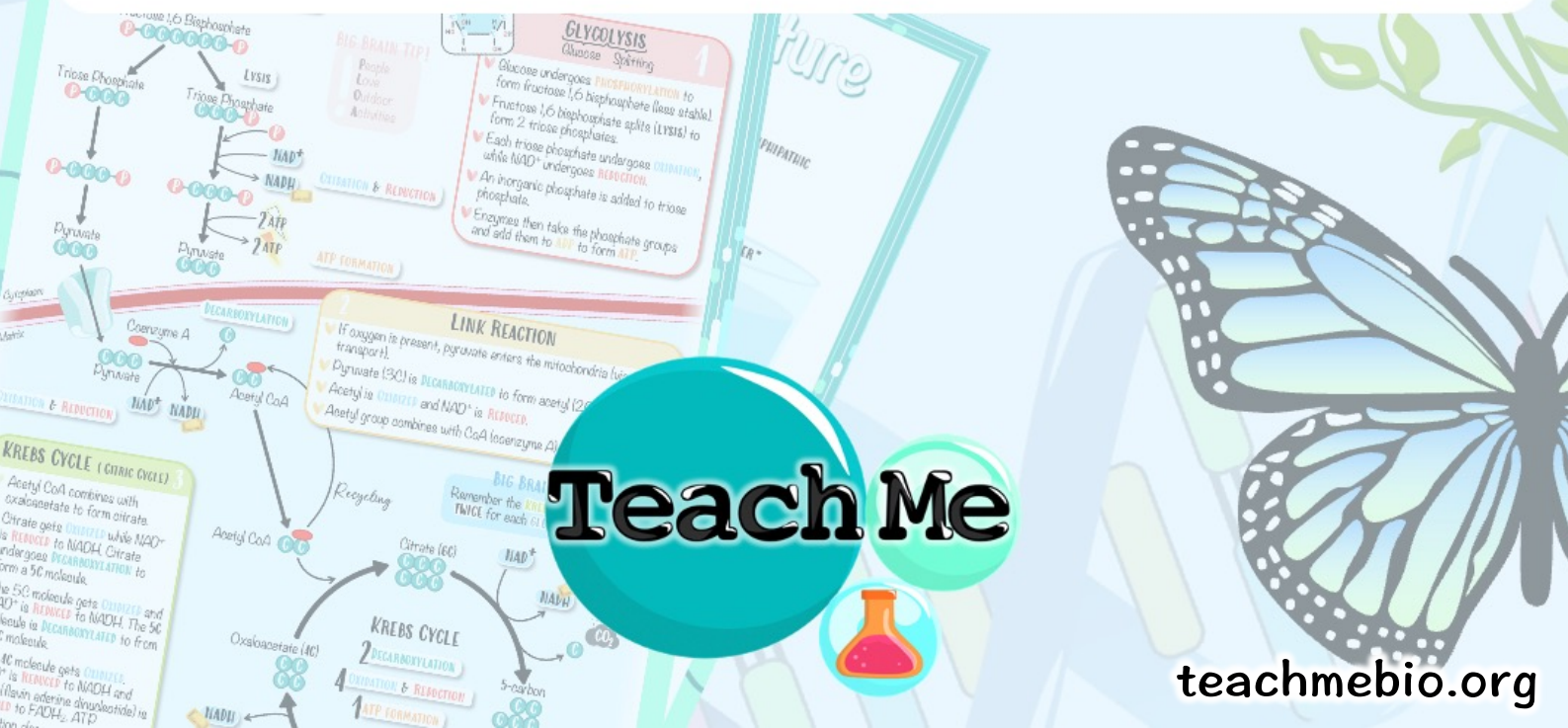


TeachMe

STUDY NOTES

C2.1 CELL RESPIRATION (HL)



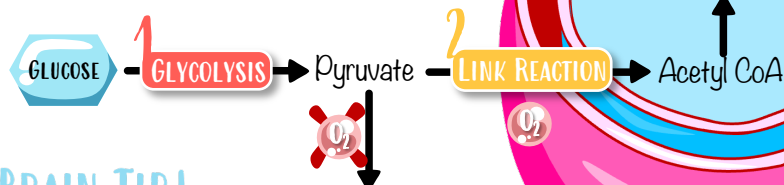
TeachMe

Cellular Respiration (HL)

CELLULAR RESPIRATION – Gradual breakdown of nutrient molecules such as **glucose** & fatty acids in a series of reactions that ultimately release energy in the form of **ATP**.

SUMMARY OF PROCESS

The process of cellular respiration starts with the entry of **GLUCOSE** into the cell via a transporter called **GLUT**. From page 2, each of the steps of respiration are shown in detail.



BIG BRAIN TIP!

