

CELLULAR RESPIRATION REVIEW

Four Corners

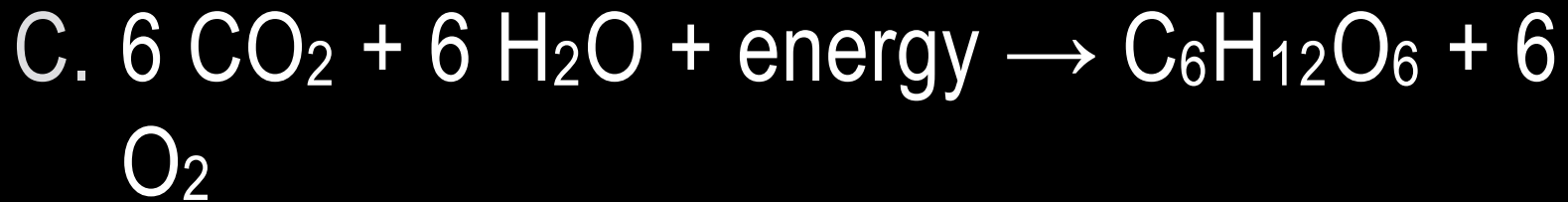
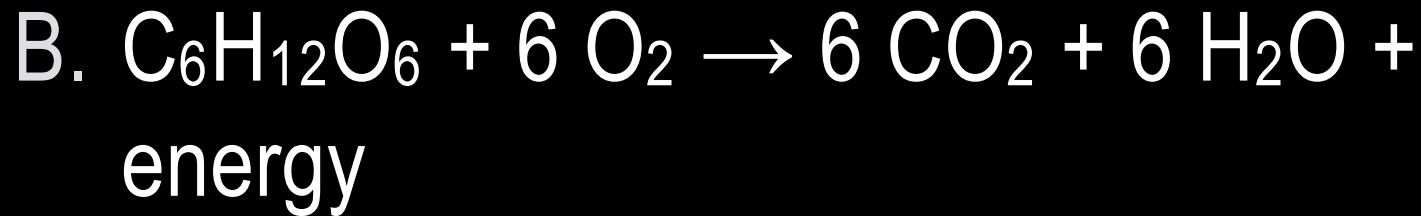
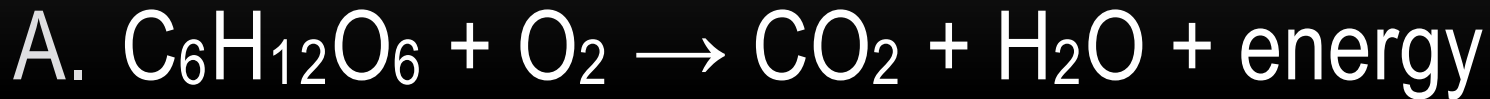
RULES OF THE GAME!!!

- Look at your cards DO NOT reveal your role to your classmates
- I will ask you a question, if you think the correct answer is *A* stand by the *A* sign. If you think the correct answer is *B*, *C*, or *D* go stand by that sign

IF YOUR CARD SAYS FIBBER

- If you hold a Player card go to the corner that you think has the right answer
 - If you hold a Fibber card you are free to go to any corner
 - Don't follow a group mentality—go to the answer YOU think is correct
-

WHAT IS THE FORMULA FOR CELLULAR RESPIRATION?



WHERE DOES GLYCOLYSIS TAKE PLACE?

A. Cytoplasm

B. Matrix

C. Inter-membrane space

D. Cristae

WHAT FORM OF FERMENTATION IS USED BY YEAST TO MAKE THINGS LIKE BREAD?

A. Lactic Acid

B. Krebs

C. Glycolysis

D. Alcoholic

WHERE DOES FERMENTATION TAKE PLACE?

A. Matrix

B. Cytoplasm

C. Inter-membrane space

D. Cristae

WHICH HIGH ENERGY ELECTRON CARRIER
PRODUCES THE MOST ATP IN THE ETC?

A. NADPH

B. FADH_2

C. NADH

D. FAD

WHAT ARE THE TWO ELECTRON CARRIERS IN
CELLULAR RESPIRATION?

