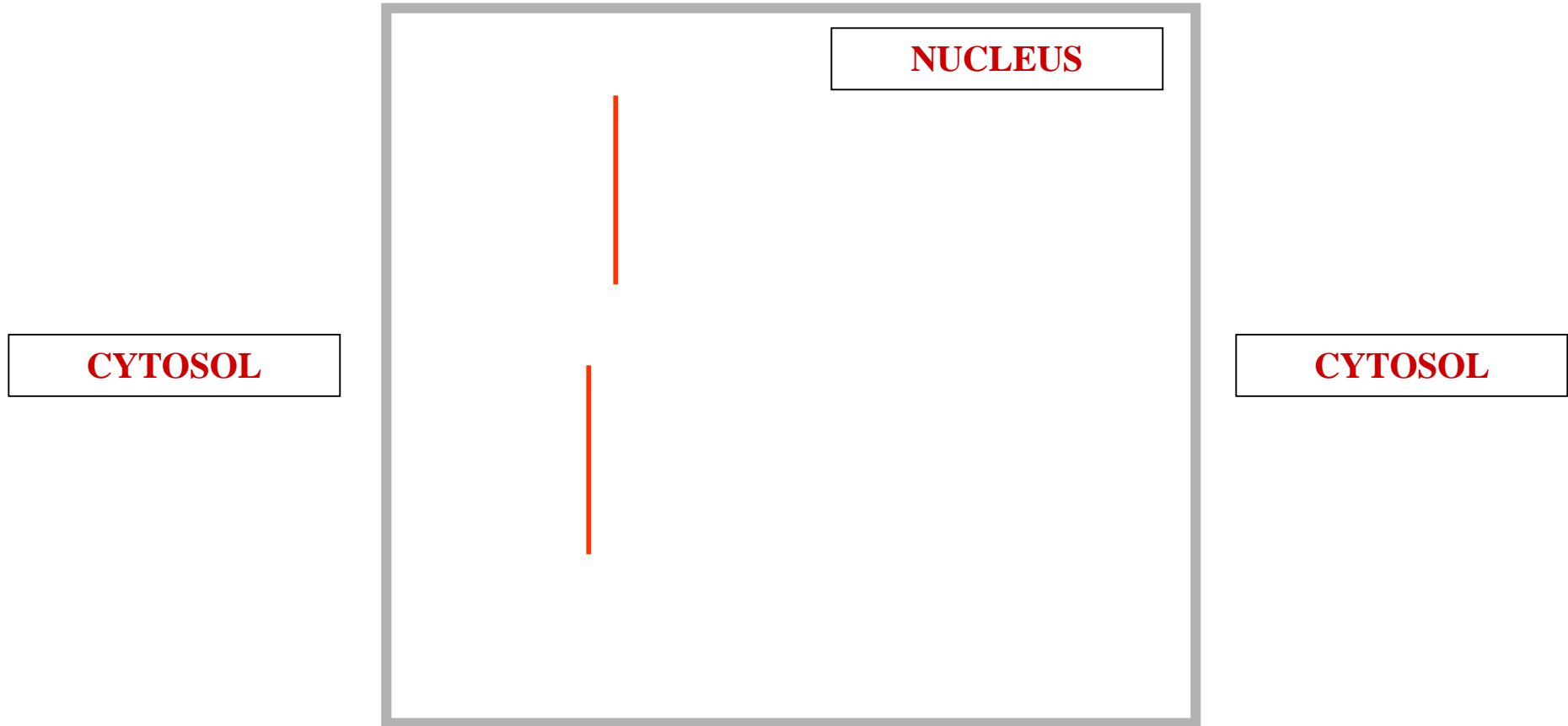
CYTOSOL

TRUE PLANT CELL



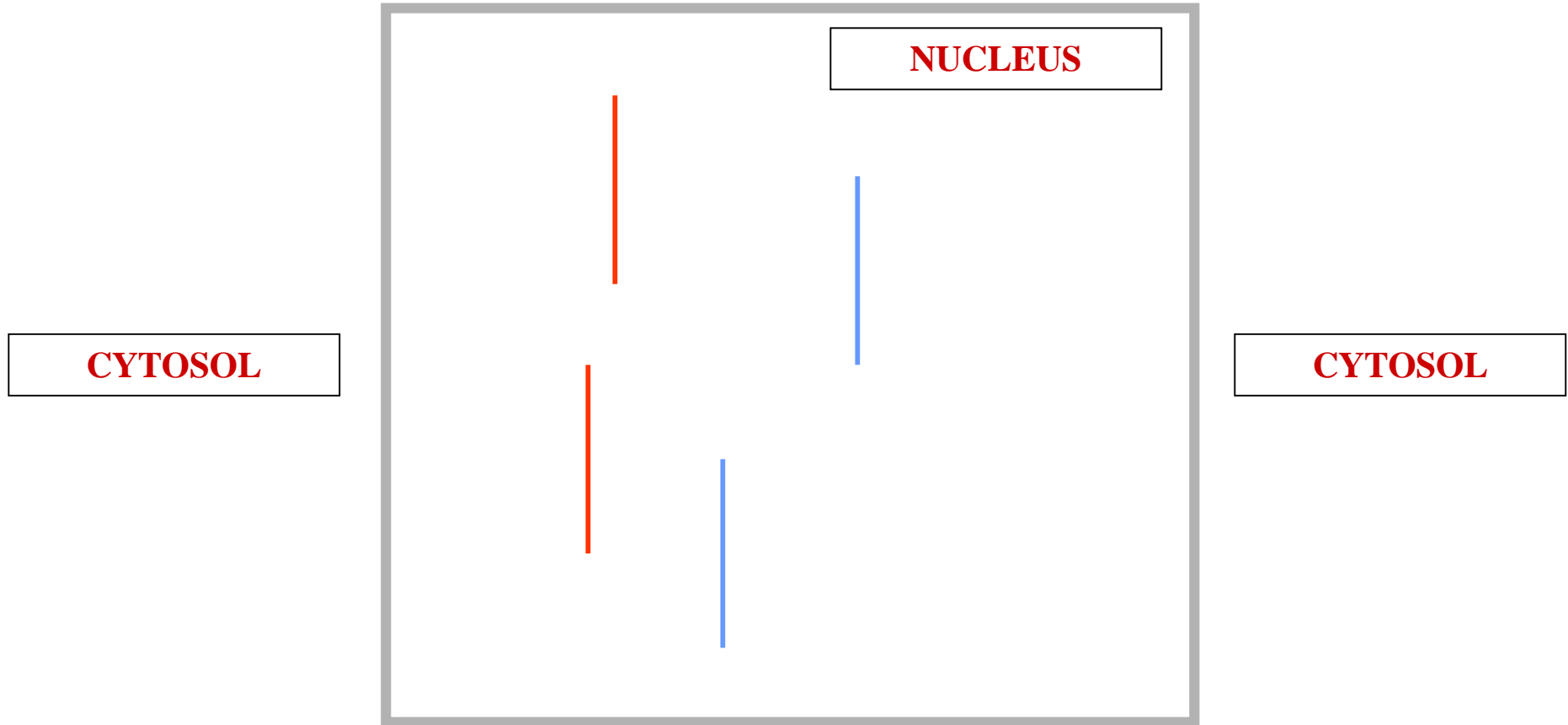
6 CHROMOSOMES

TRUE PLANT CELL



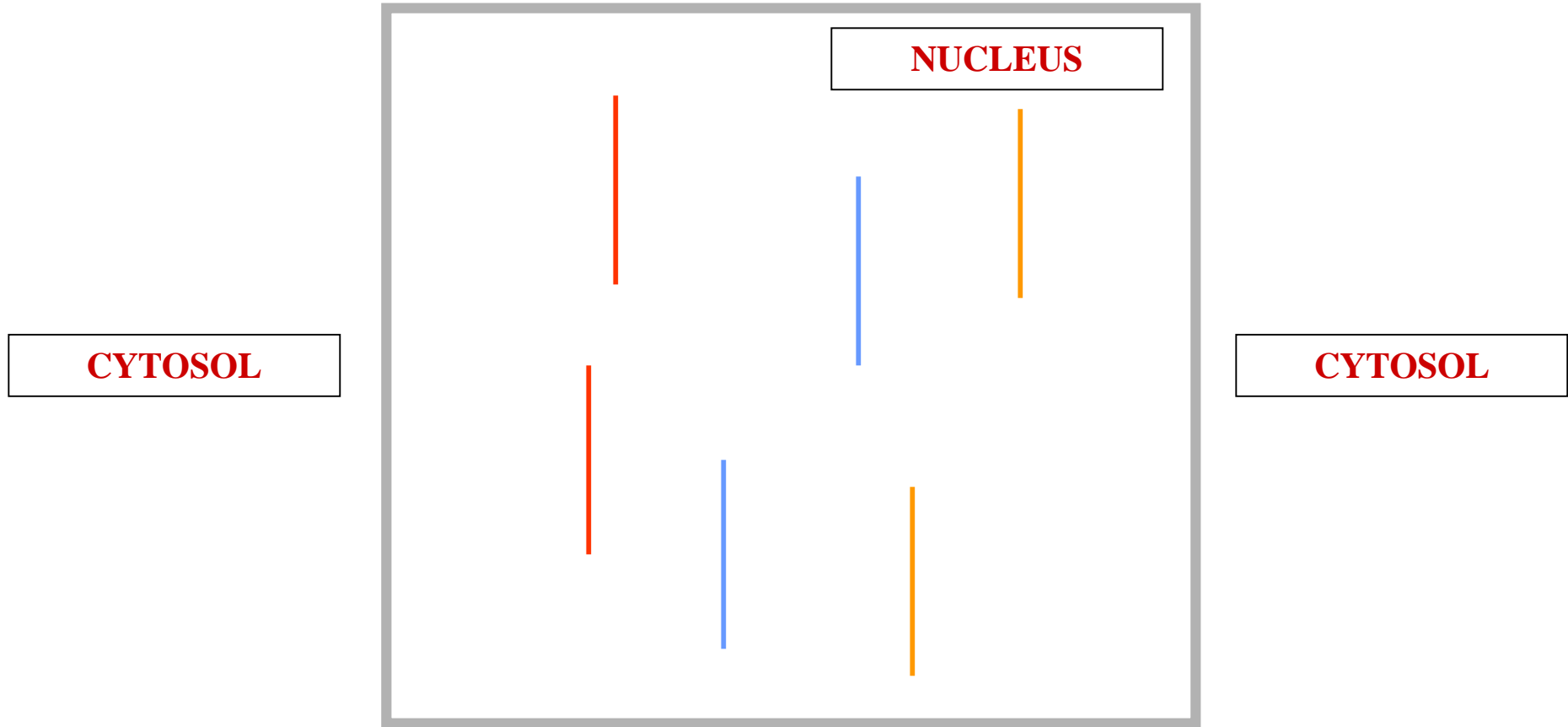
6 CHROMOSOMES

TRUE PLANT CELL



6 CHROMOSOMES

TRUE PLANT CELL



6 CHROMOSOMES

HOMOLOGOUS CHROMOSOMES



HOMOLOGOUS CHROMOSOMES

CHROMOSOME PAIRS

HOMOLOGOUS CHROMOSOMES



HOMOLOGOUS CHROMOSOMES

**CHROMOSOME PAIRS
1 MATERNAL**

**HOMOLOGOUS
CHROMOSOMES**

