

The FRAME

Law of conservation of mass
and energy

is about . . .

chemical reactions that move matter and energy from the sun to plants and animals and back again.

Main Idea

Photosynthesis

Main Idea

Cellular Respiration

Essential Details

Chloroplasts in plant cells

Essential Details

Mitochondria in plant and animal cells

Where does it
happen?

Carbon dioxide, Water, Sunlight

Oxygen, Glucose

reactants

Oxygen, Glucose

Carbon dioxide, Water, ATP (energy)

products

So What?

These two processes are opposites, when they are in balance plants and animals both get what they need to survive, grow, and move.

Extension:
Draw a
diagram of the
exchange of
matter and
energy
between two
or more living
organisms.
Label the
reactants and
products and
indicate their
direction of
flow.