

QUESTION

DURING MEIOSIS DOES
CHROMOSOME
NUMBER
REDUCTION OCCUR?

QUESTION

ANSWER



YES

ANSWER



ANSWER

**DURING MEIOSIS
CHROMOSOME
NUMBER REDUCED
BY 1/2**

ANSWER

HOMO SAPIENS

#



CHROMOSOMES

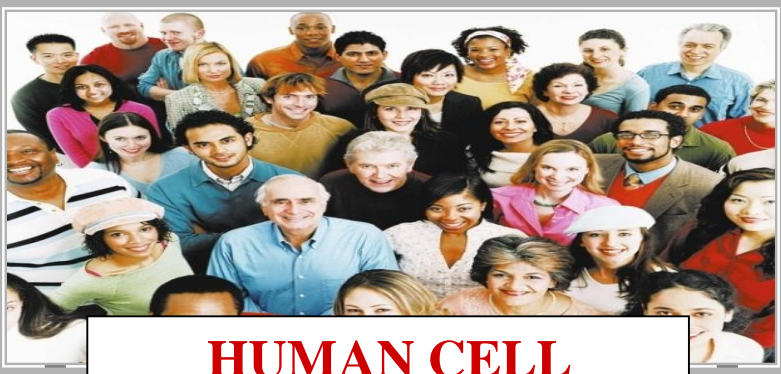
HOMO SAPIENS

HOMO SAPIENS



46
CHROMOSOMES

HOMO SAPIENS

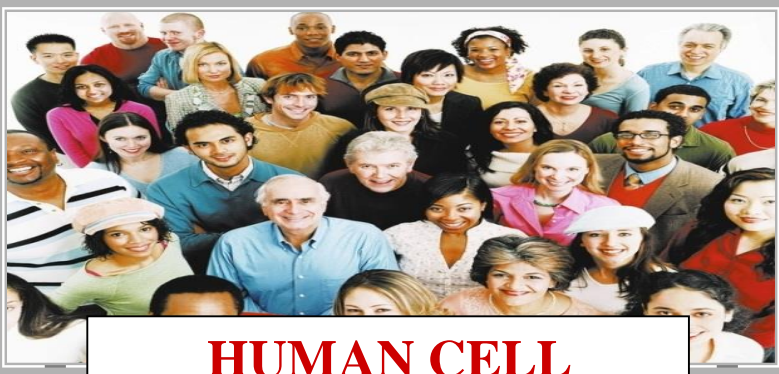


HUMAN CELL



46

GERM CELL



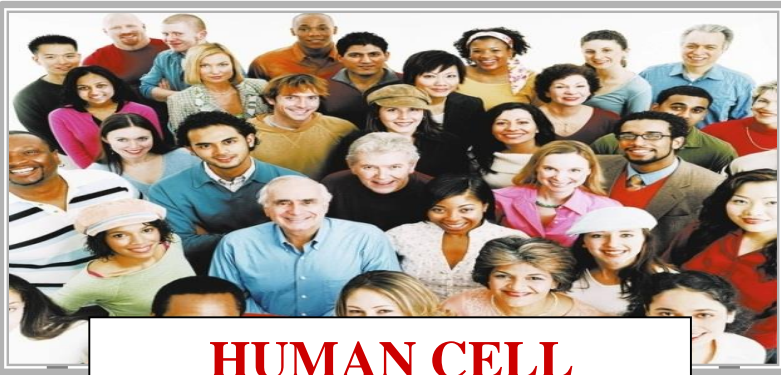
HUMAN CELL

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**YES CHROMOSOME
REDUCTION**

GERM CELL

MEIOSIS

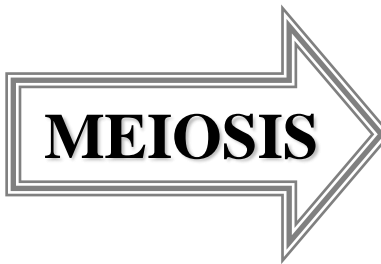


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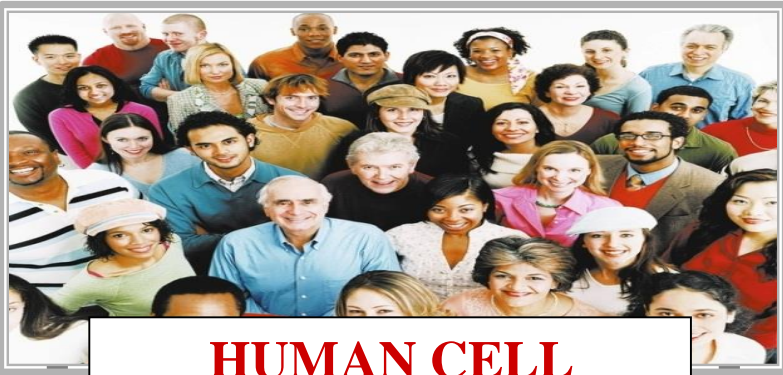


**YES CHROMOSOME
REDUCTION**

GERM CELL



1/2 REDUCTION



HUMAN CELL

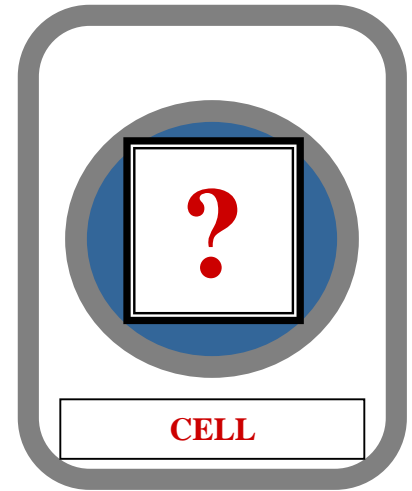
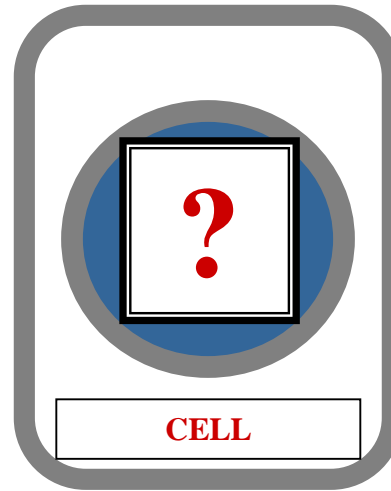
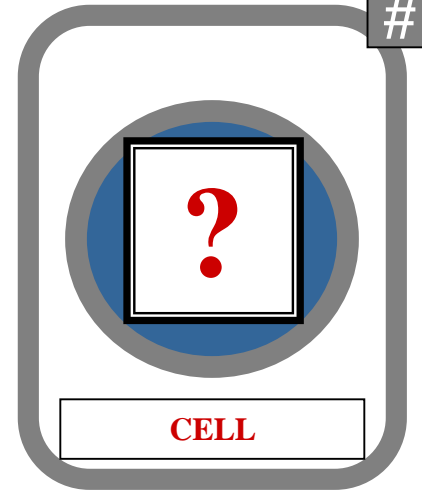
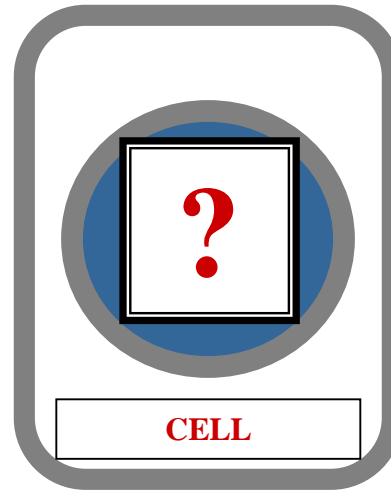
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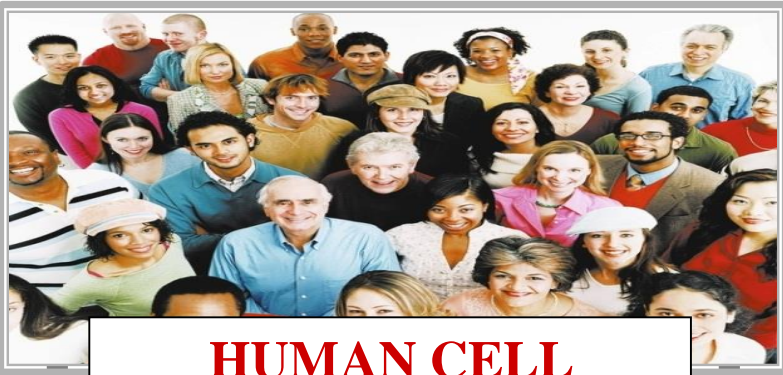
**YES CHROMOSOME
REDUCTION**