HOMOLOGOUS CHROMOSOMES



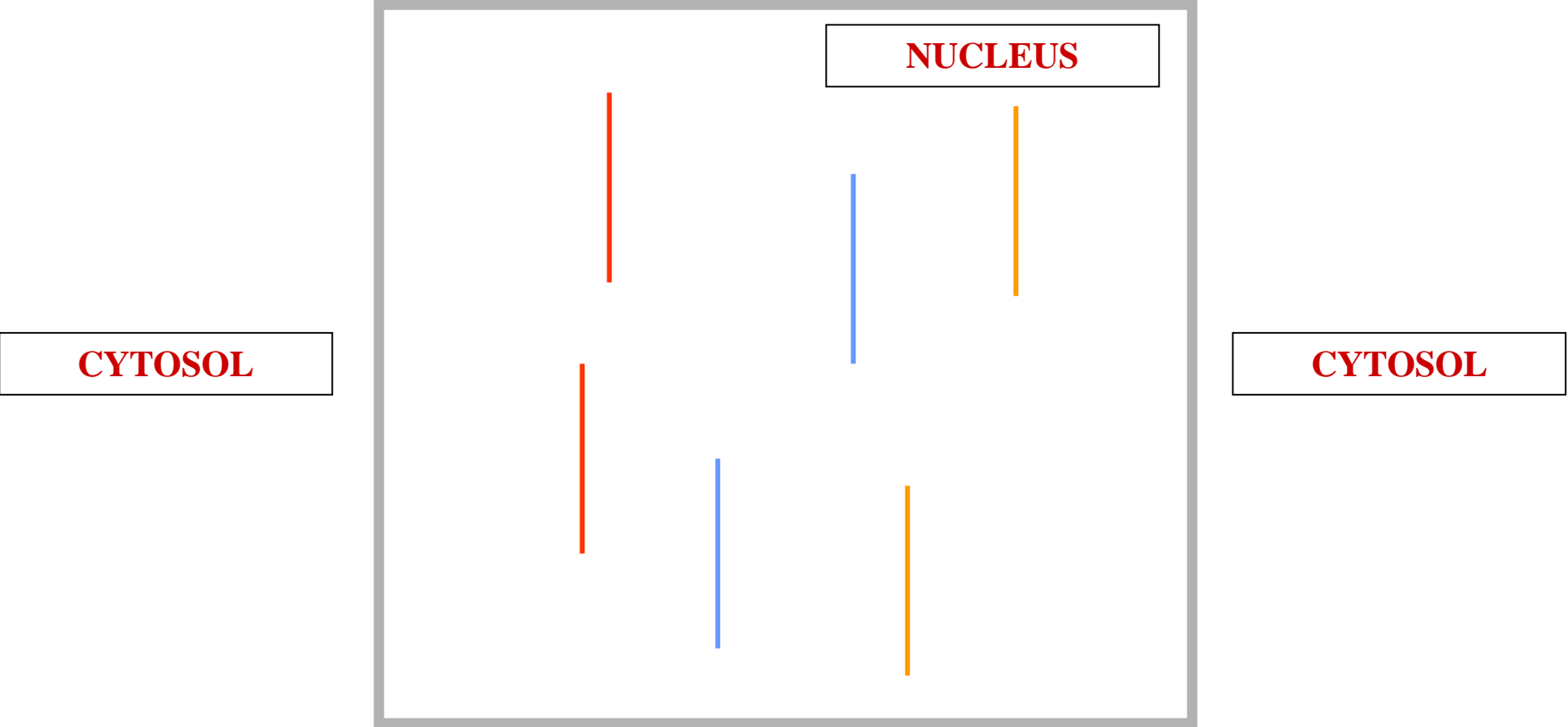
CHROMOSOME PAIRS

1 MATERNAL

1 PATERNAL

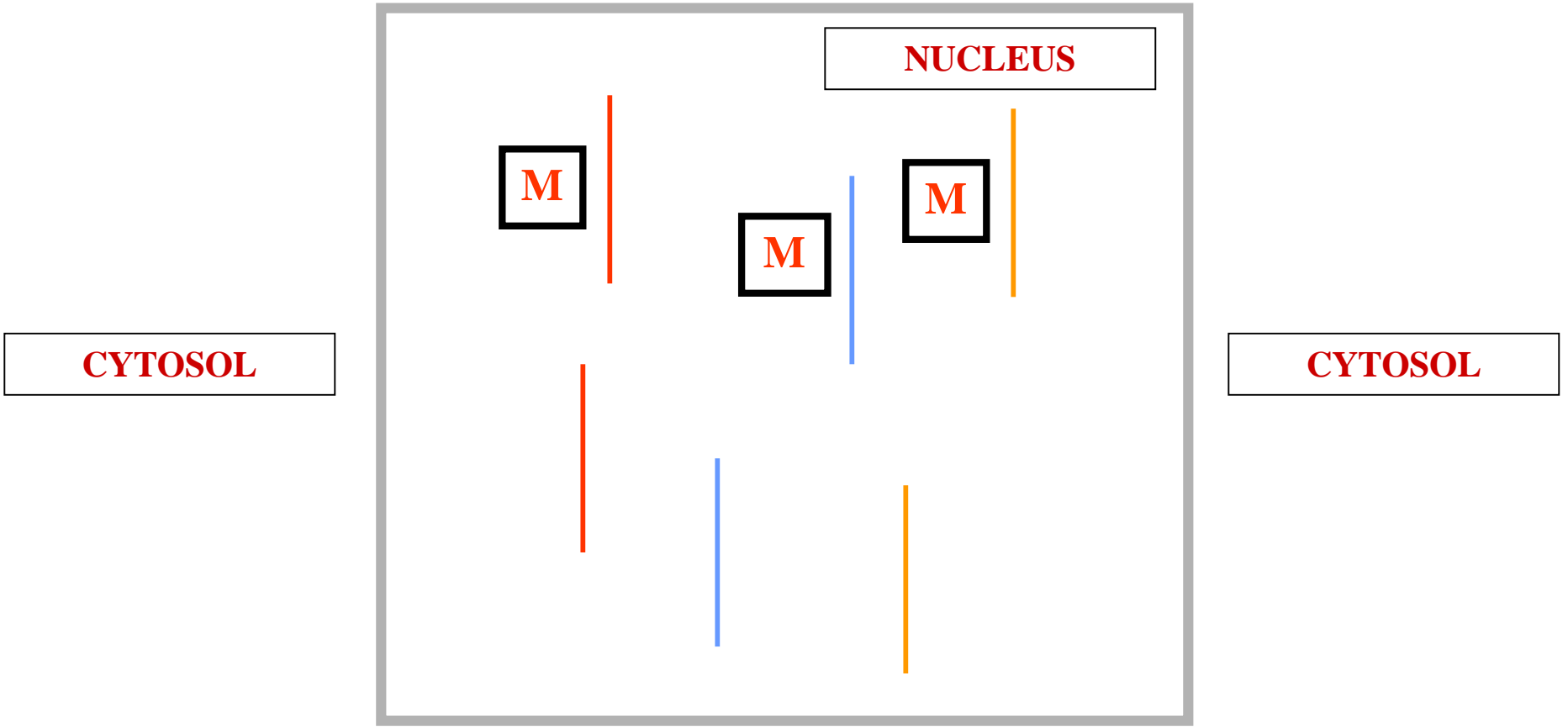
**HOMOLOGOUS
CHROMOSOMES**

HOMOLOGOUS CHROMOSOMES



6 CHROMOSOMES

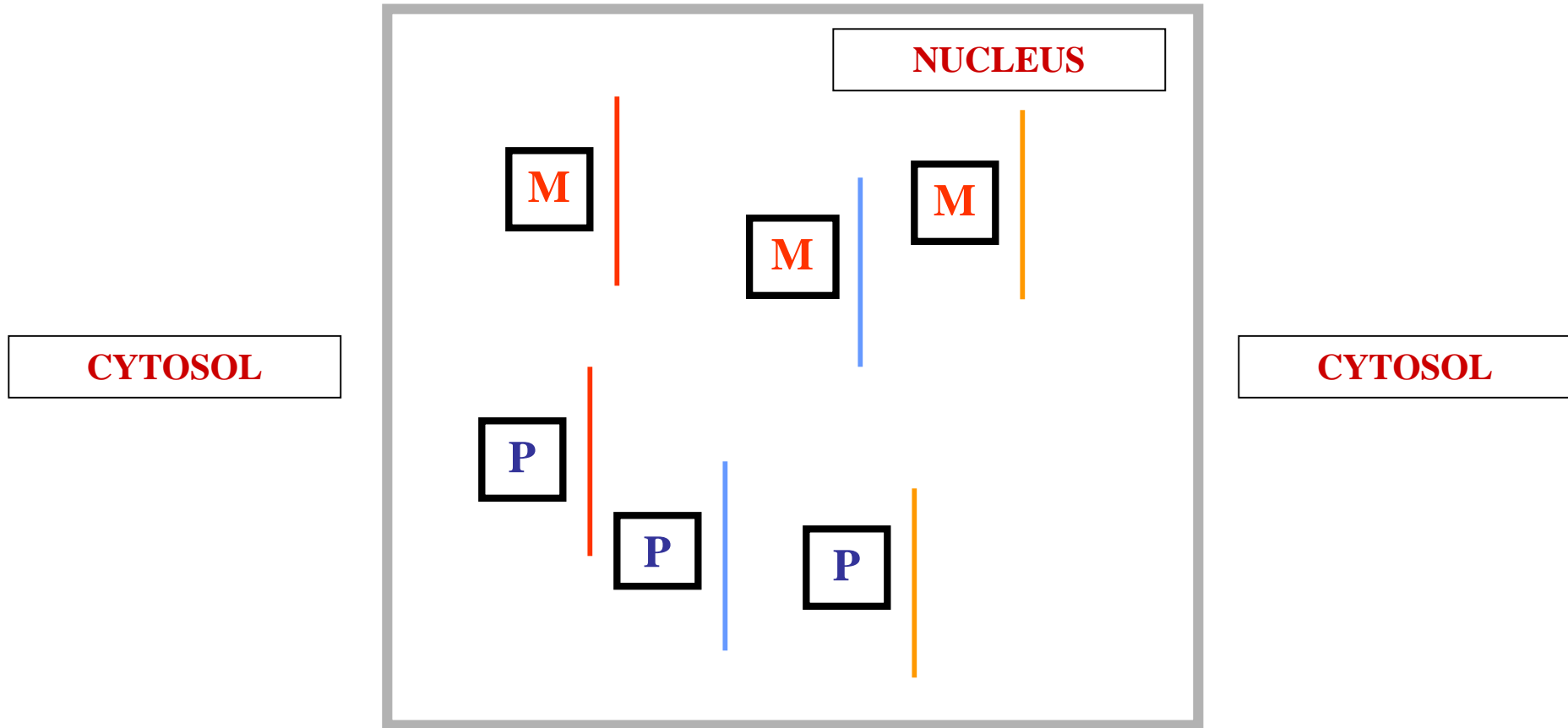
HOMOLOGOUS CHROMOSOMES



M = MATERNAL CHROMOSOME

6 CHROMOSOMES

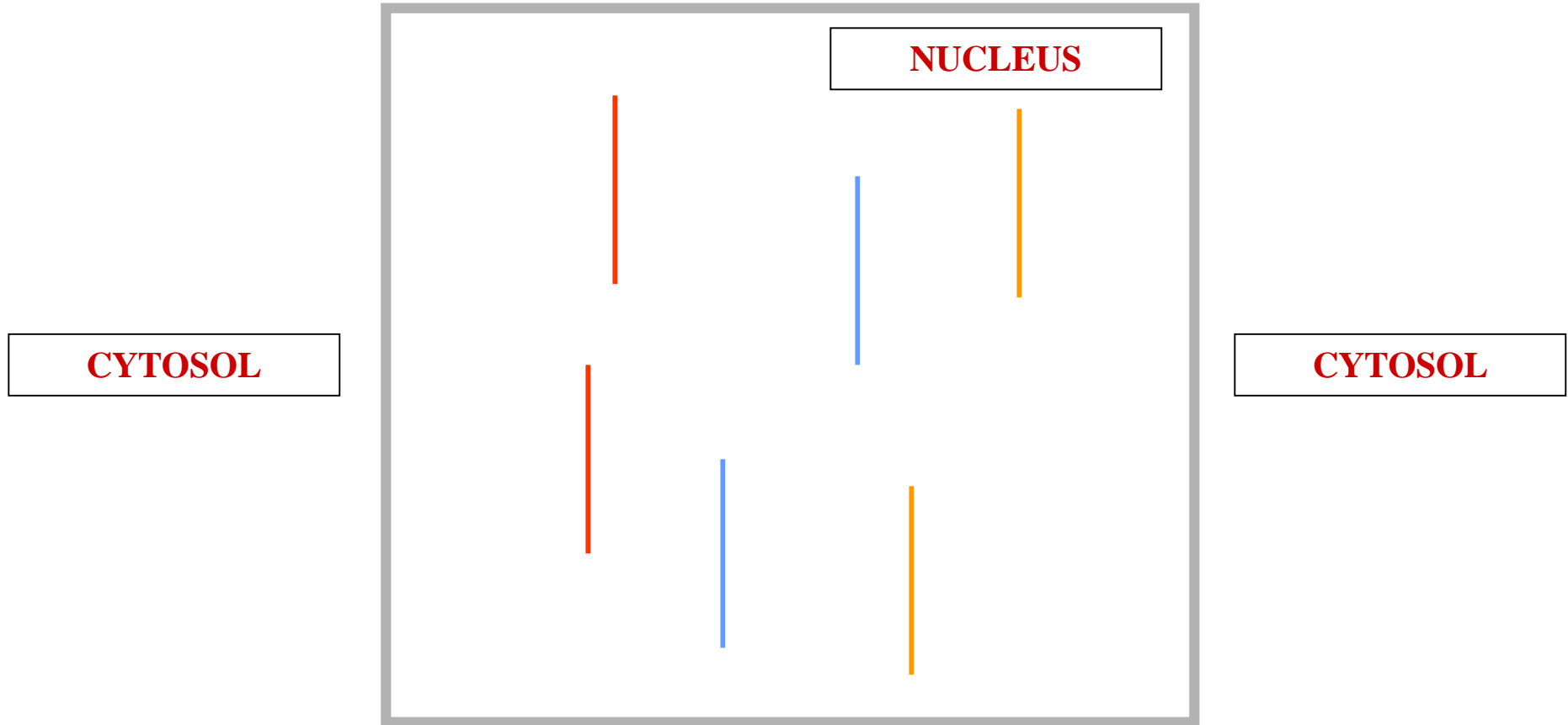
HOMOLOGOUS CHROMOSOMES



M = MATERNAL CHROMOSOME **P** = PATERNAL CHROMOSOME

