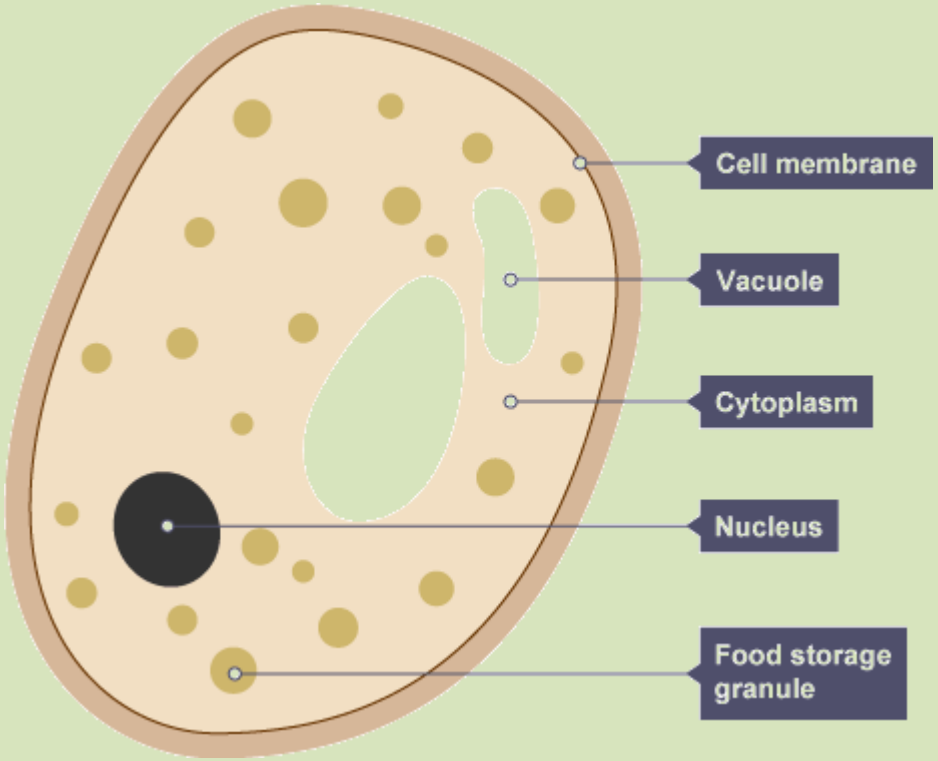
REVISION

National 5 Cell Biology

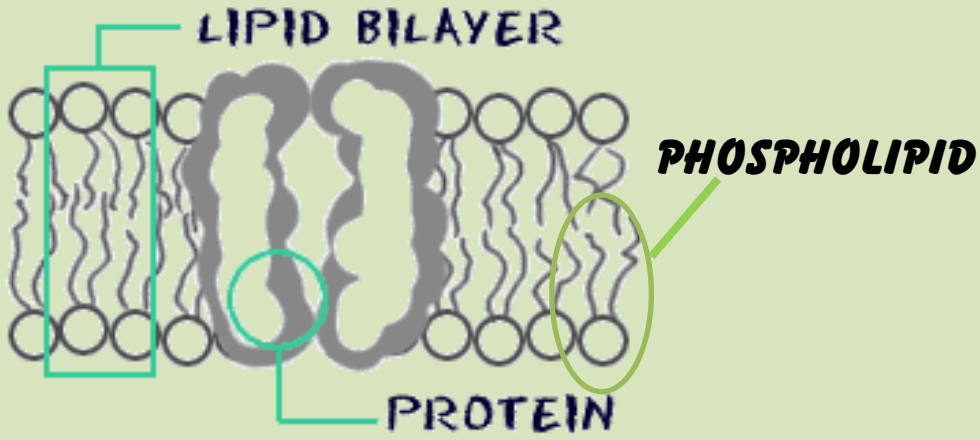
CELL STRUCTURE

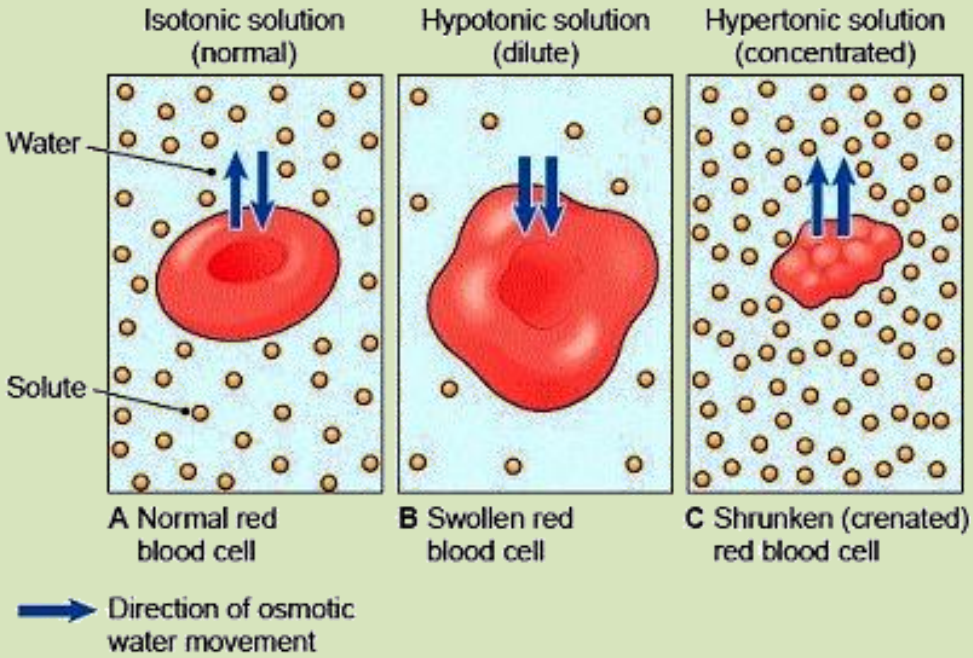


HINT!