GERM CELL

MEIOSIS

1/2 REDUCTION



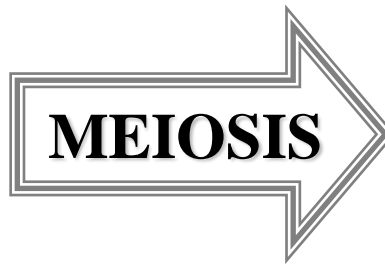


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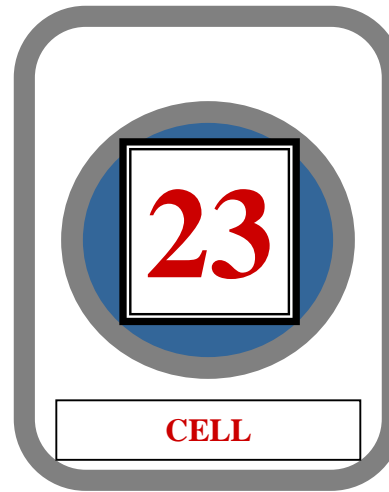
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REDUCTION**

GERM CELL



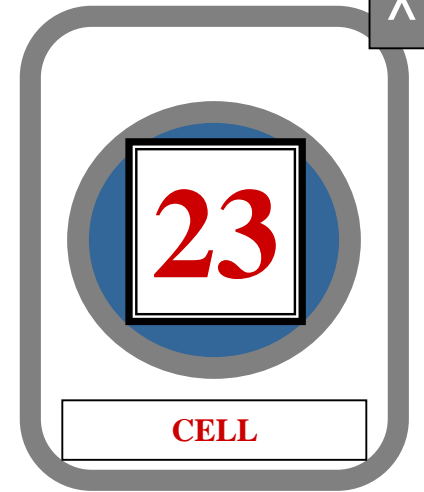
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1/2 REDUCTION



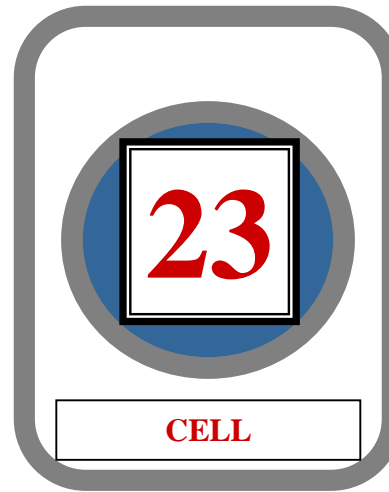
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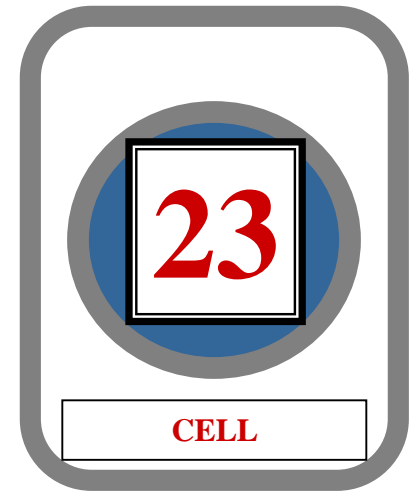
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CELL



23

CELL



23

CELL

ANIMAL GERM CELLS

GAMETOCYTE



GAMETOCYTE

ANIMAL GERM CELL

GAMETOCYTE

GAMETOCYTE



ANIMAL GERM CELL

UNDERGOES MEIOSIS

GAMETOCYTE



ANIMAL LIFE CYCLE





ANIMAL GERM CELL





GAMETOCYTE





UNDERGOES MEIOSIS





ANIMAL GAMETOCYTE TYPES

MALE ANIMAL GAMETOCYTE



SPERMATOCYTE



SPERMATOCYTE

**MALE ANIMAL
GAMETOCYTE**

SPERMATOCYTE



MALE ANIMAL



SPERMATOCYTE



MALE ANIMAL

46

GAMETOCYTE

SPERMATOCYTE



MALE ANIMAL

46

GERM CELL

GAMETOCYTE

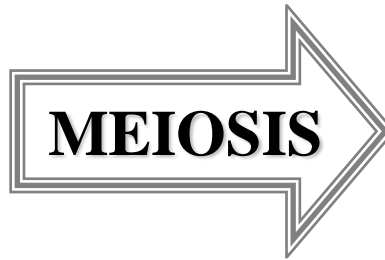
SPERMATOCYTE



MALE ANIMAL



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MEIOSIS

1/2 REDUCTION

GERM CELL

GAMETOCYTE

SPERMATOCYTE



MALE ANIMAL

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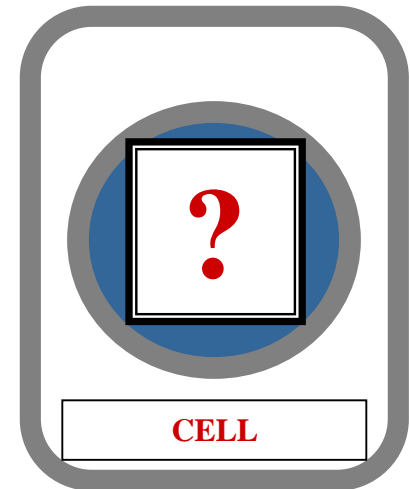
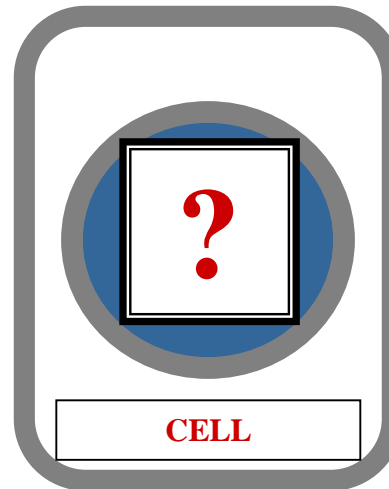
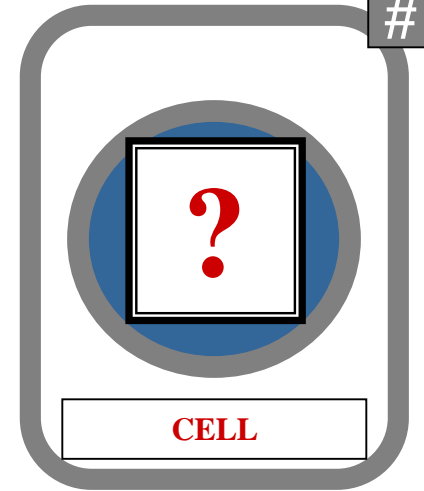
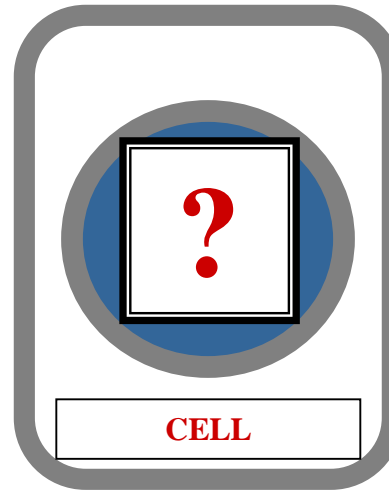
1/2 REDUCTION

GERM CELL

GAMETOCYTE

SPERMATOCYTE

MEIOSIS





MALE ANIMAL

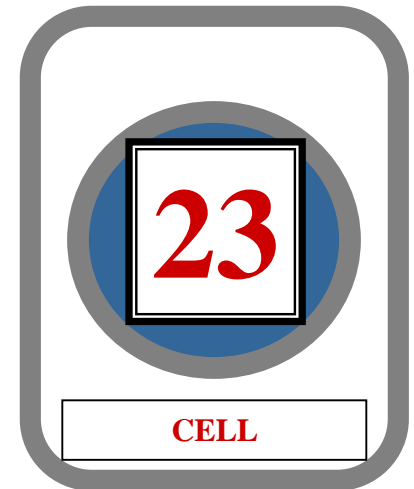
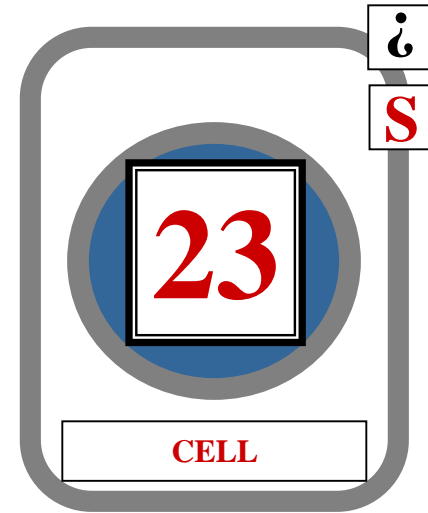
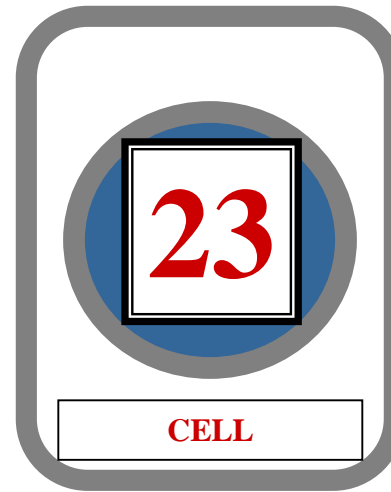
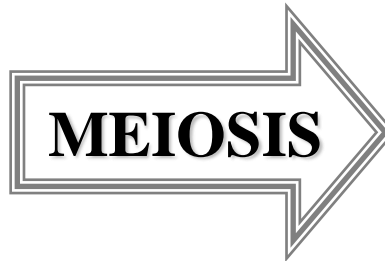