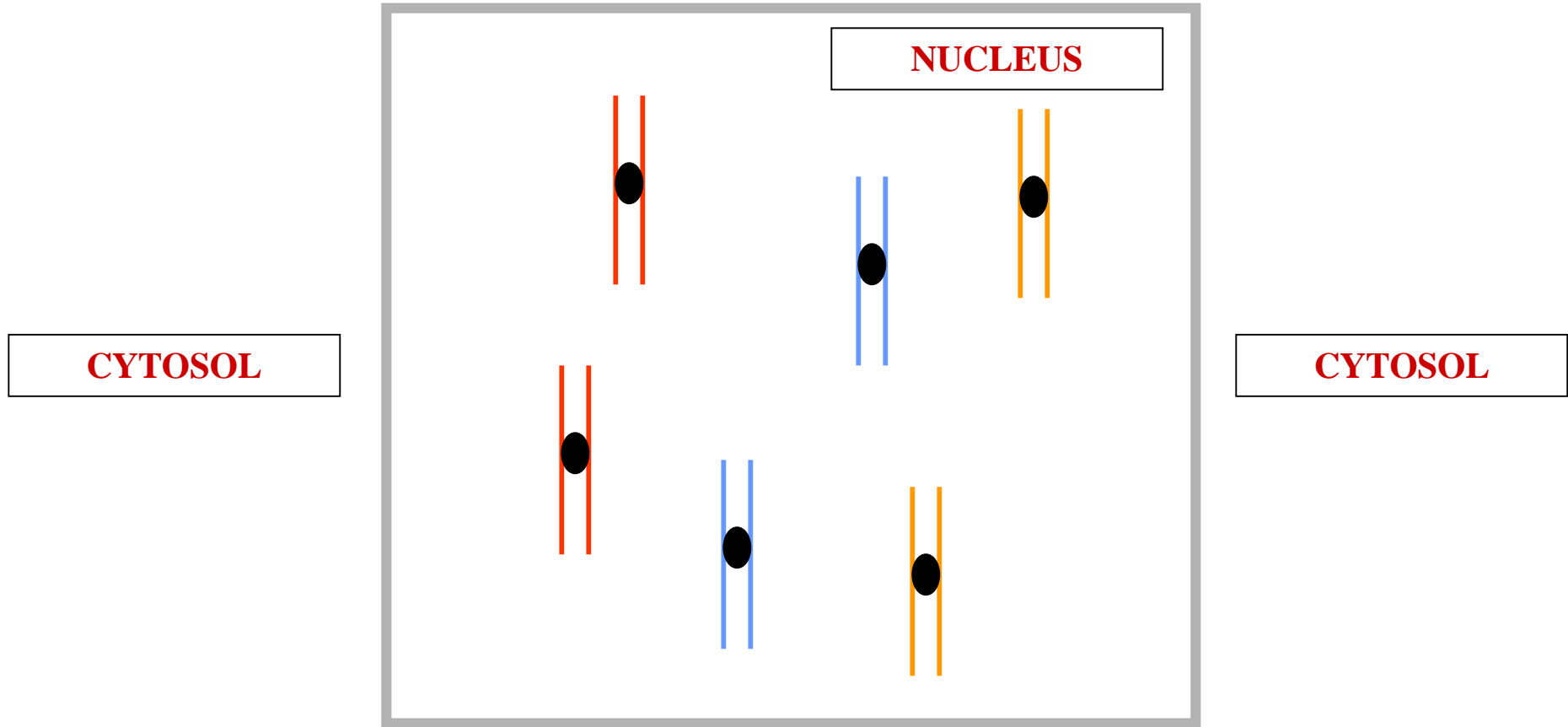
6 CHROMOSOMES

HOMOLOGOUS CHROMOSOMES

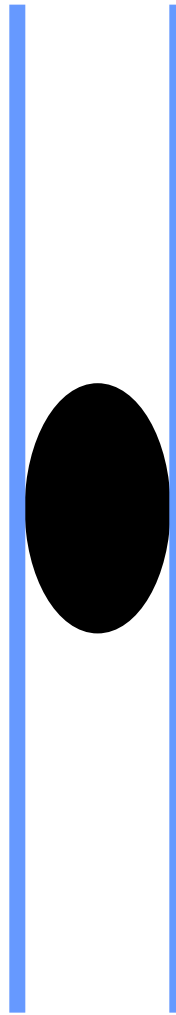


REPLICATION

HOMOLOGOUS CHROMOSOMES



POST REPLICATION



REPLICATED CHROMOSOME

CHROMATIDS

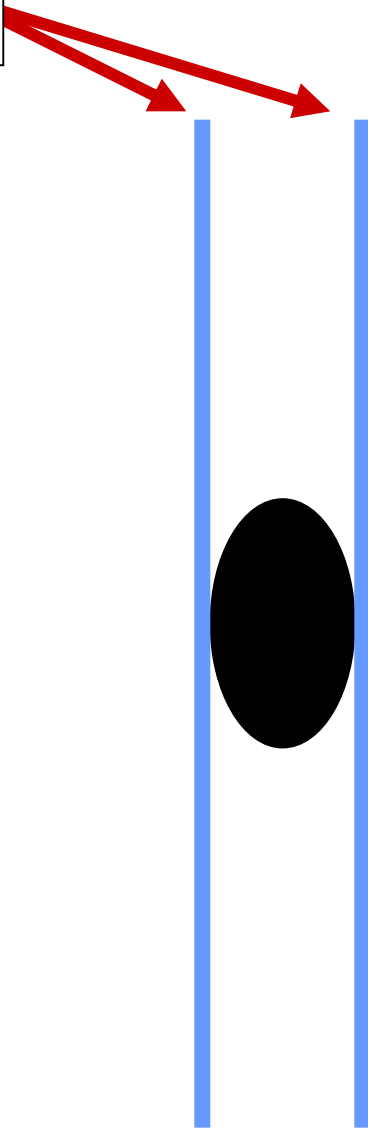
CHROMOSOME CHROMATIDS



**2 PER REPLICATED
CHROMOSOME**

**CHROMOSOME
CHROMATIDS**

CHROMATIDS



REPLICATED CHROMOSOME

CENTROMERE

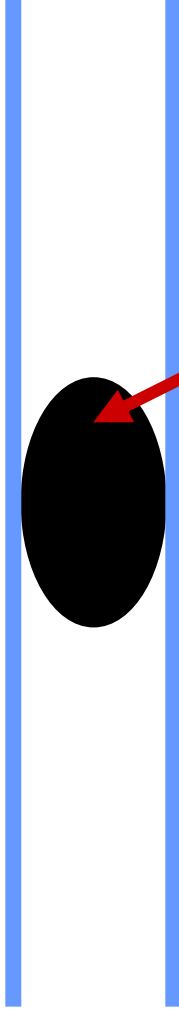