LOOK VERY CAREFULLY AT WHERE THE LINE POINTS, ESPECIALLY REGARDING THE CELL WALL AND CELL MEMBRANE.

CELL MEMBRANES





HINT!

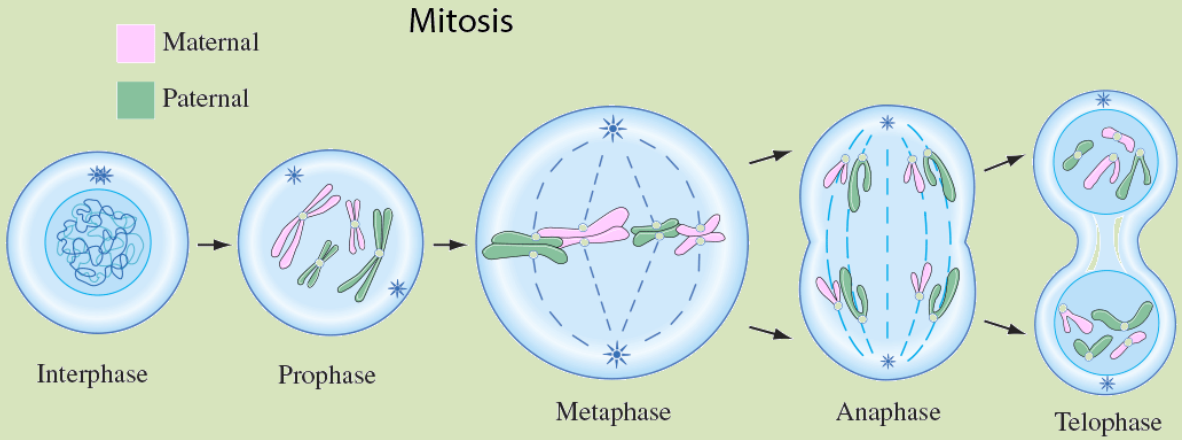
KEY TERMS:

DIFFUSION
OSMOSIS
ACTIVE TRANSPORT
CONCENTRATION GRADIENTS

MITOSIS

CHROMOSOMES LINE UP ON THE EQUATOR

CHROMATIDS SEPARATE AND MOVE TOWARDS THE POLES



NUCLEAR MEMBRANE REFORMS

CHROMOSOMES SHORTEN AND THICKEN

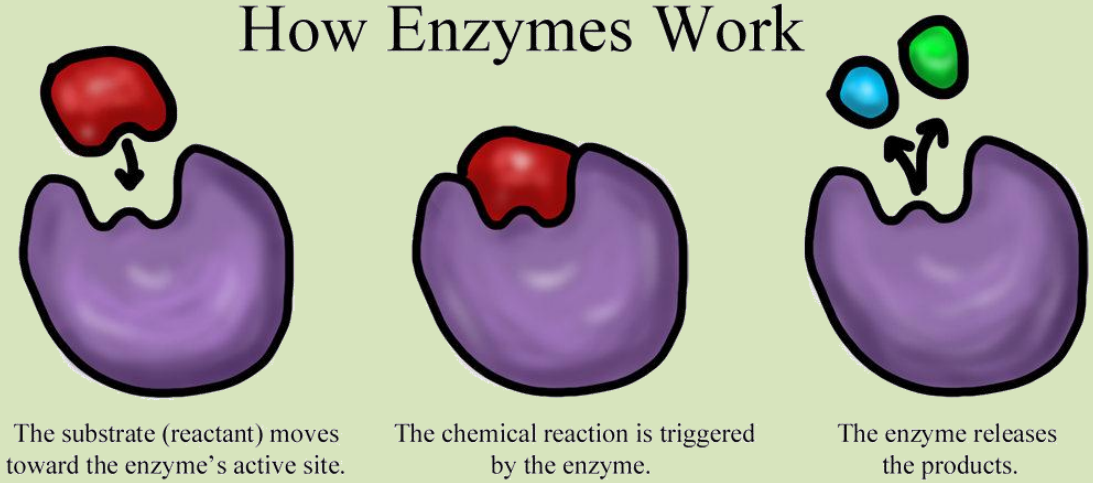
HINT!

YOU NEED TO BE ABLE TO DESCRIBE EACH STAGE

YOU ALSO NEED TO KNOW THE TERMS HAPLOID AND DIPLOID

CAN YOU DESCRIBE ASEPTIC TECHNIQUES?

ENZYMES AND PROTEINS



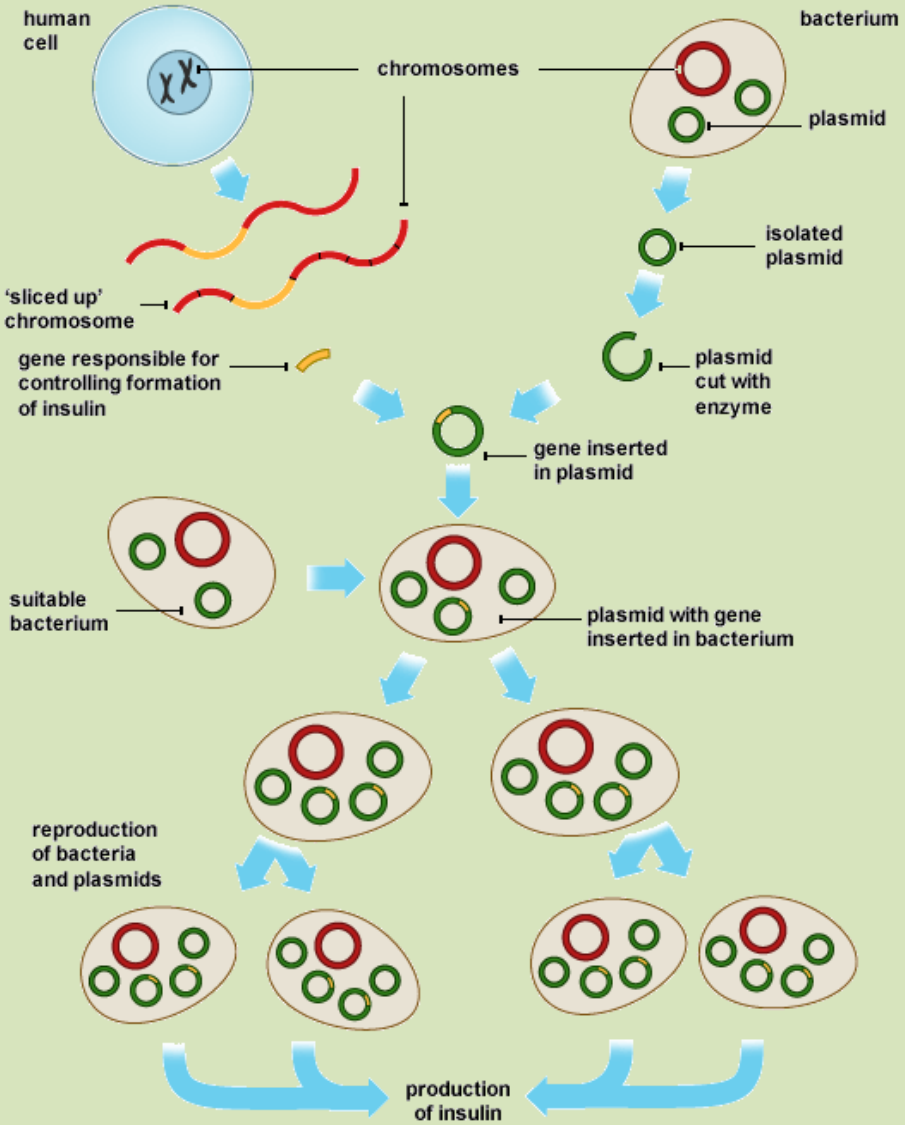
HINT!