1/2 REDUCTION

GERM CELL

GAMETOCYTE

SPERMATOCYTE





MALE ANIMAL

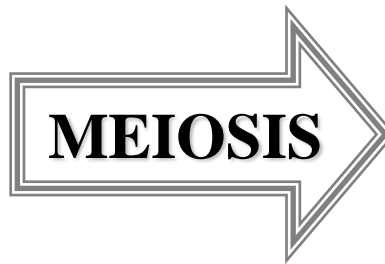


1/2 REDUCTION

GERM CELL

GAMETOCYTE

SPERMATOCYTE



FEMALE ANIMAL GAMETOCYTE



OOCYTE



OOCYTE

**FEMALE ANIMAL
GAMETOCYTE**

OOCYTE



FEMALE ANIMAL



46

OOCYTE



FEMALE ANIMAL



GAMETOCYTE

OOCYTE



FEMALE ANIMAL



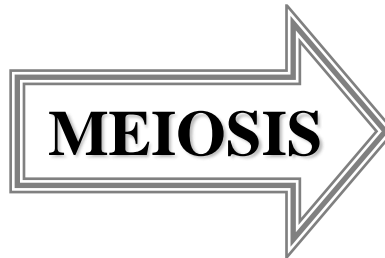
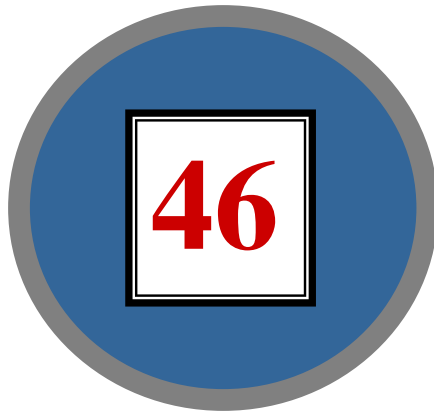
GERM CELL

GAMETOCYTE

OOCYTE



FEMALE ANIMAL



1/2 REDUCTION

GERM CELL

GAMETOCYTE

OOCYTE



FEMALE ANIMAL

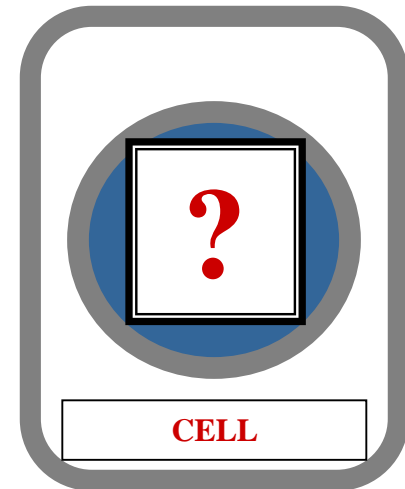
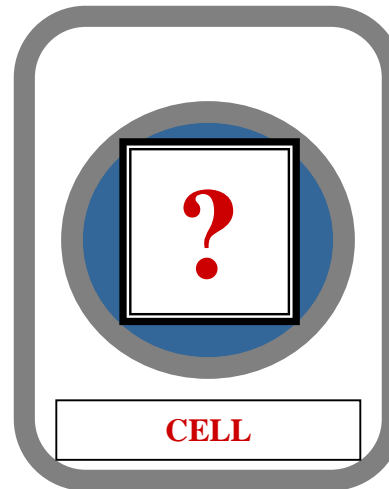
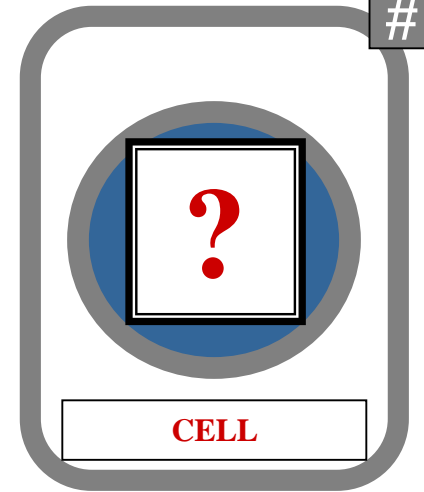
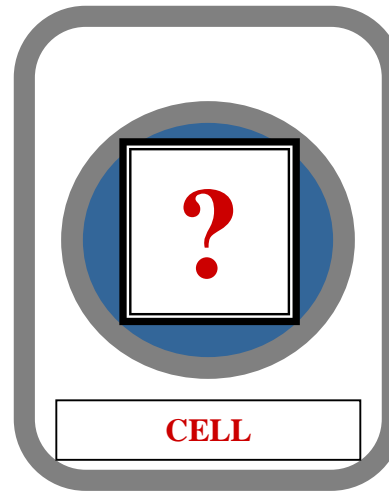
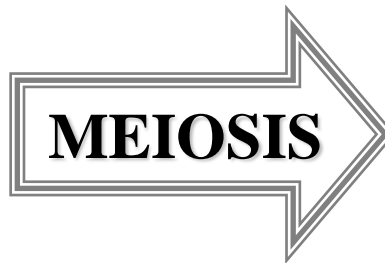


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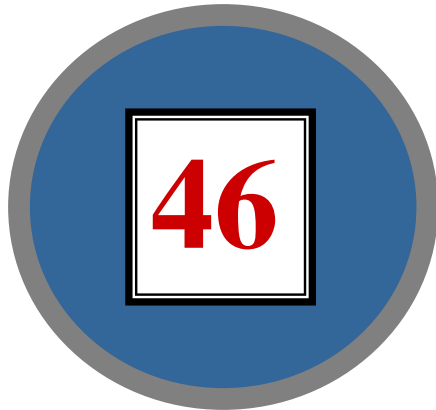
GAMETOCYTE

OOCYTE





FEMALE ANIMAL

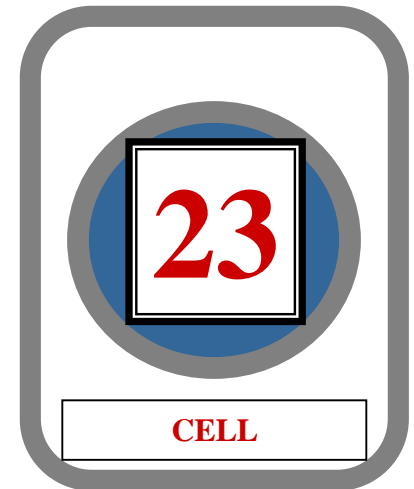
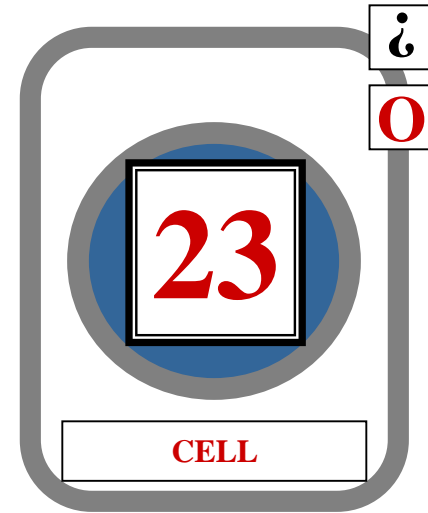
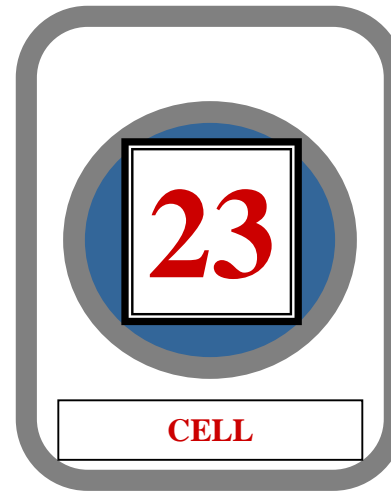
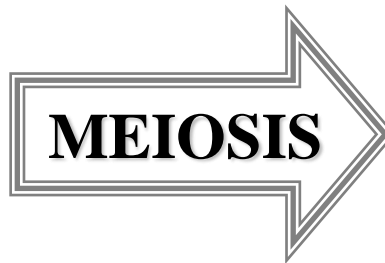


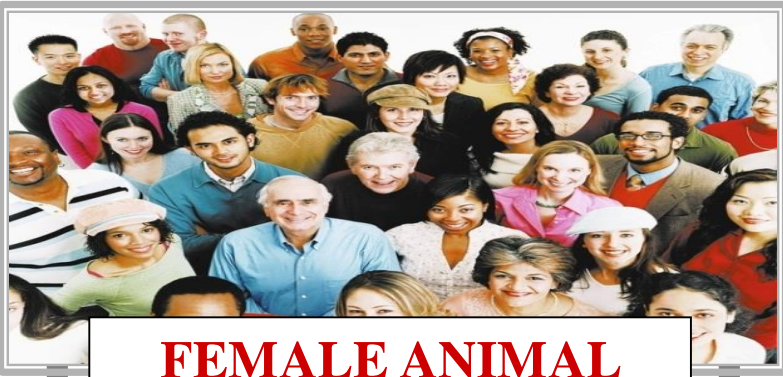
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GERM CELL

GAMETOCYTE

OOCYTE





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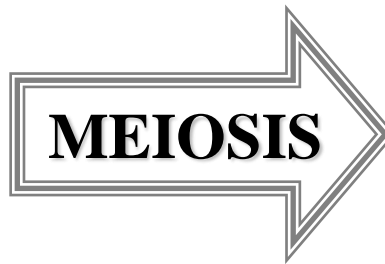


1/2 REDUCTION

GERM CELL

GAMETOCYTE

OOCYTE



QUESTION

WHAT IS THE MEIOSIS
OUTCOME IN THE
ANIMAL LIFE CYCLE?