A. NADPH & ATP

B. NAD^+ & FAD

C. NADH & NAD^+

D. FAD & FADH_2

WHY DO WE NEED FERMENTATION?

- A. Our bodies use the alcohol and lactic acid as energy
- B. It produces the most ATP
- C. It is used for long-term energy
- D. It regenerates NAD^+ molecules

WHAT HAPPENS TO CO₂ IN THE KREBS CYCLE?

A. It broken down to make ATP

B. It stays in the matrix

C. It is released into the atmosphere

D. The mitochondria uses if for
energy

GLYCOLYSIS REQUIRES OXYGEN.

A. True

B. False

WHAT DOES A cALORIE AND A CALORIE HAVE IN COMMON?

- A. They are both used to measure heat energy
- B. They are the same thing
- C. They are what we see on food labels telling us what is in our food
- D. 1 calorie = 1000 Calories

WHERE DO PROKARYOTES HAVE THEIR
ELECTRON TRANSPORT CHAIN?

A. In the mitochondria

B. In the cytoplasm

C. In the cell membrane

D. Attached to their nucleus

FERMENTATION IS AN ANAEROBIC PROCESS.

A. True

B. False

WHERE DOES THE KREBS CYCLE TAKE PLACE?

A. In the cristae

B. In the inter-membrane space

C. In the matrix

D. In the Cytoplasm

WHAT IS THE FINAL ELECTRON ACCEPTOR AT THE
END OF THE ELECTRON TRANSPORT CHAIN?

A. NADH

B. O_2

C. NAD^+

D. H_2O

WHAT HAPPENS TO THE PYRUVIC ACID MADE IN GLYCOLYSIS IF THERE IS NO OXYGEN PRESENT?

A. It goes into fermentation

B. It enters the Krebs cycle

C. It enters the citric acid cycle

D. Nothing, it needs oxygen

WHICH IS THE CORRECT ORDER OF CELLULAR RESPIRATION?

- A. Electron transport chain → glycolysis → Krebs cycle
- B. Glycolysis → Electron transport chain → Krebs cycle
- C. Krebs cycle → Electron transport chain → glycolysis
- D. Glycolysis → Krebs cycle → Electron transport chain

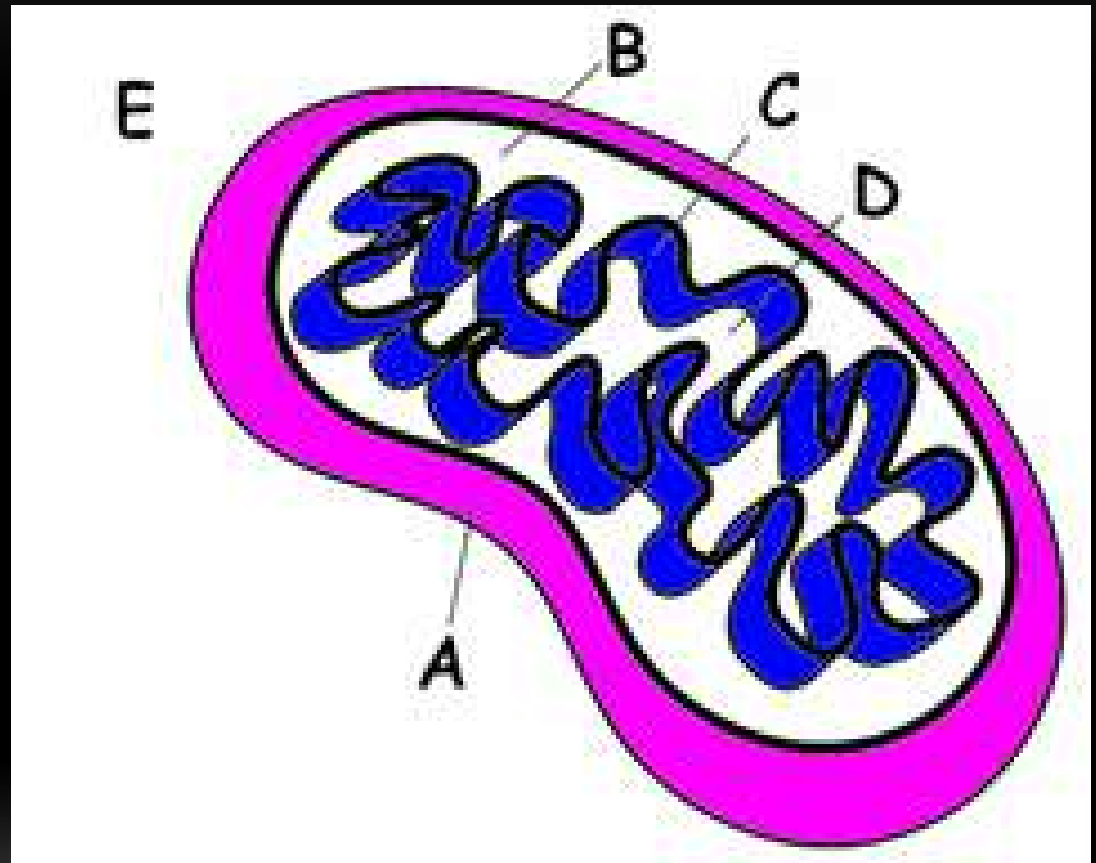
WHAT LETTER REPRESENTS THE PLACE WHERE H^+ IONS BUILD UP?