**CHROMOSOME
CENTROMERE**



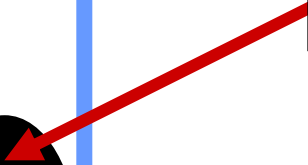
**CHROMATIDS
ATTACHMENT
POINT**

**CHROMOSOME
CENTROMERES**

CHROMATIDS



CENTROMERE



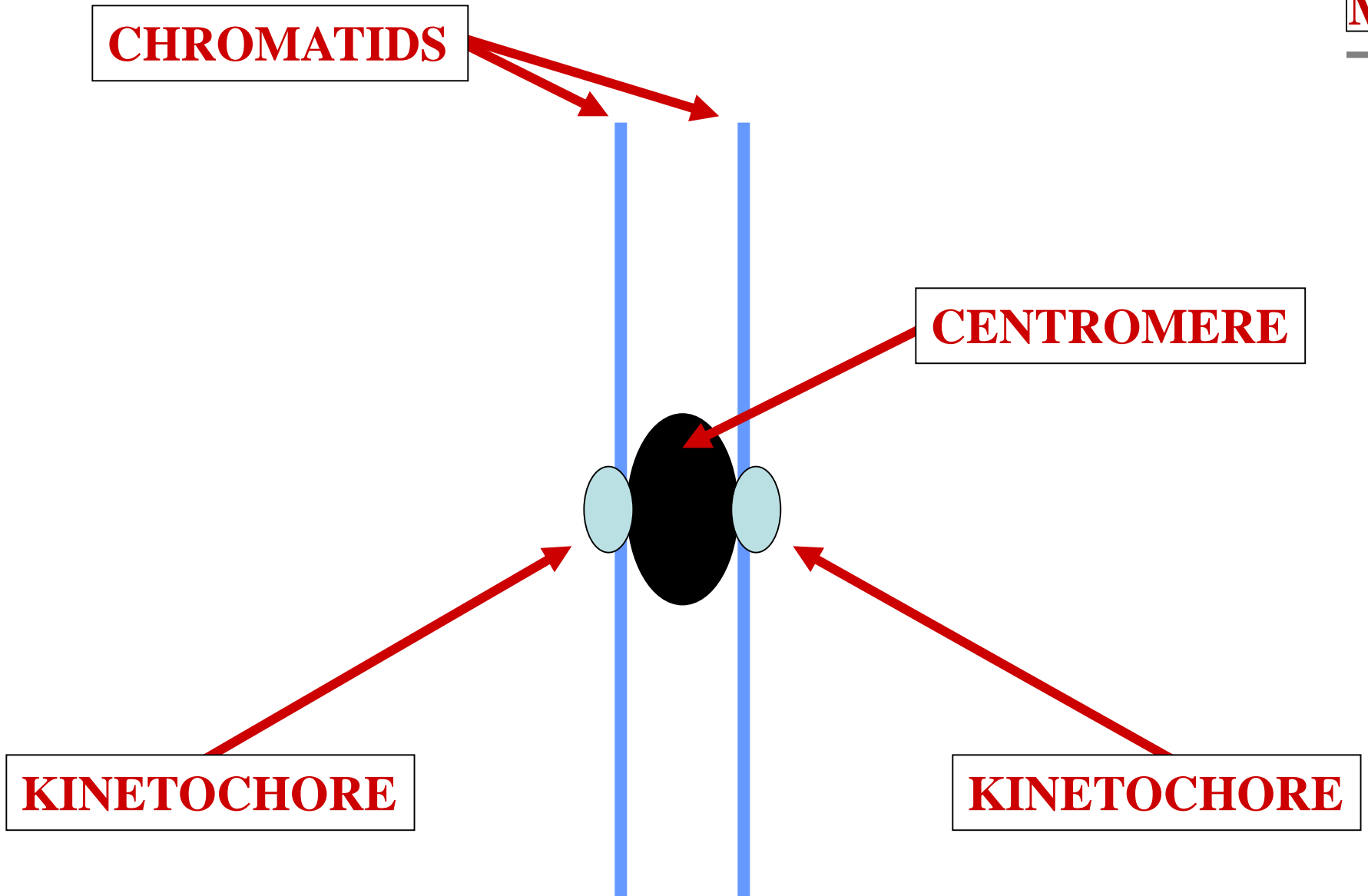
REPLICATED CHROMOSOME

KINETOCHORE

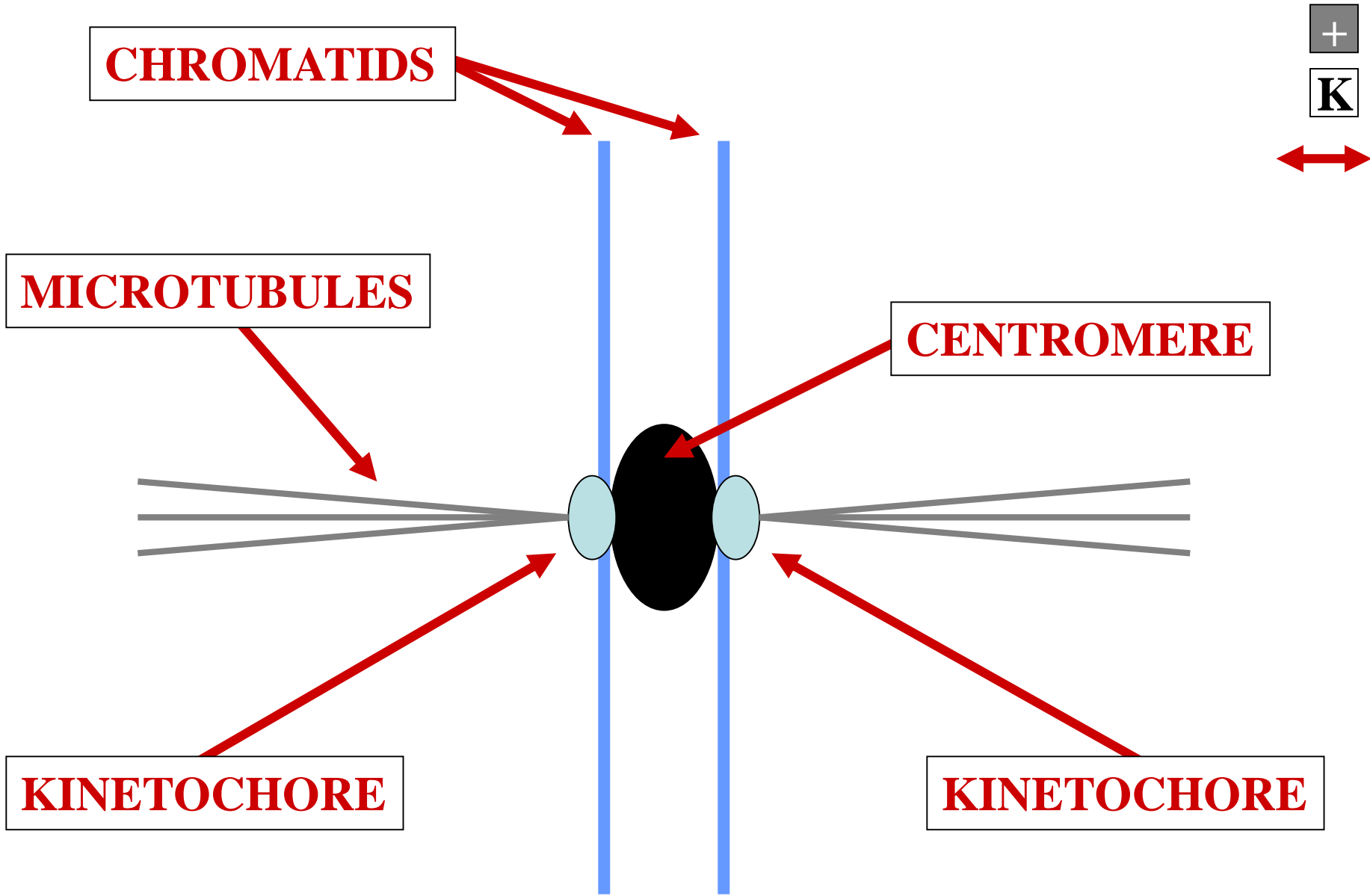
**CHROMOSOME
KINETOCHORE**

**MICROTUBULE
ATTACHMENT
POINT**

**CHROMOSOME
KINETOCHORE**



REPLICATED CHROMOSOME

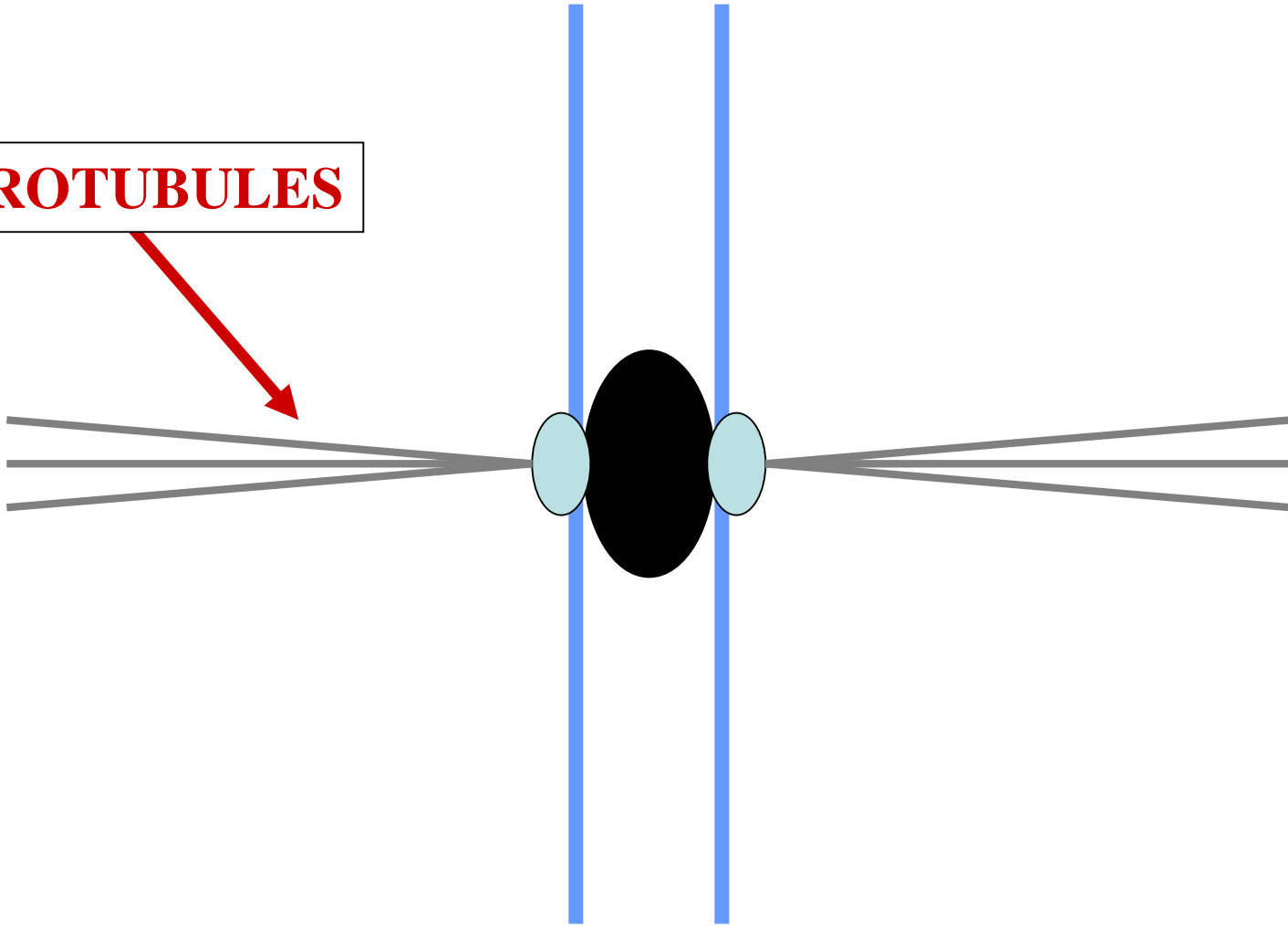