KEY WORDS:
ANABOLIC
CATABOLIC
OPTIMUM PH
OPTIMUM TEMPERATURE

ENZYMES ARE PROTEINS

OTHER PROTEINS CAN BE MEMBRANE PROTEINS OR HORMONES

GENETIC ENGINEERING

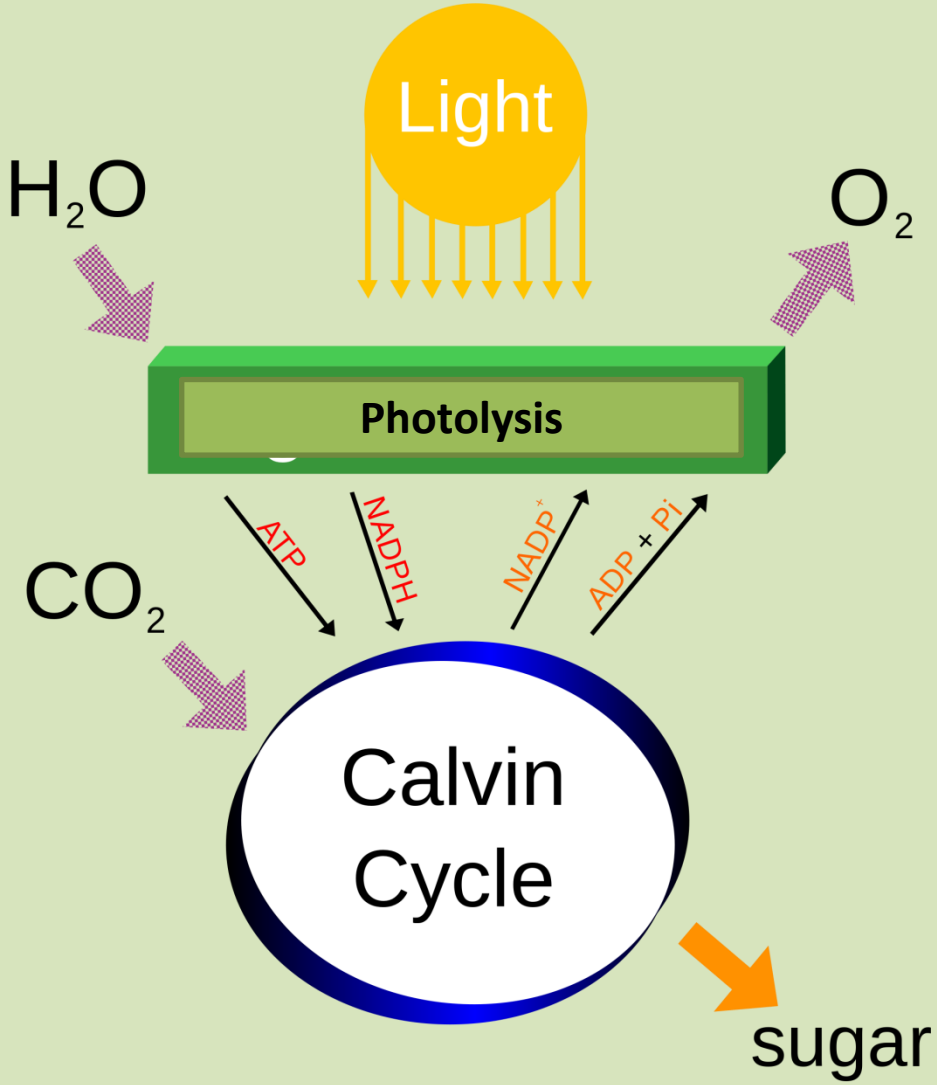


HINT!