Remember the structures of the mitochondria covered in section B2.2

REDOX – Cellular Respiration is considered to be a **REDOX** reaction: when **OXIDATION** & **REDUCTION** occur together.

REDUCTION

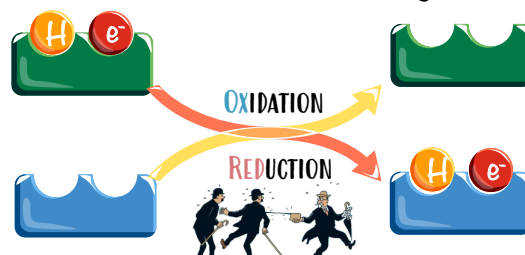
Gain of electrons
Gain of hydrogens
Loss of oxygen
Results in product with higher potential energy

A general type of chemical reaction resulting in products with higher potential energy than the reactants

OXIDATION

Loss of electrons
Loss of hydrogen
Gain of oxygen
Results in product with lower potential energy

A general type of chemical reaction resulting in products with lower potential energy than the reactants

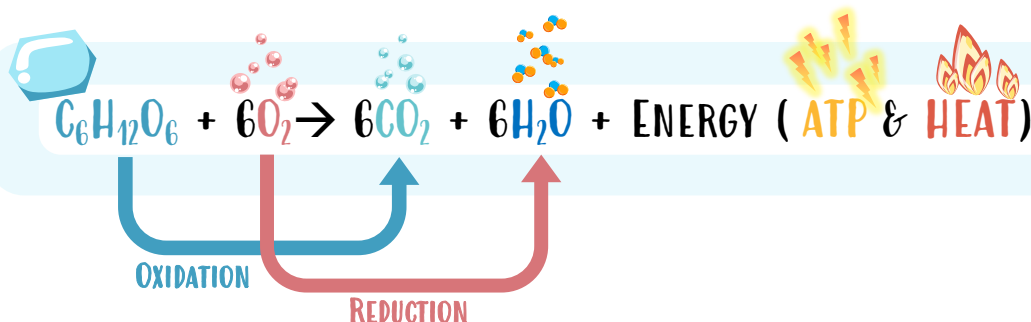


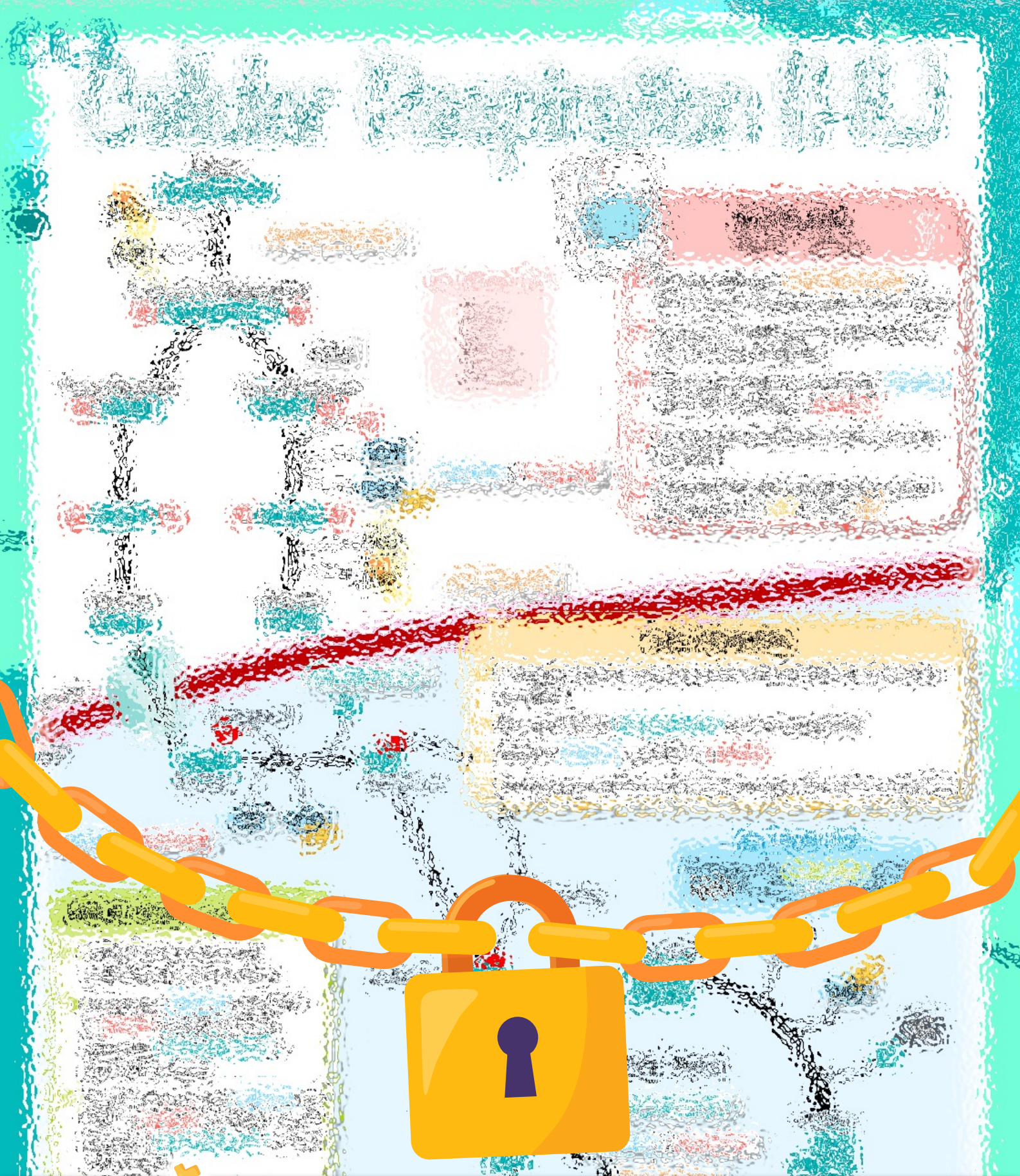
BIG BRAIN TIP!

