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Sunday

Week 28
Day 196 • 169
Date 15 • 07 • 2018
July 2018

	M	T	W	T	F	S	S
J	30	31					
U	2	3	4	5	6	7	8
L	9	10	11	12	13	14	15
18	16	17	18	19	20	21	22
	23	24	25	26	27	28	29

Respiration - Plant

Biological process whereby the energy stored in carbohydrates released in a step-wise, controlled manner.

↓
Energy released is coupled to the synthesis of ATP.

↓
ATP is essential for plant cell maintenance, growth and development.

Citric Acid Cycle / TCA cycle / Krebs cycle

The citric acid cycle, refers to the first molecule that forms during the cycle's rks - citrate.

↓
TCA cycle, for the 3 carboxyl groups on its first 2 intermediates.

↓
Krebs cycle, after its discoverer, Hans Krebs.

↓
Second stage of respiration.

↓
TCA cycle Occurs in the **mitochondrial matrix**. **Characteristics**.

↓
Catalyzed by a series of enzymes located in the mitochondrial matrix (exception is **succinate dehydrogenase**).

The greatest pleasure in life is doing what people say you cannot do.

M	T	W	T	F	S	S	A U G 18
1	2	3	4	5			
6	7	8	9	10	11	12	
13	14	15	16	17	18	19	
20	21	22	23	24	25	26	
27	28	29	30	31			

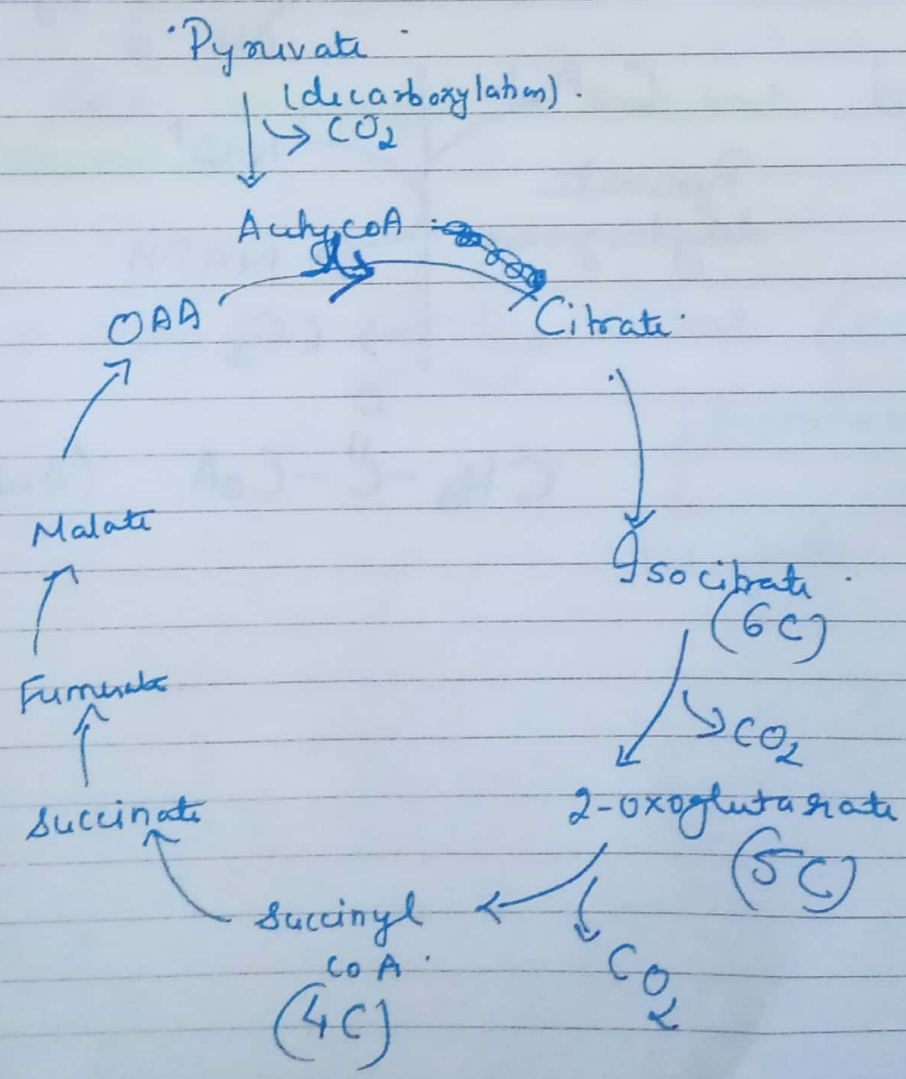
Week 29
 Day 197 • 168
 Date 16 • 07 • 2018
 July 2018

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 Monday

Pyruvate generated in the cytosol during glycolysis is transported into mitochondrial matrix.

Pyruvate is decarboxylated (removal of CO₂) to form Acetyl CoA.

Acetyl CoA is thus the connecting link betⁿ glycolysis and the next series of rxns that yield more energy in the form of ATP.



Nothing in life is to be feared, it is only to be understood.

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Tuesday

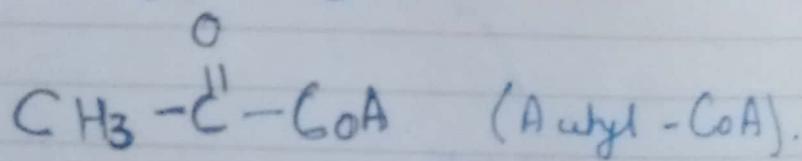
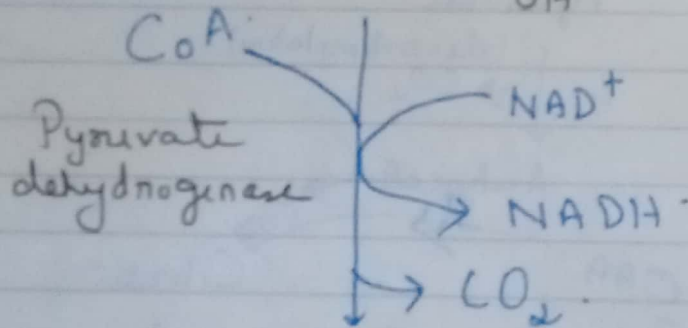
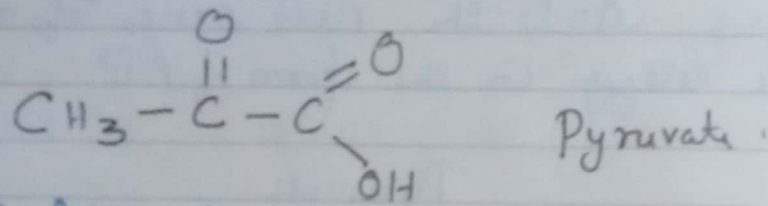
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Step 1.

Pyruvate is decarboxylated in an oxidation rxn by the enzyme pyruvate dehydrogenase

NADH, CO₂ and acetyl-CoA are formed.



W	T	F	S	S	
1	2	3	4	5	A
8	9	10	11	12	U
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22	23	24	25	26	18
29	30	31			

Week 29
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Wednesday

Step 2.

(2C)

OAA (4C compound) combines with acetyl group of acetyl - CoA to give 6C - citrate in presence of Citrate synthase.



OAA is a 4C - dicarboxylic acid and Citrate is 6C - tricarboxylic acid).



Citrate is then isomerized to isocitrate by the enzyme aconitase.