A. A

B. B

C. C

D. D



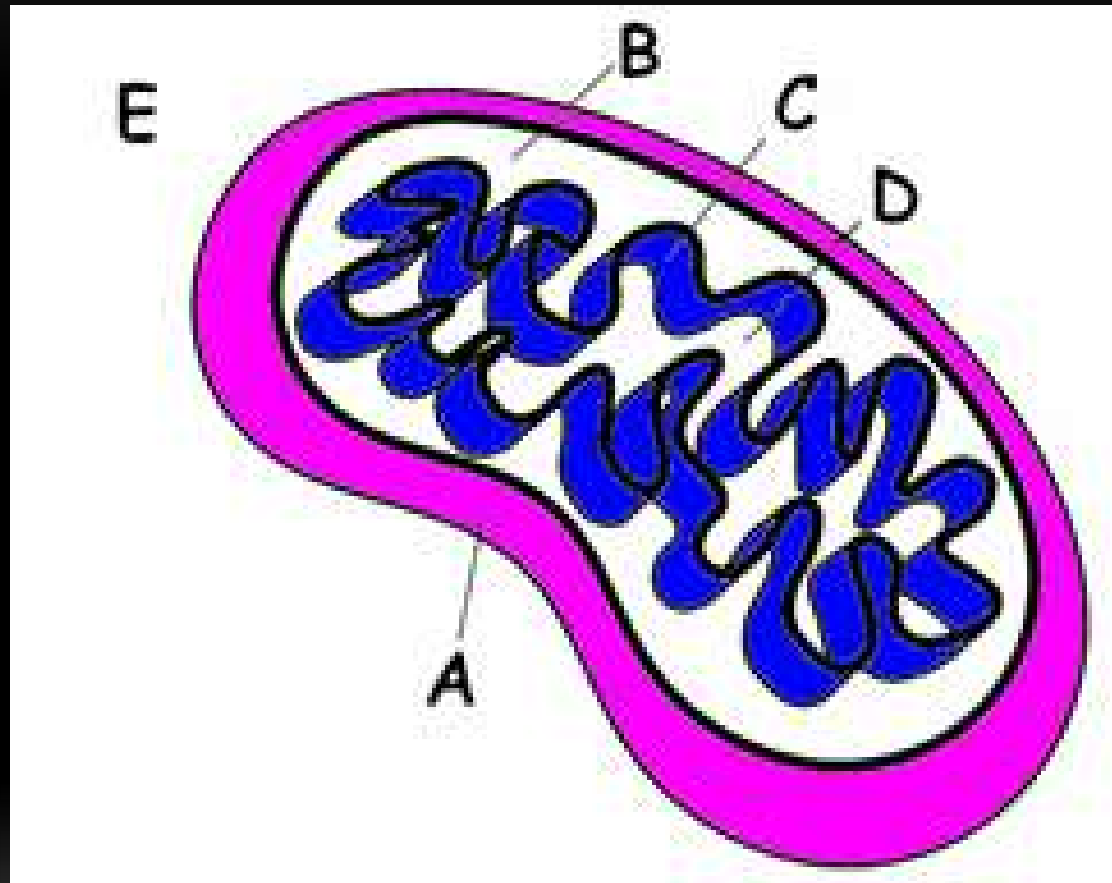
WHAT LETTER REPRESENTS THE CRISTAE?