QUESTION

ANSWER



ANIMAL GAMETES

ANSWER

ANIMAL GAMETES

GAMETE



GAMETE

**ANIMAL MEIOSIS
OUTCOME**

GAMETE



MALE ANIMAL



1/2 REDUCTION

GERM CELL

GAMETOCYTE

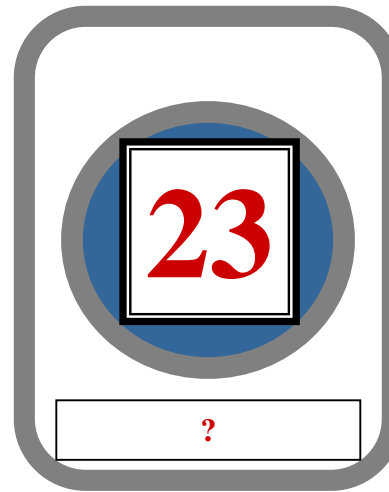
SPERMATOCYTE



MEIOSIS

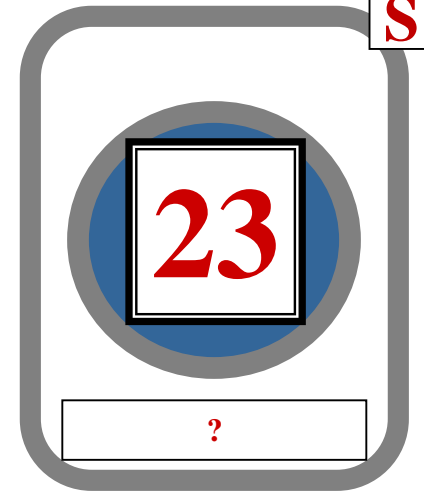


OUTCOME



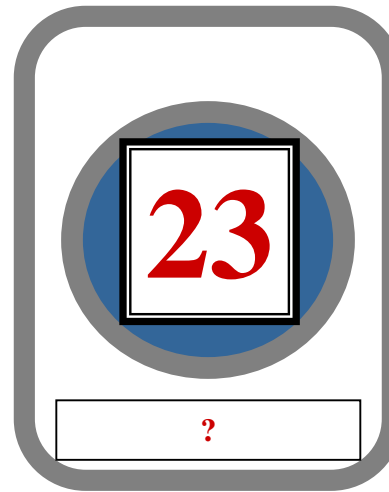
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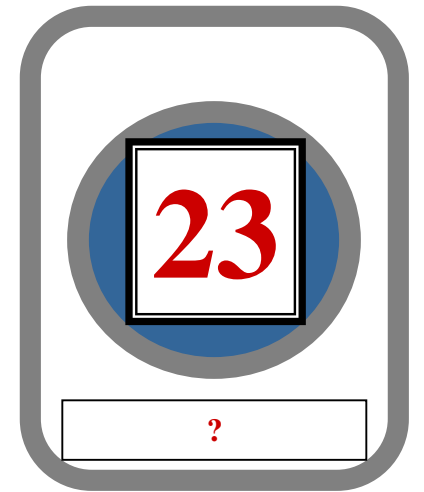
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MALE ANIMAL

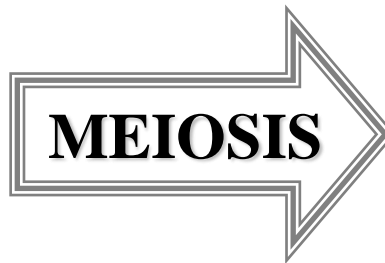


1/2 REDUCTION

GERM CELL

GAMETOCYTE

SPERMATOCYTE



MEIOSIS



OUTCOME



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SPERM



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SPERM



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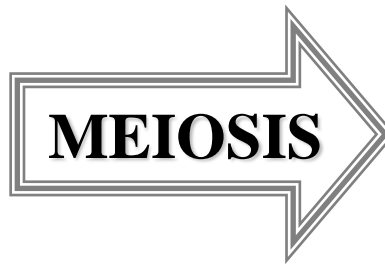


1/2 REDUCTION

GERM CELL

GAMETOCYTE

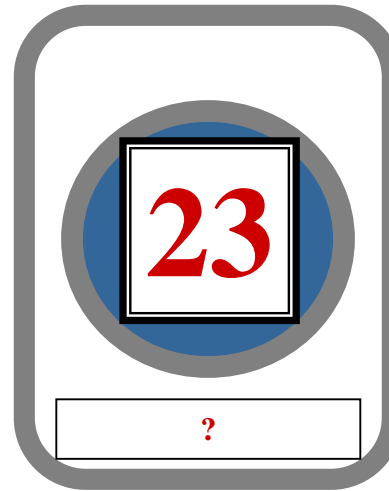
OOCYTE



MEIOSIS

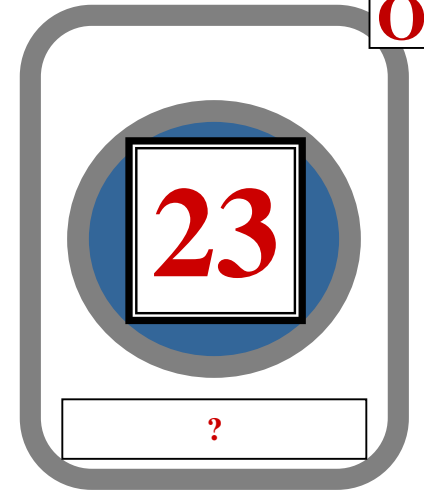


OUTCOME



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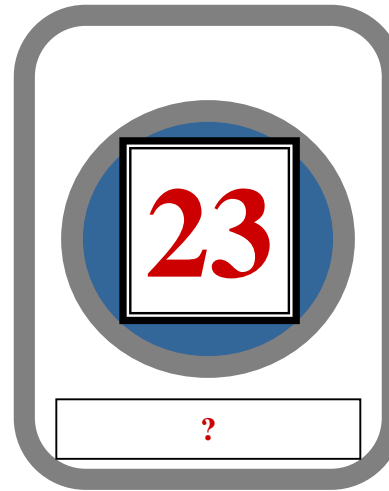
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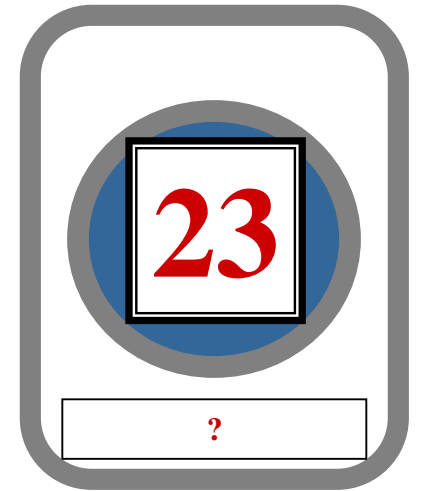
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FEMALE ANIMAL