YOU NEED TO BE ABLE TO DESCRIBE WHAT IS HAPPENING AT EACH STAGE.

KEY WORDS:
GENE
PLASMID
BACTERIUM
ENZYME

PHOTOSYNTHESIS



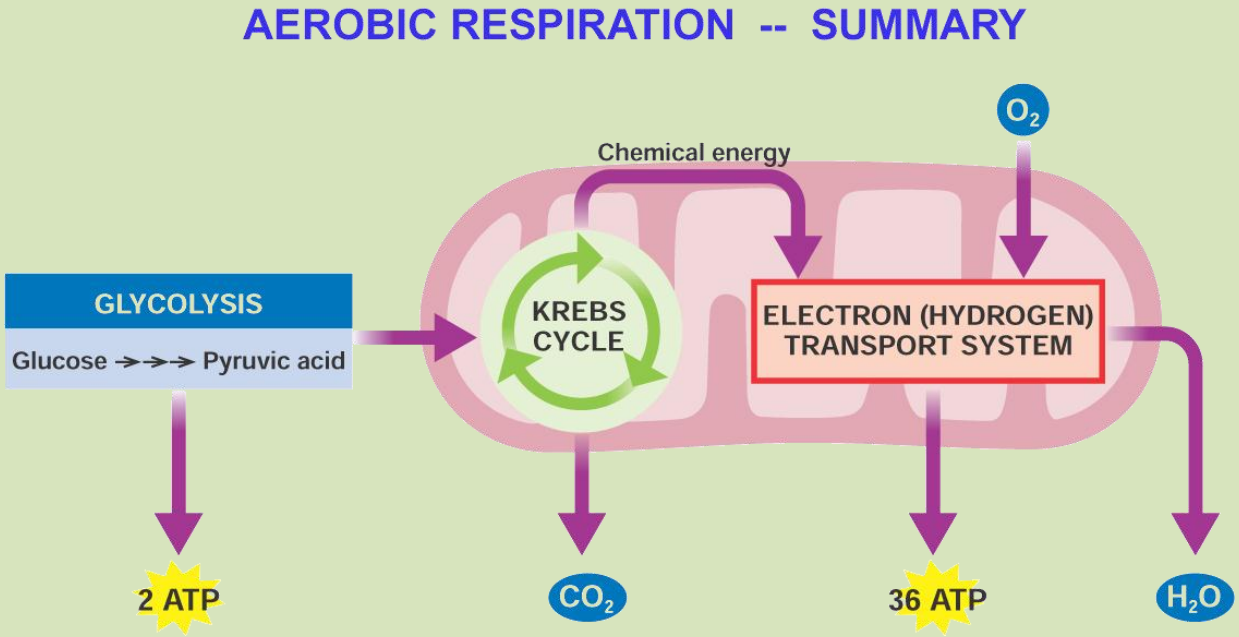
HINT!

YOU NEED TO KNOW THE MAIN STAGES:

PHOTOLYSIS (SHOWN HERE AS THE LIGHT REACTIONS) - THIS SPLITS WATER.

CALVIN CYCLE - THIS FIXES CARBON DIOXIDE (CONVERTS IT TO CARBOHYDRATE)

RESPIRATION



HINT!

KNOW THE DIFFERENCE BETWEEN AEROBIC AND AEROBIC RESPIRATION.

ANAEROBIC RESPIRATION IN YEAST AND PLANTS PRODUCES ETHANOL AND CO2 AND IS KNOWN AS FERMENTATION.

ANAEROBIC RESPIRATION IN ANIMAL CELLS PRODUCES LACTIC ACID AND LEADS TO AN OXYGEN DEBT.