REPLICATED CHROMOSOME

KARYOKINESIS

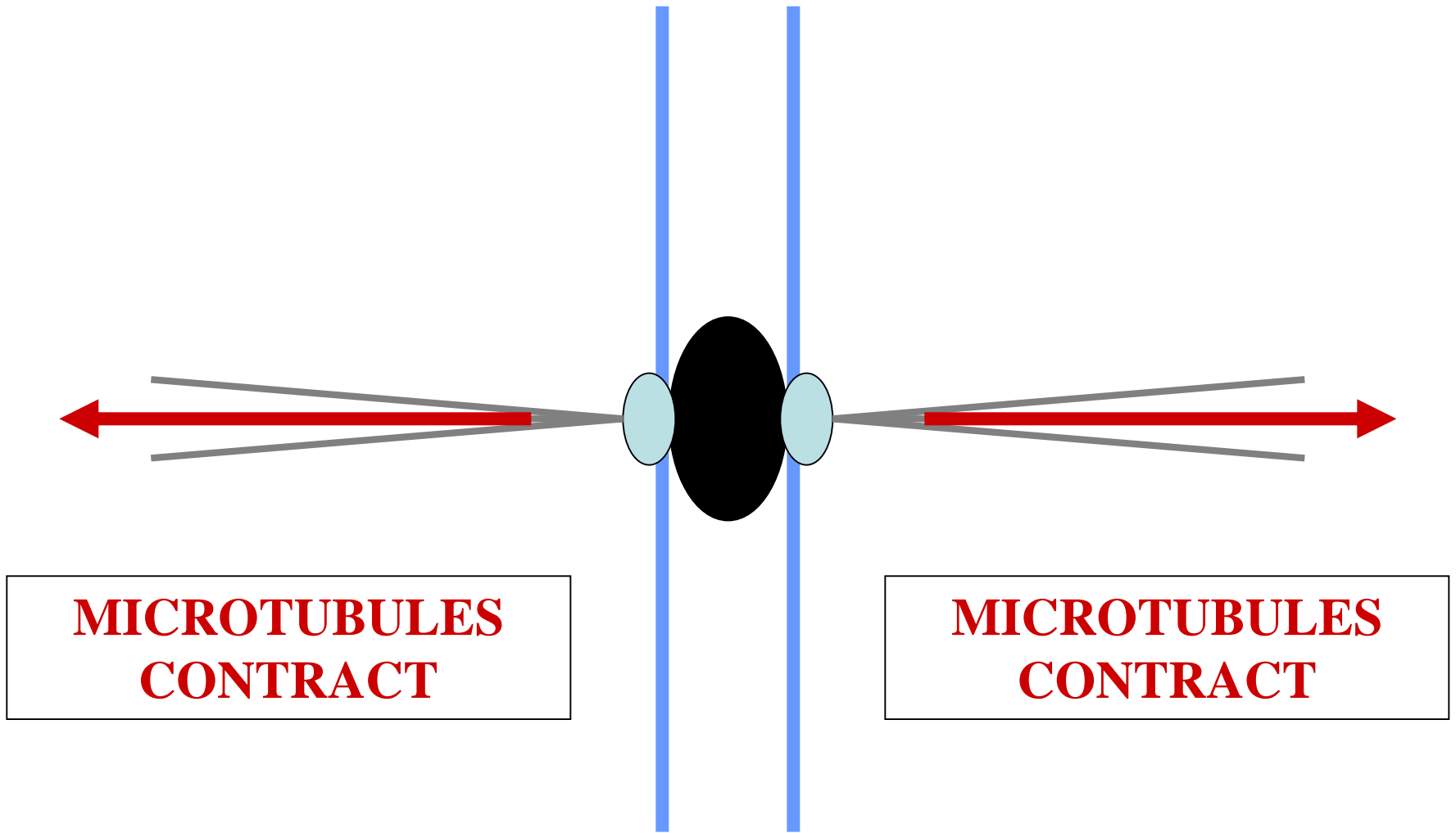


MICROTUBULES



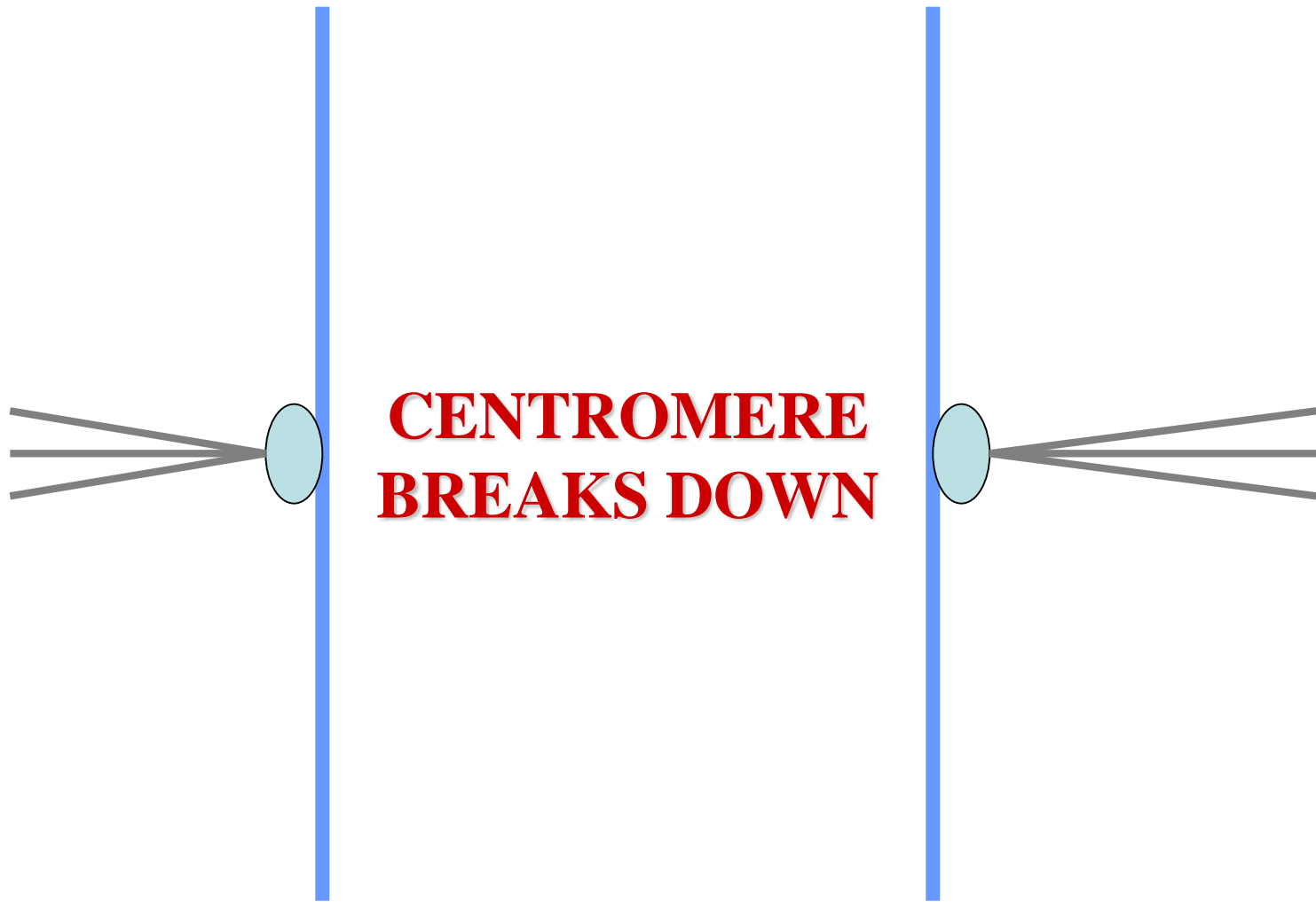
KARYOKINESIS

KARYOKINESIS



KARYOKINESIS

KARYOKINESIS



KARYOKINESIS

KARYOKINESIS



CHROMATIDS
SEPARATE

The diagram consists of two vertical blue lines, one on the left and one on the right, representing the poles of a cell. The text 'CHROMATIDS SEPARATE' is centered between these two lines.