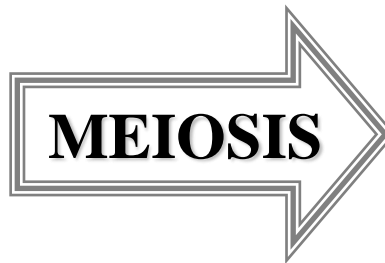


1/2 REDUCTION

GERM CELL

GAMETOCYTE

OOCYTE



MEIOSIS



OUTCOME



23

OVUM



23

OVUM



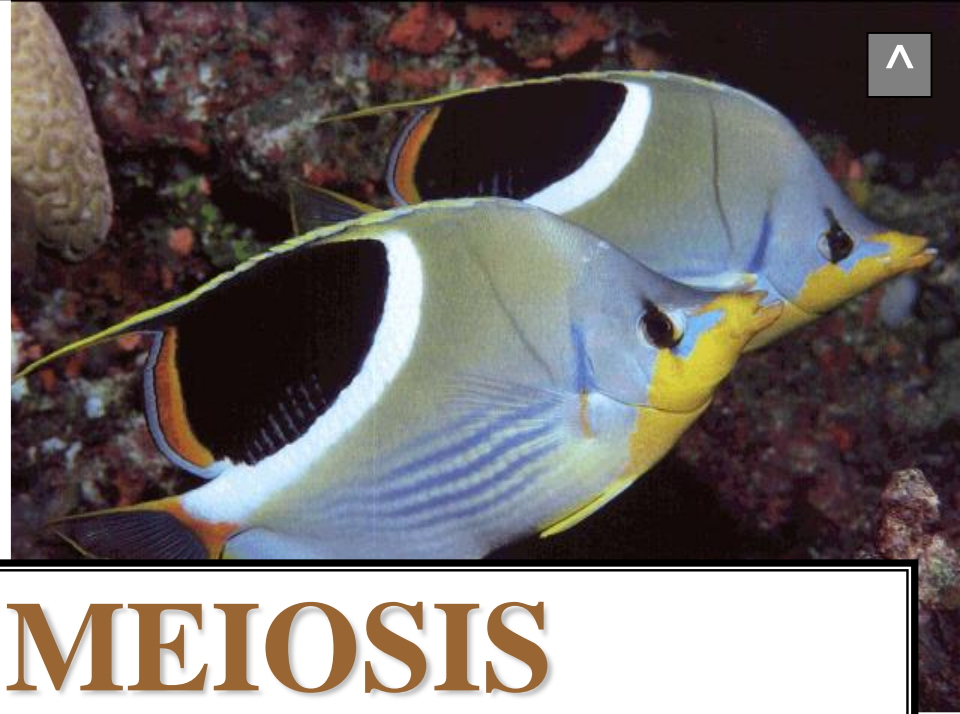
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OVUM



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OVUM



ANIMAL MEIOSIS OUTCOME: GAMETES



PLANT GERM CELLS

SPOROCYTE



SPORO CYTE

PLANT GERM CELL

SPORO CYTE



SPORO CYTE

PLANT GERM CELL

UNDERGOES MEIOSIS

SPORO CYTE



GC

PLANT LIFE CYCLE





S

PLANT GERM CELL





SPOROCYTE





UNDERGOES MEIOSIS





PLANT SPORO CYTE TYPES

MALE PLANT SPORO CYTE



MICROSPORO CYTE



MICROSPOROCTE

**MALE PLANT
SPOROCTE**

MICROSPOROCTE



MALE PLANT

24

MICROSPOROCYTE



MALE PLANT

24

SPOROCYTE

MICROSPOROCYTE



MALE PLANT

24

GERM CELL

SPOROCYTE

MICROSPOROCYTE



MALE PLANT

24

MEIOSIS

1/2 REDUCTION

GERM CELL

SPOROCYTE

MICROSPOROCYTE



MALE PLANT

24

1/2 REDUCTION

GERM CELL

SPOROCYTE

MICROSPOROCYTE

MEIOSIS

?

CELL

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CELL



MALE PLANT

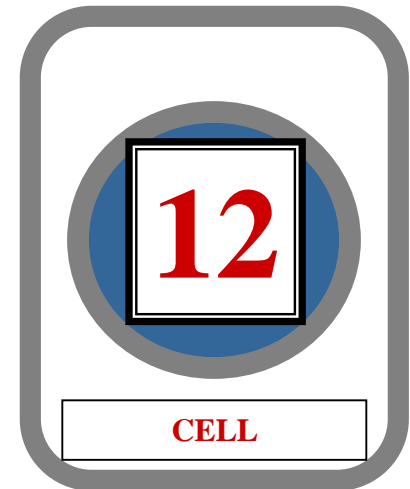
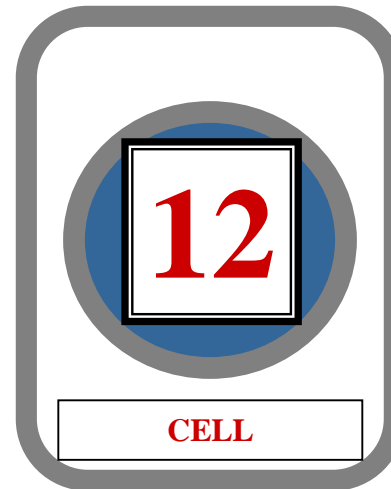
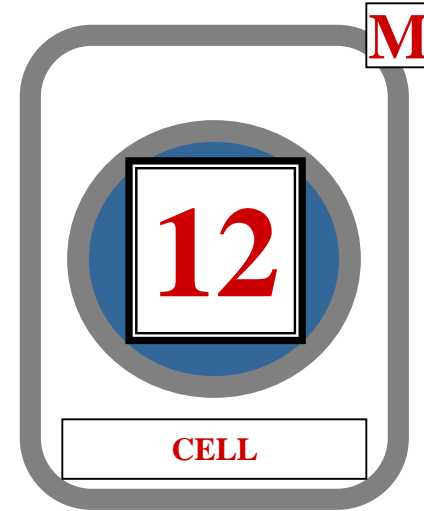
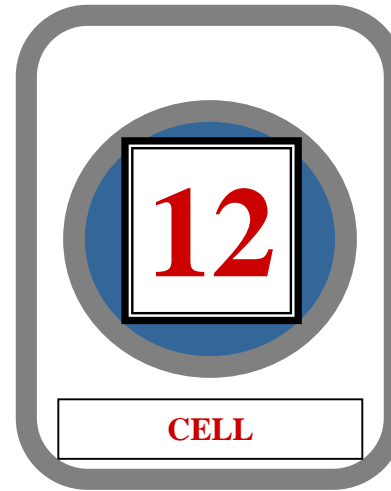
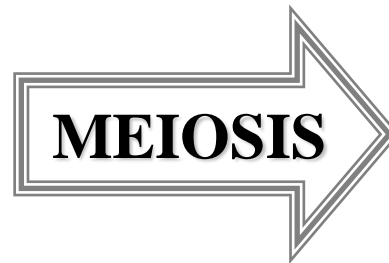