A.A

B.B

C.C

D.D



HOW MANY CARBON DIOXIDE MOLECULES ARE
PRODUCED FROM 1 GLUCOSE

A. 16

B. 32

C. 3

D. 6

IF YOU NEED QUICK ENERGY YOU WILL USE....

A. Lactic Acid Fermentation

B. Alcoholic Fermentation

C. Electron Transport

D. Cellular Respiration

WHAT IS THE FIRST STEP IN CELLULAR RESPIRATION?

A. Fermentation

B. Krebs Cycle

C. Glycolysis

D. Electron Transport Chain

WHAT STAGE OF CELLULAR RESPIRATION
PRODUCES THE MOST ATP?

A. Electron Transport Chain

B. Glycolysis

C. Fermentation

D. Krebs Cycle

WHEN EXERCISING FOR LONG PERIODS OF TIME
YOUR BODY WILL FIRST BURN _____ AND THEN

A. Fat, Sugar

B. Sugar, Glycogen

C. Glycoproteins, Alcohol

D. Glycogen, Fat

WHAT IS THE SUBSTANCE THAT IS FOUND IN MUSCLE CELLS THAT CAN ADD PHOSPHATES TO AN ADP

A. Creatine

B. Glycogen

C. Citric Acid

D. Oxygen

HOW MANY TOTAL ATP ARE PRODUCED BY 1
GLUCOSE IN CELLULAR RESPIRATION?

A. 16

B. 32

C. 6

D. 36

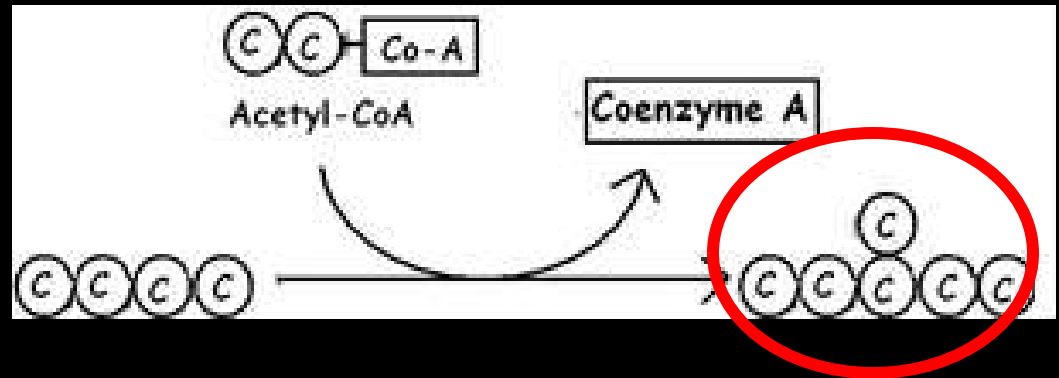
WHAT IS THE NAME OF THE 6 CARBON MOLECULE FORMED WHEN ACETYL-COA ITS 2 CARBONS TO A 4 CARBON MOLECULE IN THE KREBS CYCLE?

A. Pyruvic Acid

B. Citric Acid

C. Glucose

D. ATP



WHAT IS THE THREE CARBON MOLECULE
PRODUCED WHEN GLUCOSE IS SPLIT IN HALF?

A. Citric Acid

B. Acetic Acid

C. Pyruvic Acid

D. Hydrochloric Acid