KARYOKINESIS

KARYOKINESIS



**DAUGHTER
CHROMOSOMES**

KARYOKINESIS

DAUGHTER CHROMOSOMES

**DAUGHTER
CHROMOSOMES**



**SEPARATED
CHROMATIDS**

**DAUGHTER
CHROMOSOMES**



KARYOKINESIS

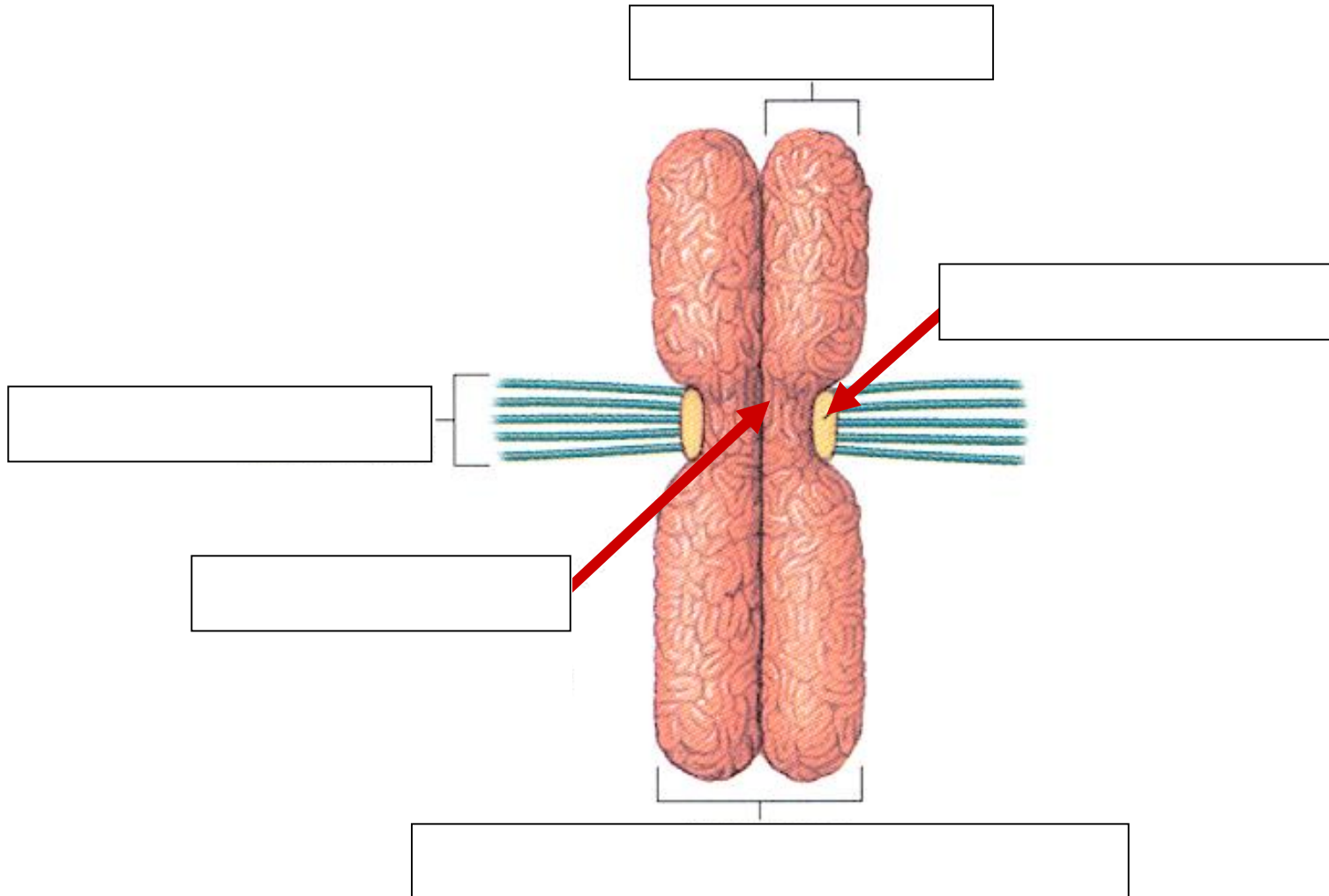
**DAUGHTER
CHROMOSOMES**

KARYOKINESIS

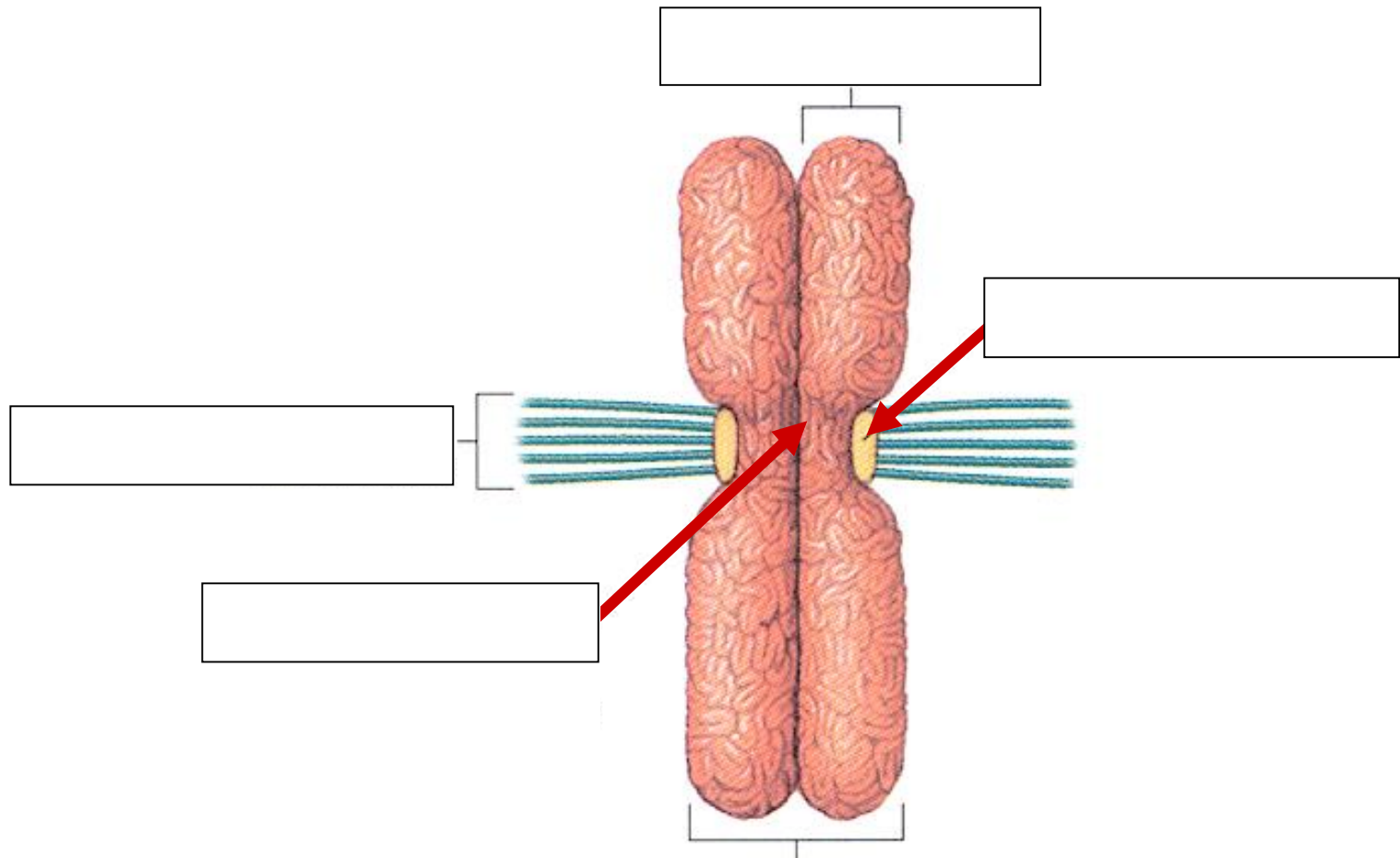


CHROMOSOME TERMS SUMMARY