1/2 REDUCTION

GERM CELL

SPOROCYTE

MICROSPOROCYTE





MALE PLANT

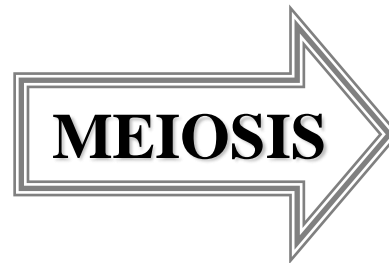


1/2 REDUCTION

GERM CELL

SPOROCYTE

MICROSPOROCYTE



MICROSPORE



MICROSPORE



MICROSPORE



MICROSPORE

FEMALE PLANT SPORO CYTE



MEGASPOROCYTE



MEGASPOROCYTE

**FEMALE PLANT
SPOROCYTE**

MEGASPOROCYTE



FEMALE PLANT

24

MEGASPOROCYTE



FEMALE PLANT

24

SPOROCYTE

MEGASPOROCYTE



FEMALE PLANT

24

GERM CELL

SPOROCYTE

MEGASPOROCYTE



FEMALE PLANT

24

MEIOSIS

1/2 REDUCTION

GERM CELL

SPOROCYTE

MEGASPOROCYTE



FEMALE PLANT

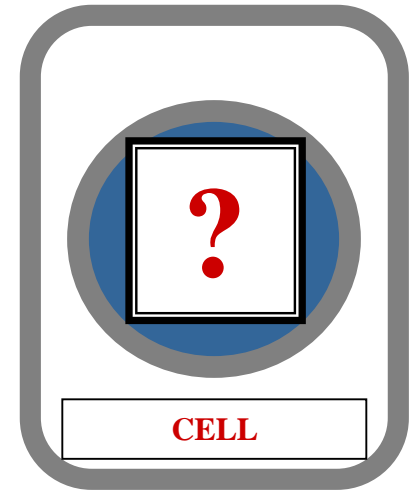
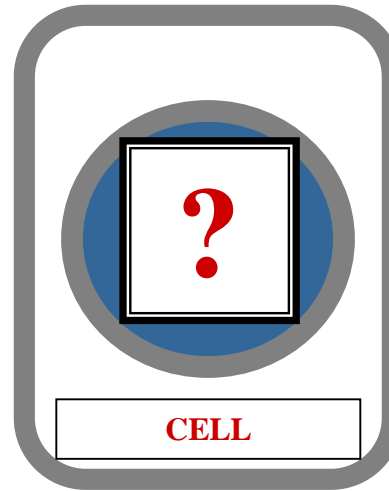
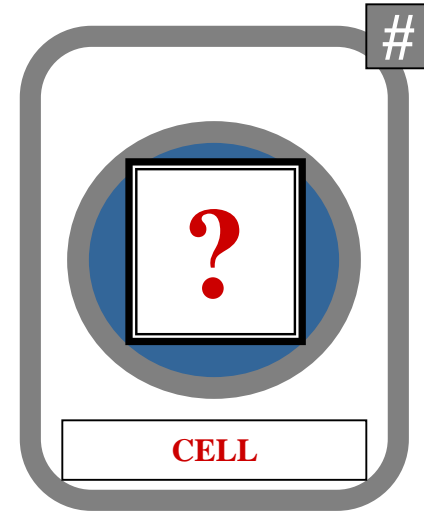
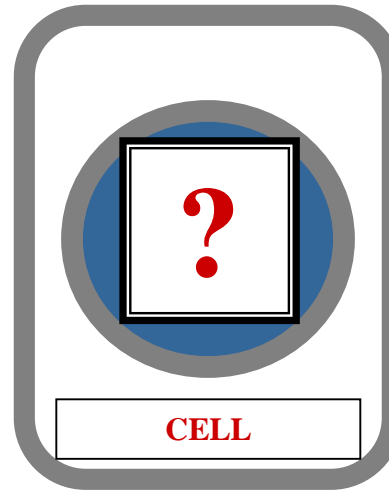
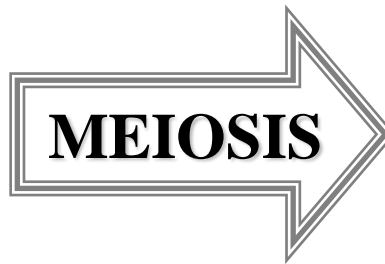
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1/2 REDUCTION

GERM CELL

SPOROCYTE

MEGASPOROCYTE





FEMALE PLANT

24

1/2 REDUCTION

GERM CELL

SPOROCYTE

MEGASPOROCYTE

MEIOSIS

12

CELL

12

CELL

M

12

CELL

12

CELL



FEMALE PLANT

24

1/2 REDUCTION

GERM CELL

SPOROCYTE

MEGASPOROCYTE

MEIOSIS

12

MEGASPORE

12

MEGASPORE

?

12

MEGASPORE

12

MEGASPORE

QUESTION

WHAT IS THE MEIOSIS
OUTCOME IN THE
PLANT LIFE CYCLE?

QUESTION

ANSWER



PLANT SPORES

ANSWER

PLANT SPORES

SPORE



SPORE

**PLANT MEIOSIS
OUTCOME**

SPORE



MALE PLANT

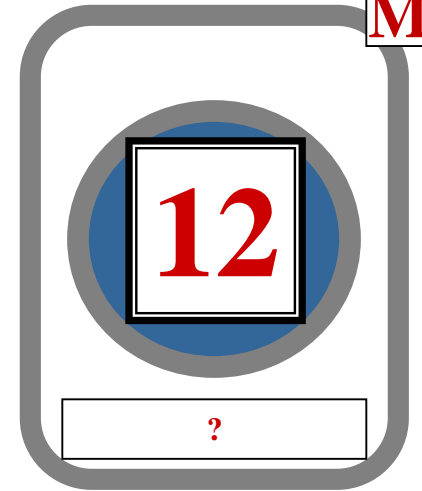
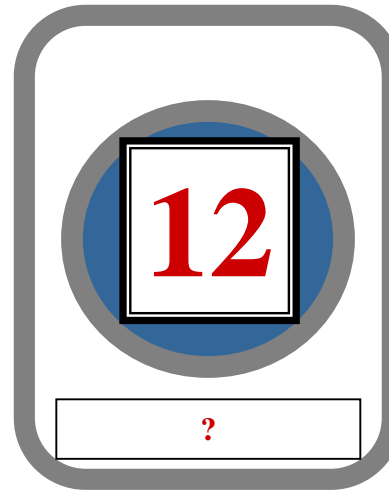


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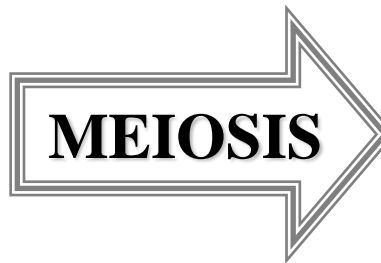
GERM CELL

SPOROCYTE

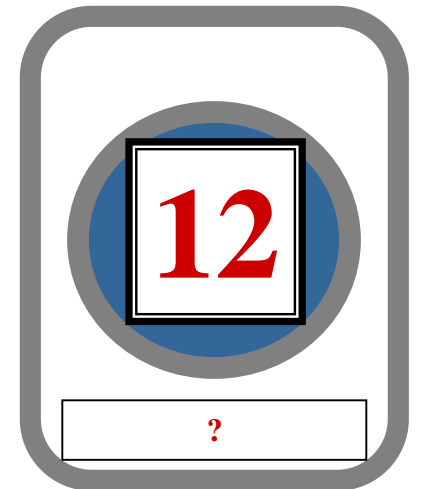
MICROSPOROCYTE



M



OUTCOME





MALE PLANT

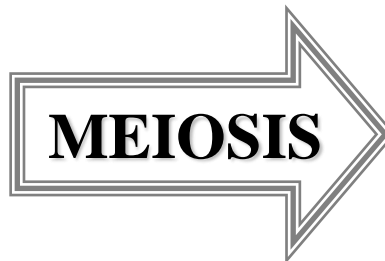


1/2 REDUCTION

GERM CELL

SPOROCYTE

MICROSPOROCYTE



OUTCOME





FEMALE PLANT



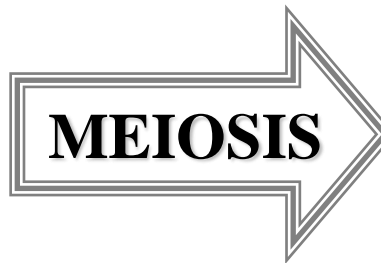
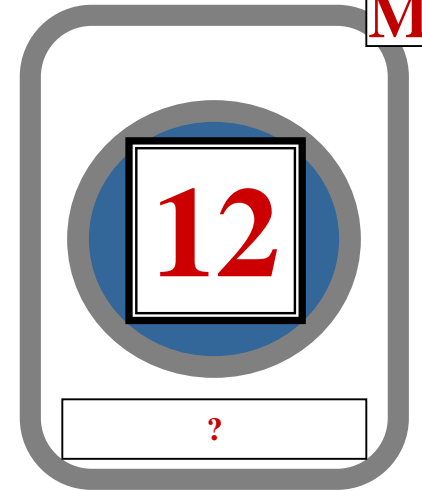
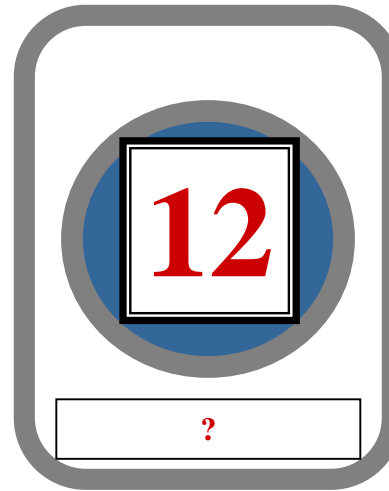
1/2 REDUCTION

GERM CELL

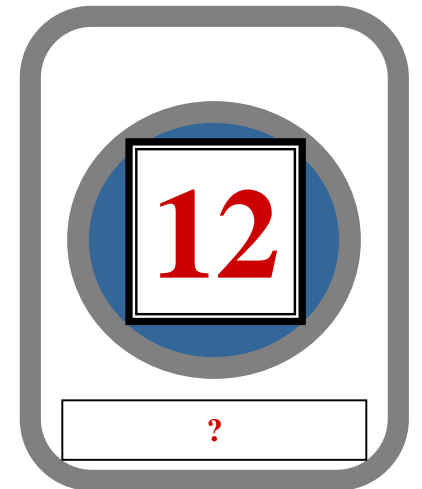
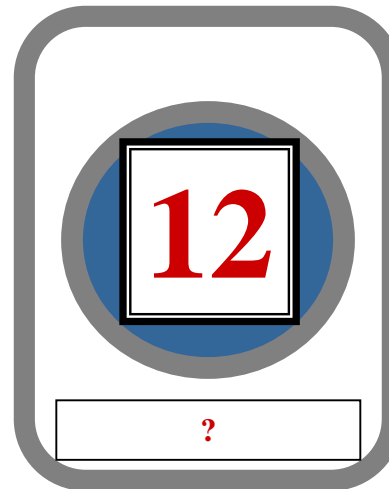
SPOROCYTE

MEGASPOROCYTE

M



OUTCOME





FEMALE PLANT

24

1/2 REDUCTION

GERM CELL

SPOROCYTE

MEGASPOROCYTE

12

MEGASPORE

12

MEGASPORE

MEIOSIS

OUTCOME

12

MEGASPORE

12

MEGASPORE





PLANT MEIOSIS OUTCOME: SPORES





MEIOSIS OUTCOME SUMMARY



QUESTION

WHAT IS THE MEIOSIS
OUTCOME IN ANIMALS?