OILRIG

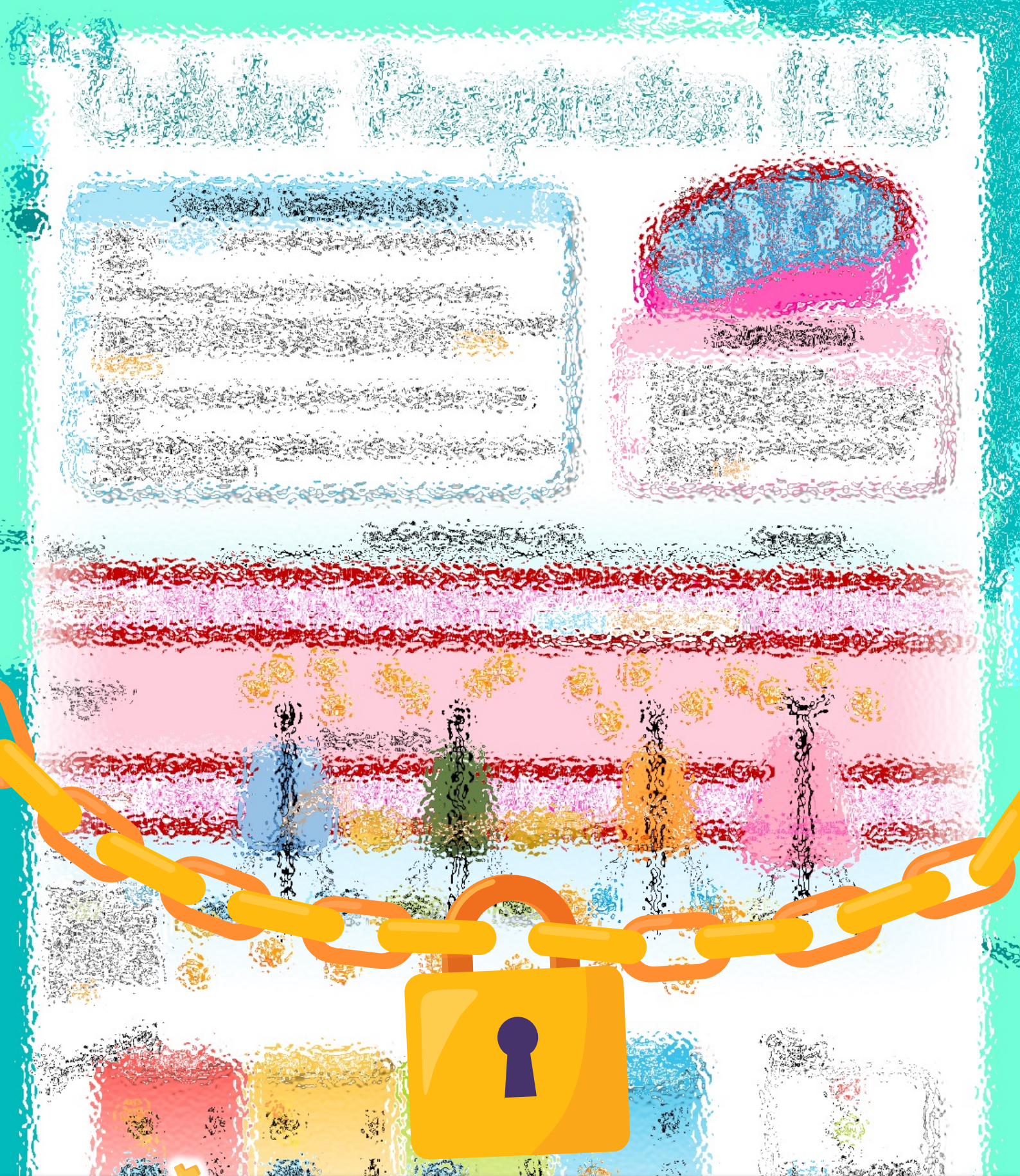
Oxidation Is Loss of electrons & hydrogen
Reduction Is Gain of electrons & hydrogen