CHROMOSOME TERMS



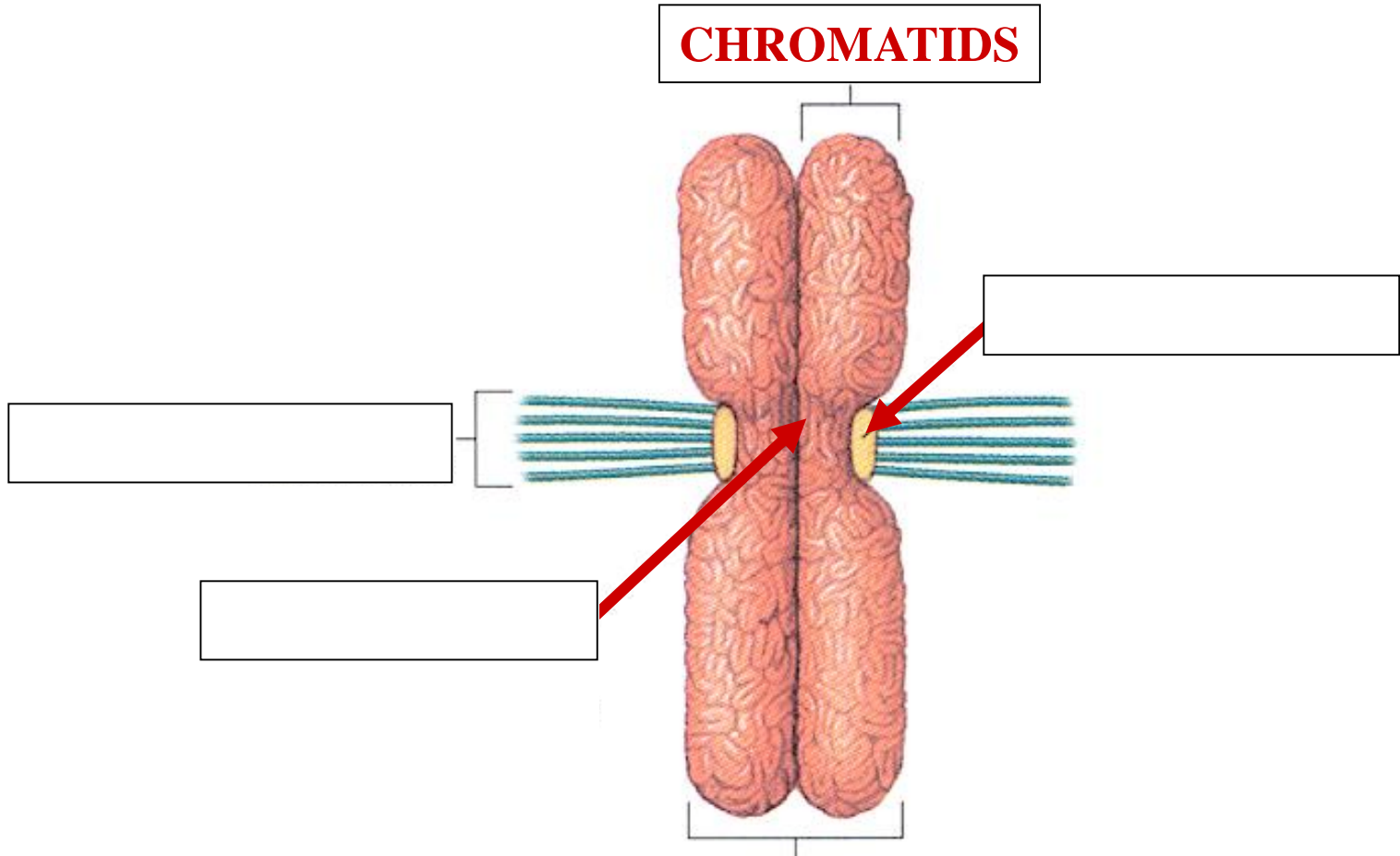
CHROMOSOME TERMS



REPLICATED CHROMOSOME

CHROMOSOME TERMS

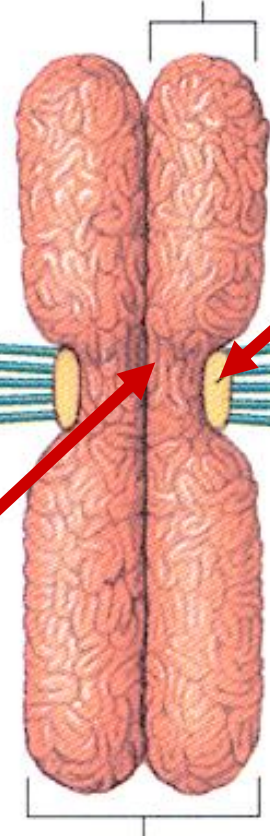
CHROMATIDS



REPLICATED CHROMOSOME

CHROMOSOME TERMS

CHROMATIDS



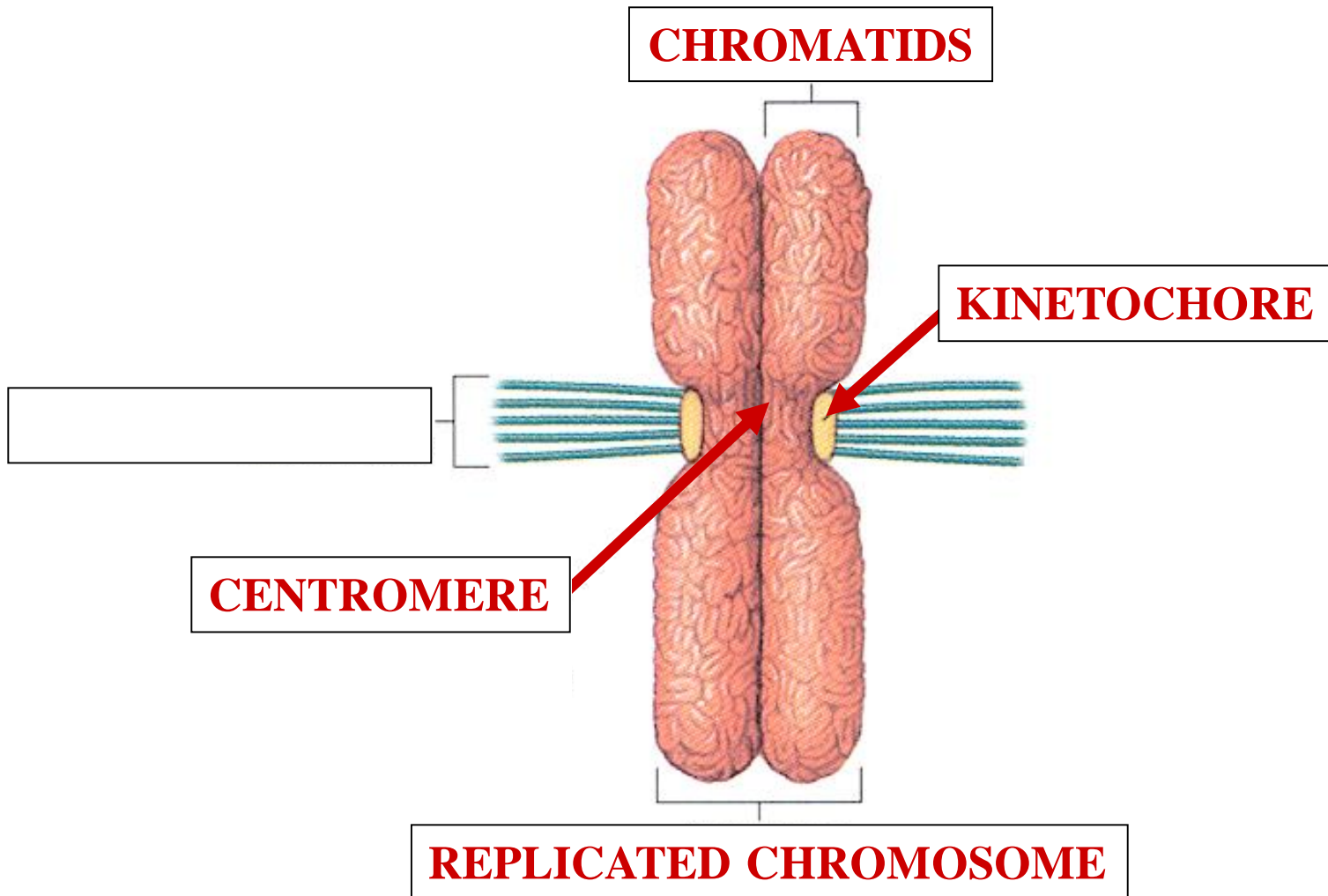
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[Empty box]