QUESTION



MEIOSIS: OUTCOME

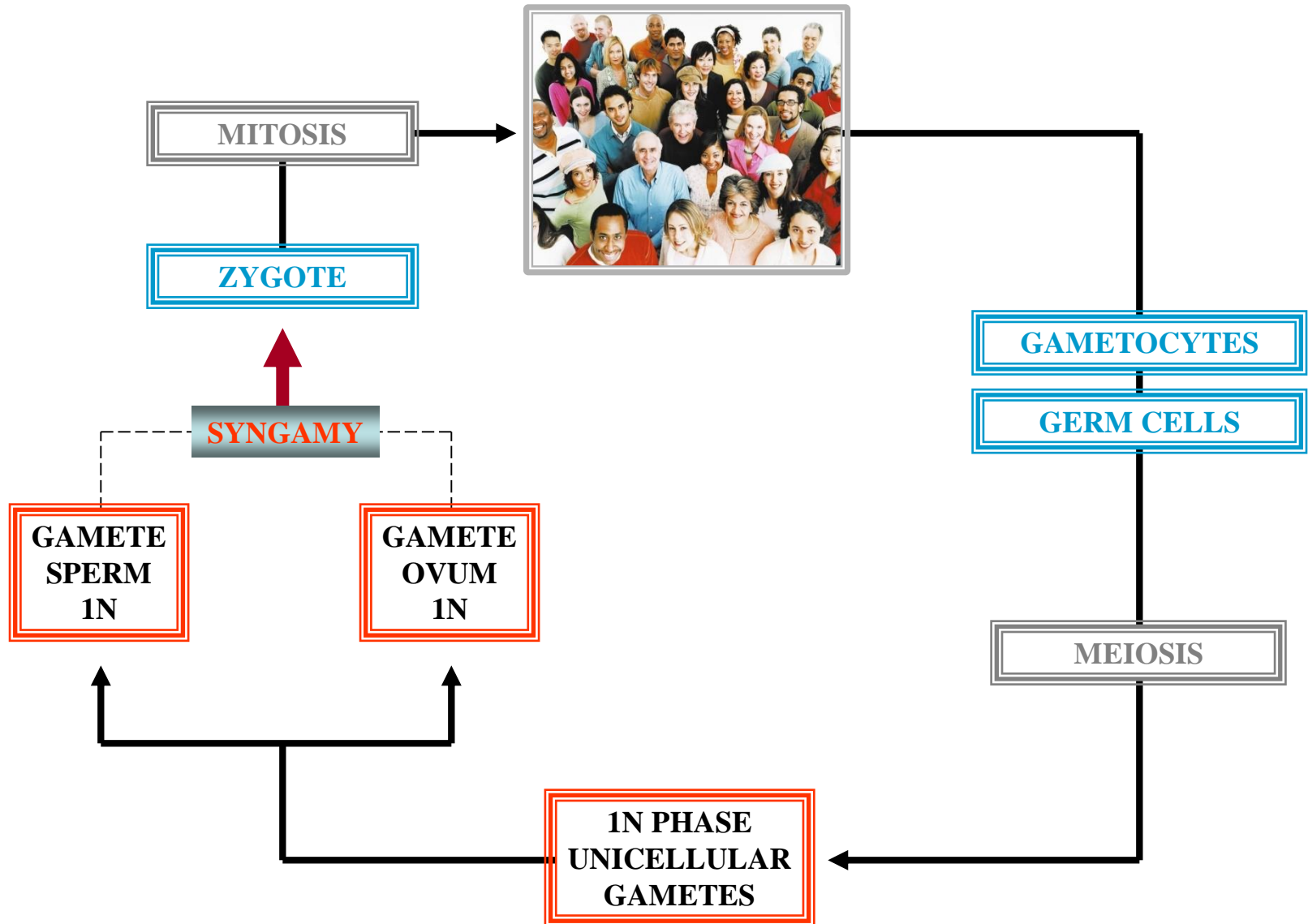




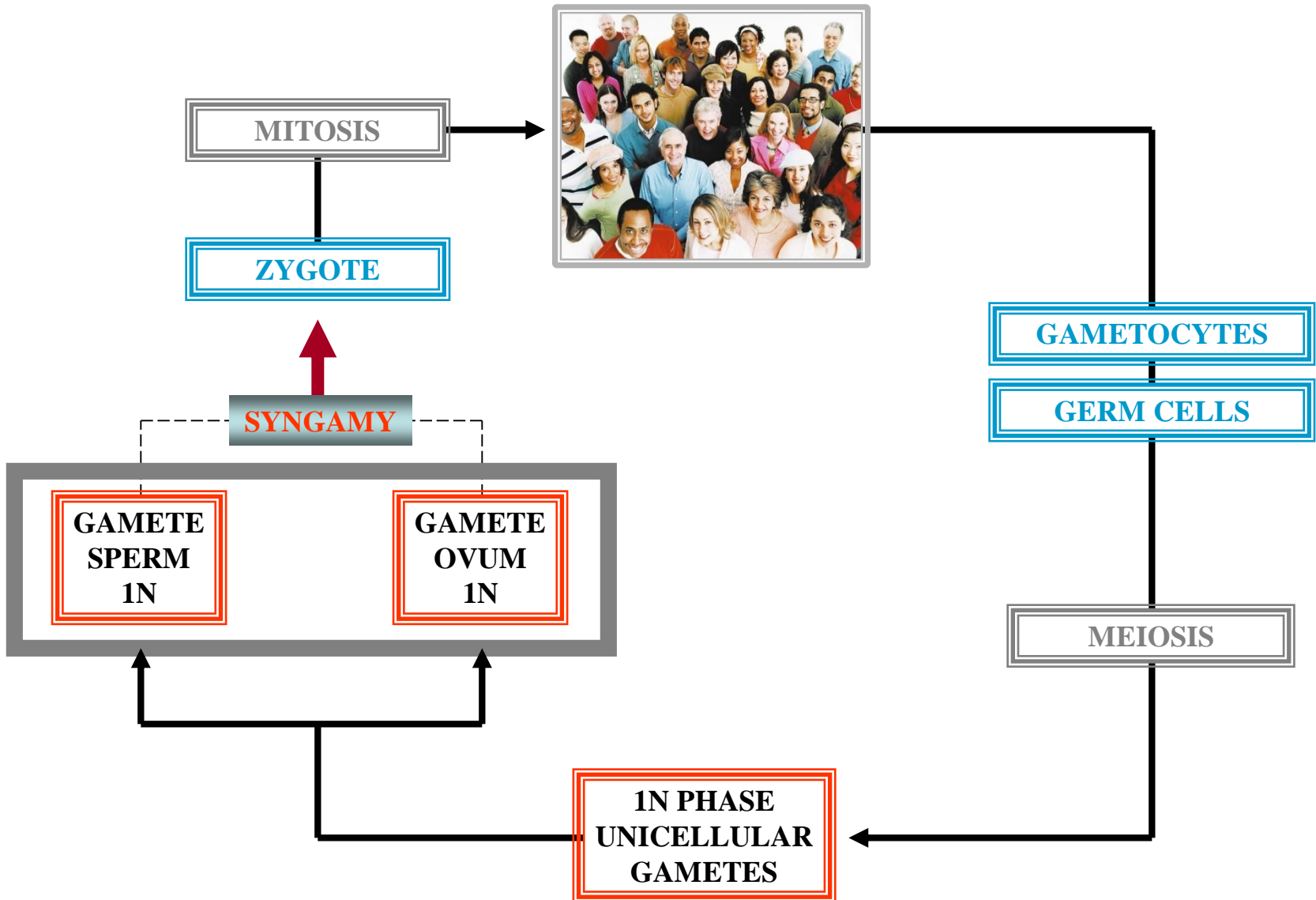
GAMETES



ANIMAL LIFE CYCLE



ANIMAL LIFE CYCLE

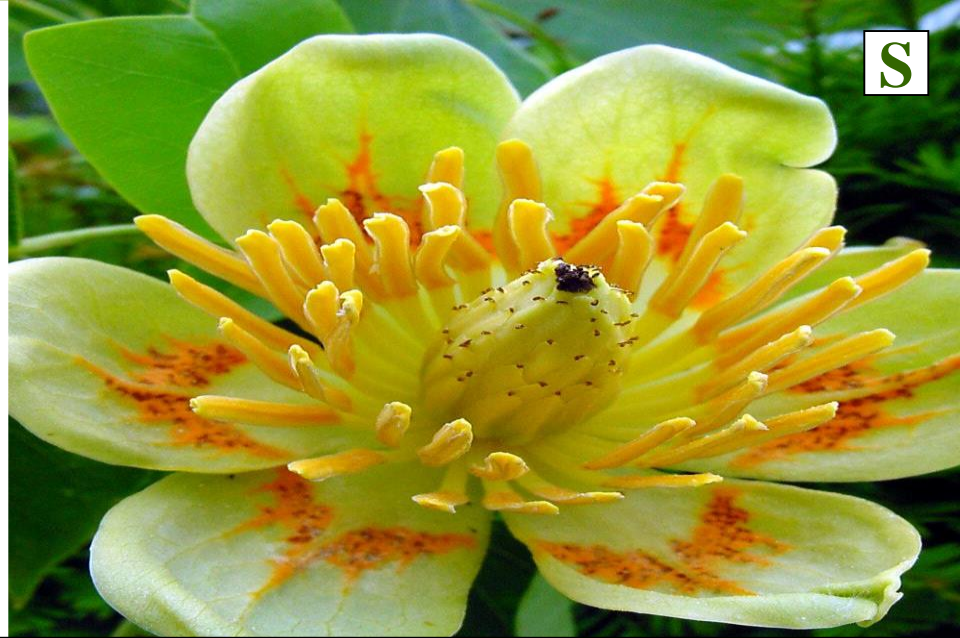




QUESTION

WHAT IS THE MEIOSIS
OUTCOME IN PLANTS?