CELLULAR RESPIRATION EQUATION (Aerobic)

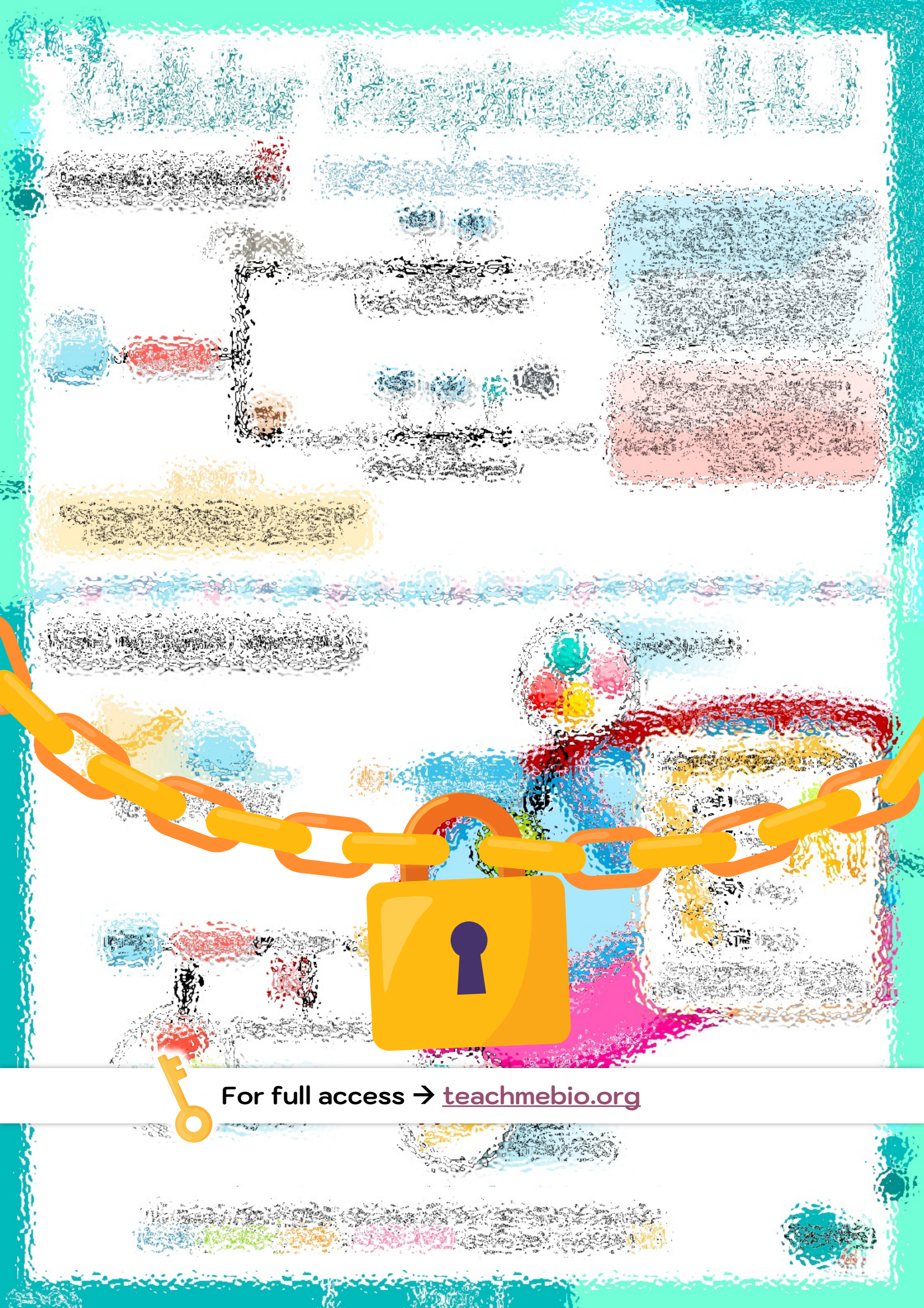




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A stylized illustration of a yellow padlock with a dark blue keyhole, centered in the frame. A chain of yellow and orange links is draped over the padlock, extending from the left and right edges of the image. The background consists of horizontal, wavy, light blue lines on a white base, framed by a thick, textured yellow border.