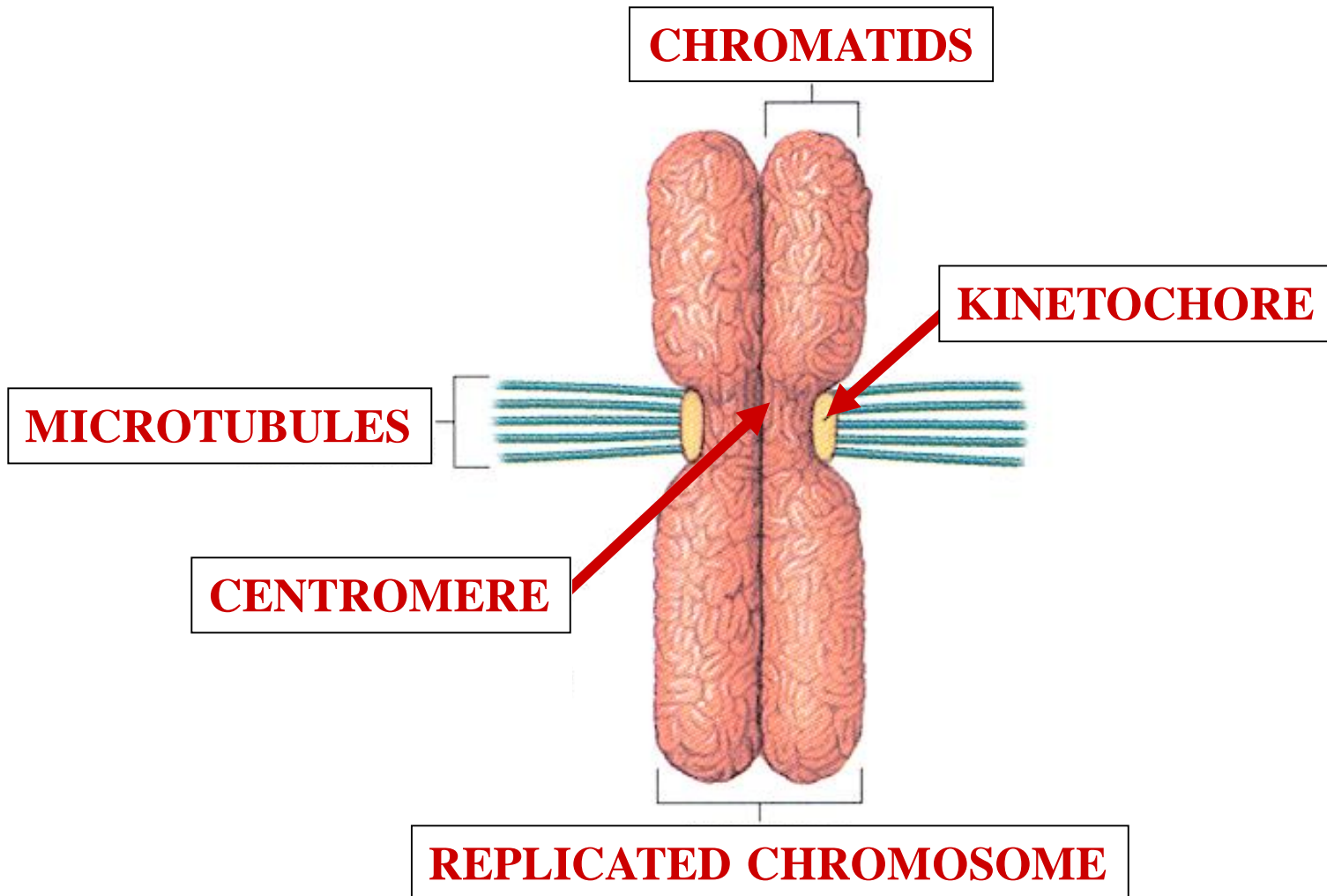
CENTROMERE

REPLICATED CHROMOSOME

CHROMOSOME TERMS



CHROMOSOME TERMS





VASCULAR PLANT EVOLUTION



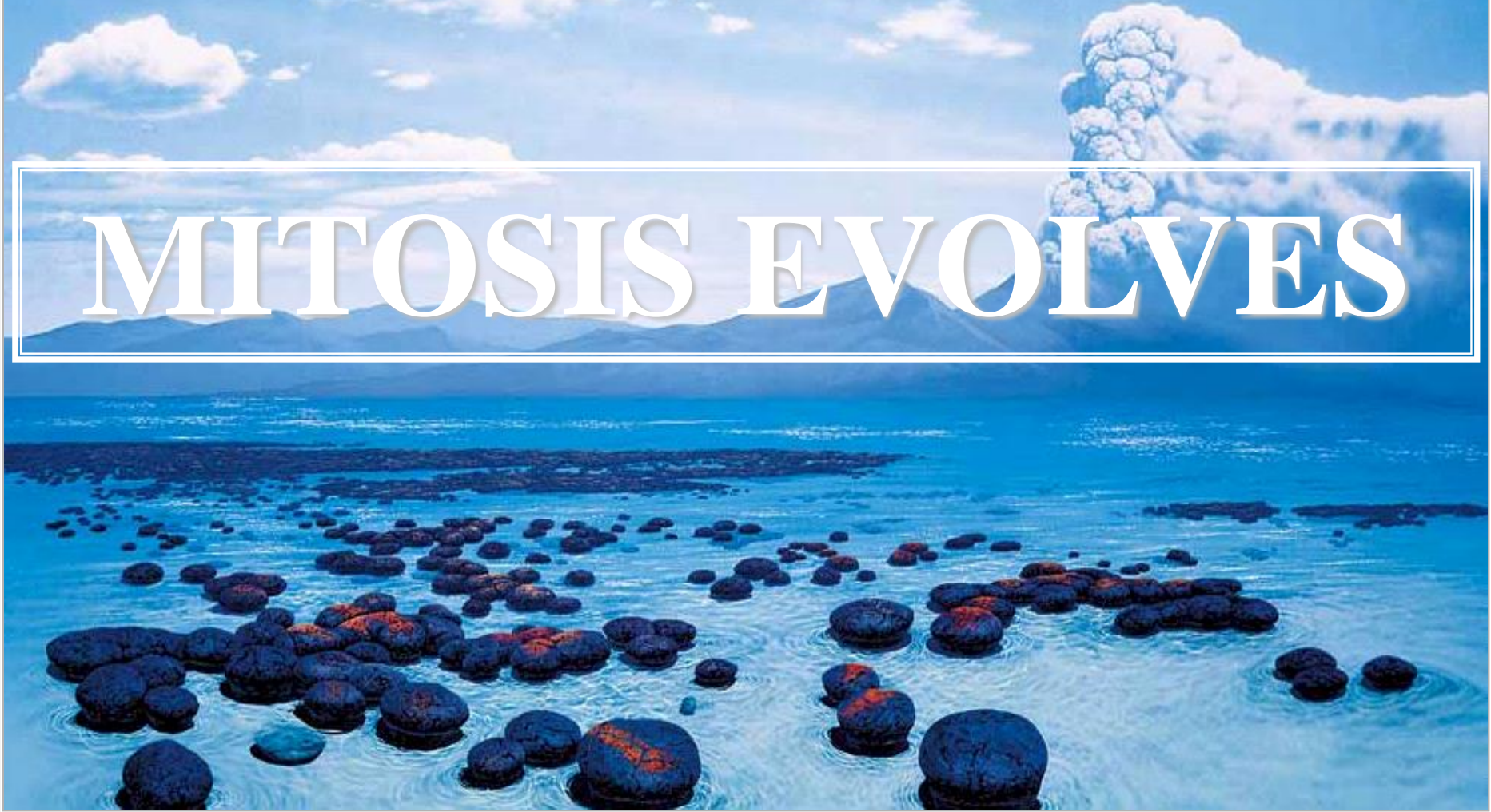
~1.5

BILLION YEARS

~1.5 BILLION YEARS AGO



MITOSIS EVOLVES



TRUE PLANT SOMATIC CELL CYCLE

**TRUE PLANT
SOMATIC CELL**



**TRUE PLANT
SOMATIC CELL**

UNDERGOES MITOSIS ONLY

**TRUE PLANT
SOMATIC CELL**

**TRUE PLANT
SOMATIC CELL**

UNDERGOES MITOSIS ONLY

**DERIVES
GROWTH & MAINTENANCE
CELLS**

**TRUE PLANT
SOMATIC CELL**



TRUE PLT SOMATIC CELL



NUCLEUS
6
CHROMOSOMES

SOMATIC CELL

SOMATIC CELL
UNDERGOES
MITOSIS ONLY

TRUE PLT SOMATIC CELL