QUESTION



MEIOSIS: OUTCOME

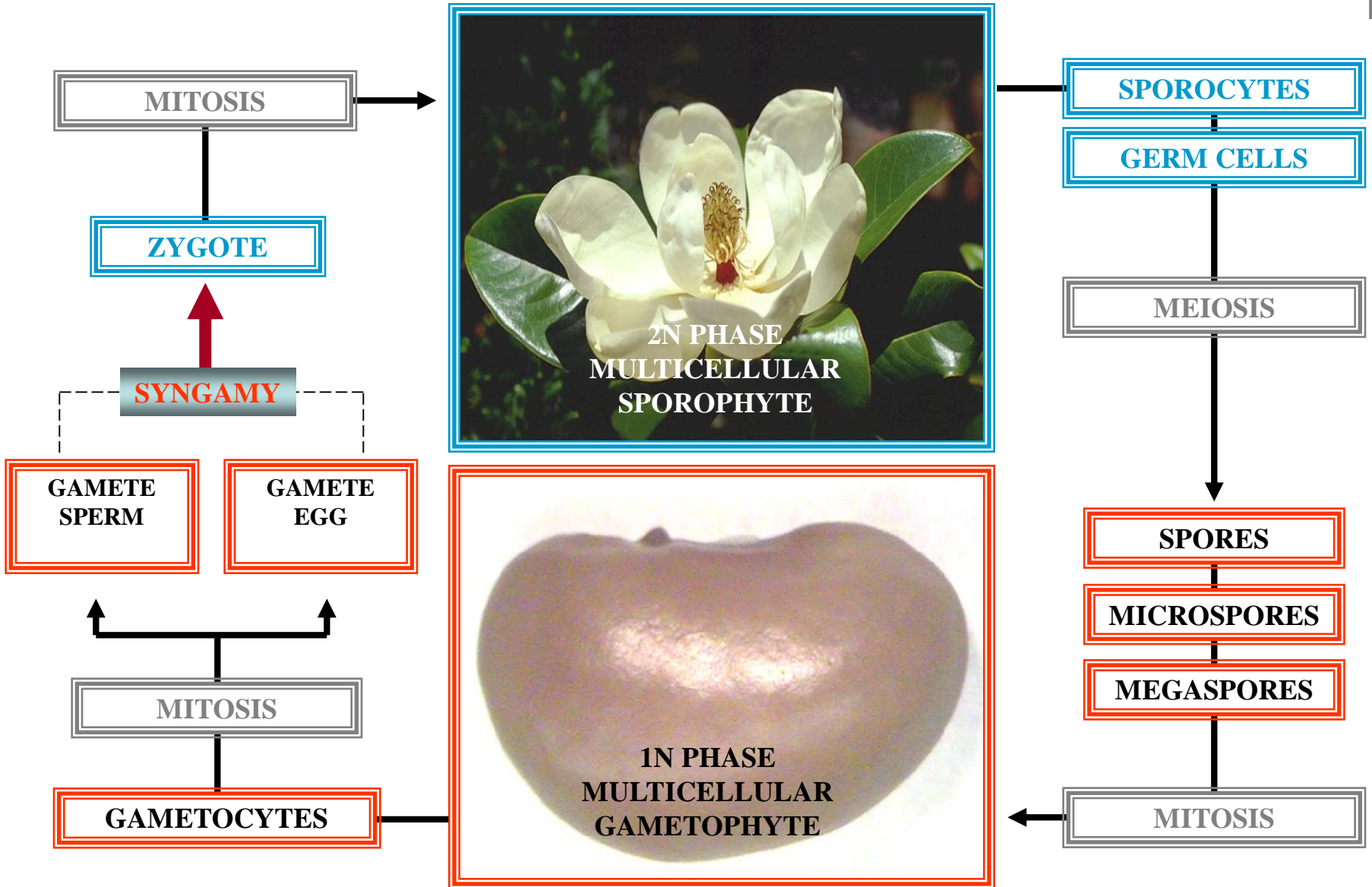




SPORES

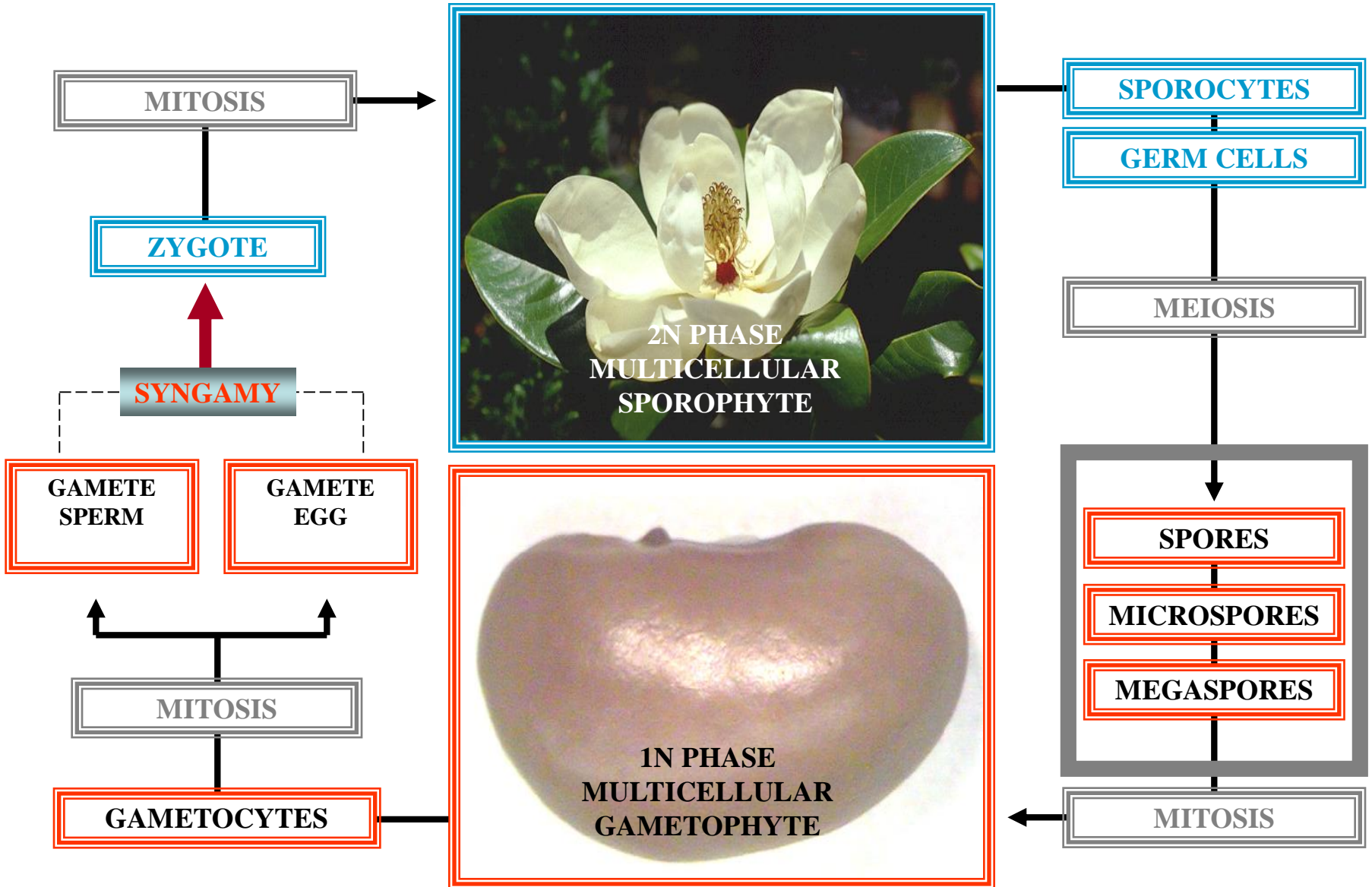


PLANT LIFE CYCLE





PLANT LIFE CYCLE



PLOIDY LEVEL