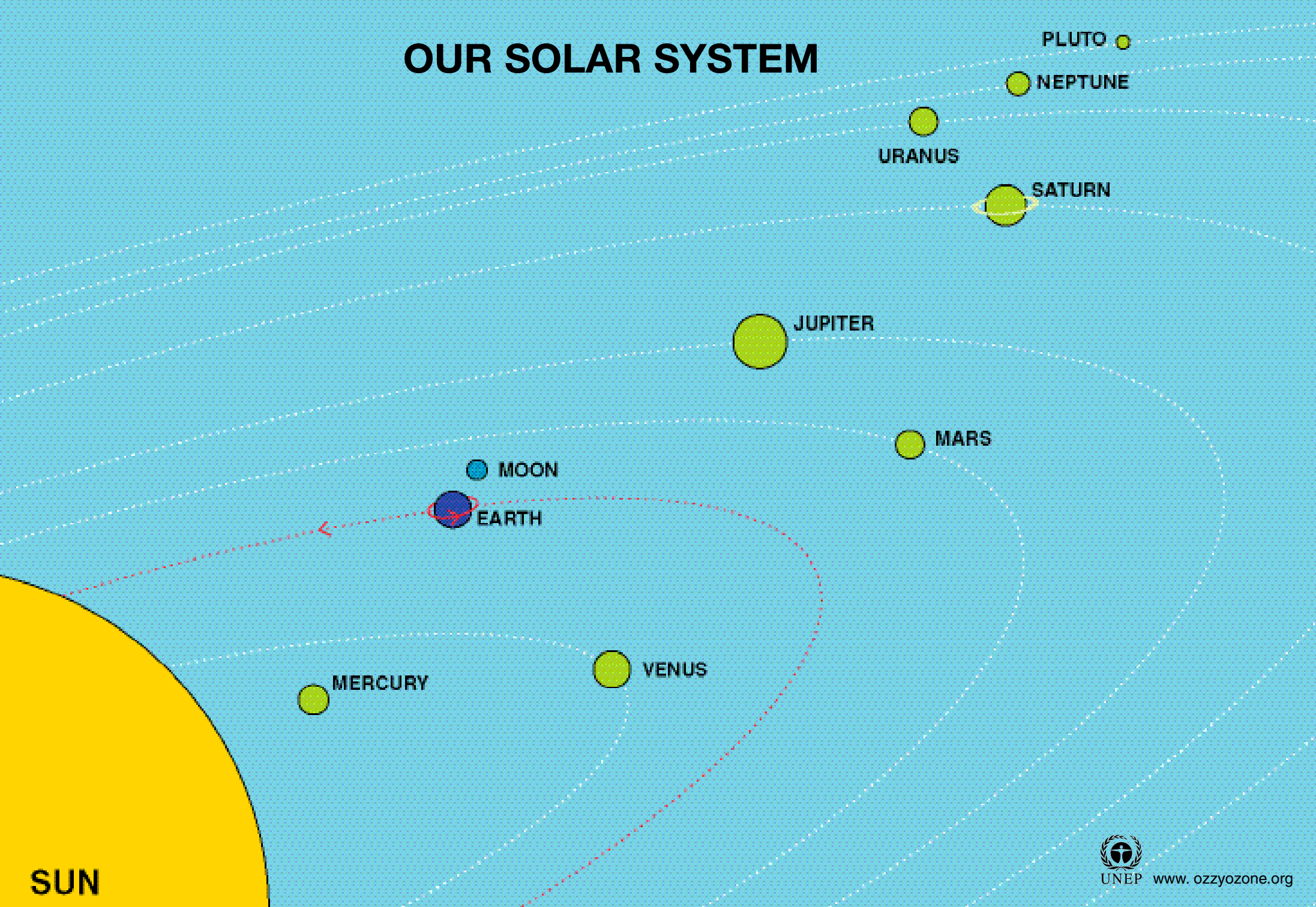


OUR SOLAR SYSTEM



SUN

MERCURY

VENUS

MOON

EARTH

JUPITER

MARS

URANUS

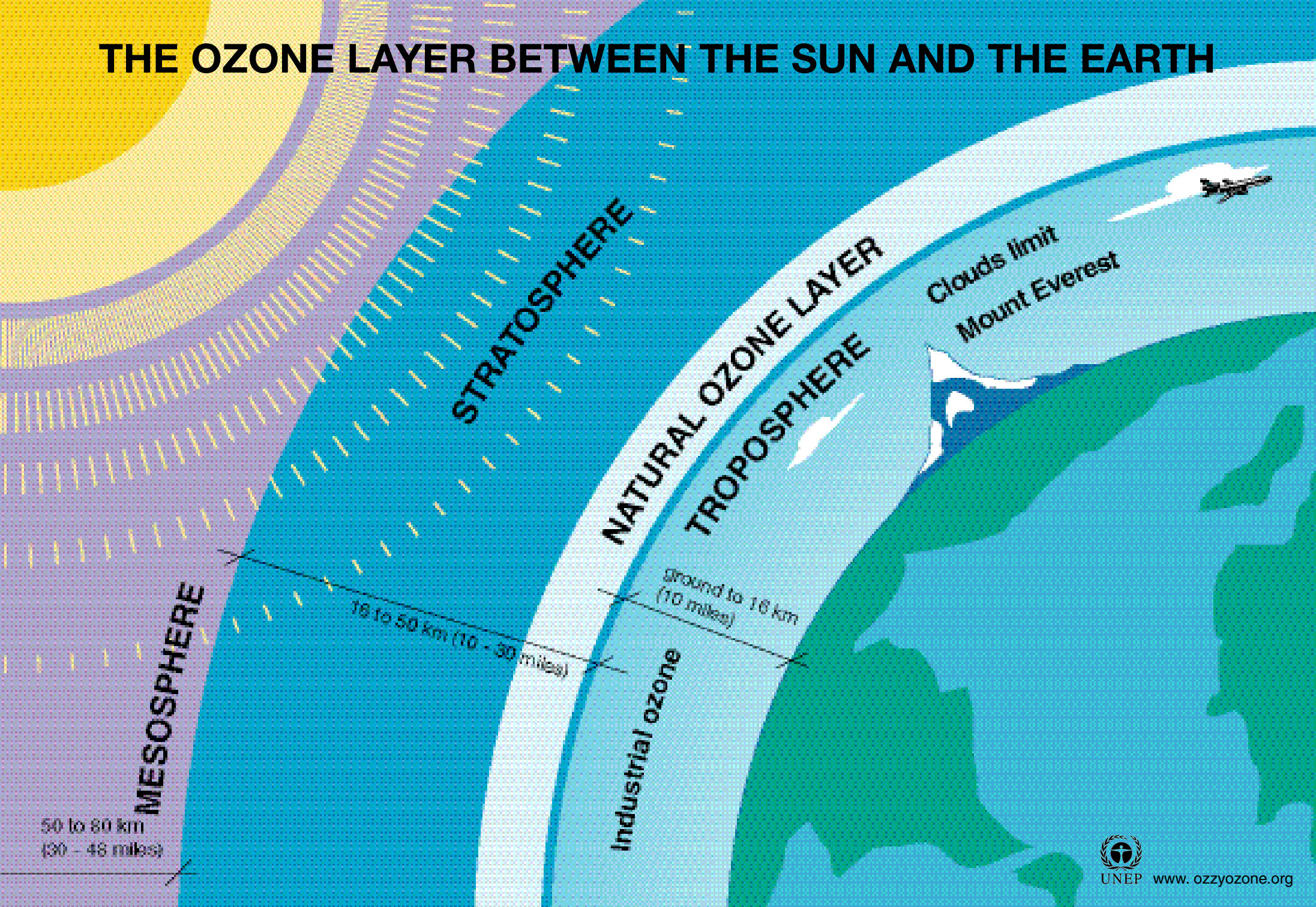
SATURN

NEPTUNE

PLUTO



THE OZONE LAYER BETWEEN THE SUN AND THE EARTH



STRATOSPHERE

NATURAL OZONE LAYER

TROPOSPHERE

Clouds limit
Mount Everest

MESOSPHERE

16 to 50 km (10 - 30 miles)

Ground to 16 km
(10 miles)

Industrial ozone

50 to 80 km
(30 - 48 miles)



SUN

PHOTOSYNTHESIS: HOW DO PLANTS GROW?

LIGHT ENERGY

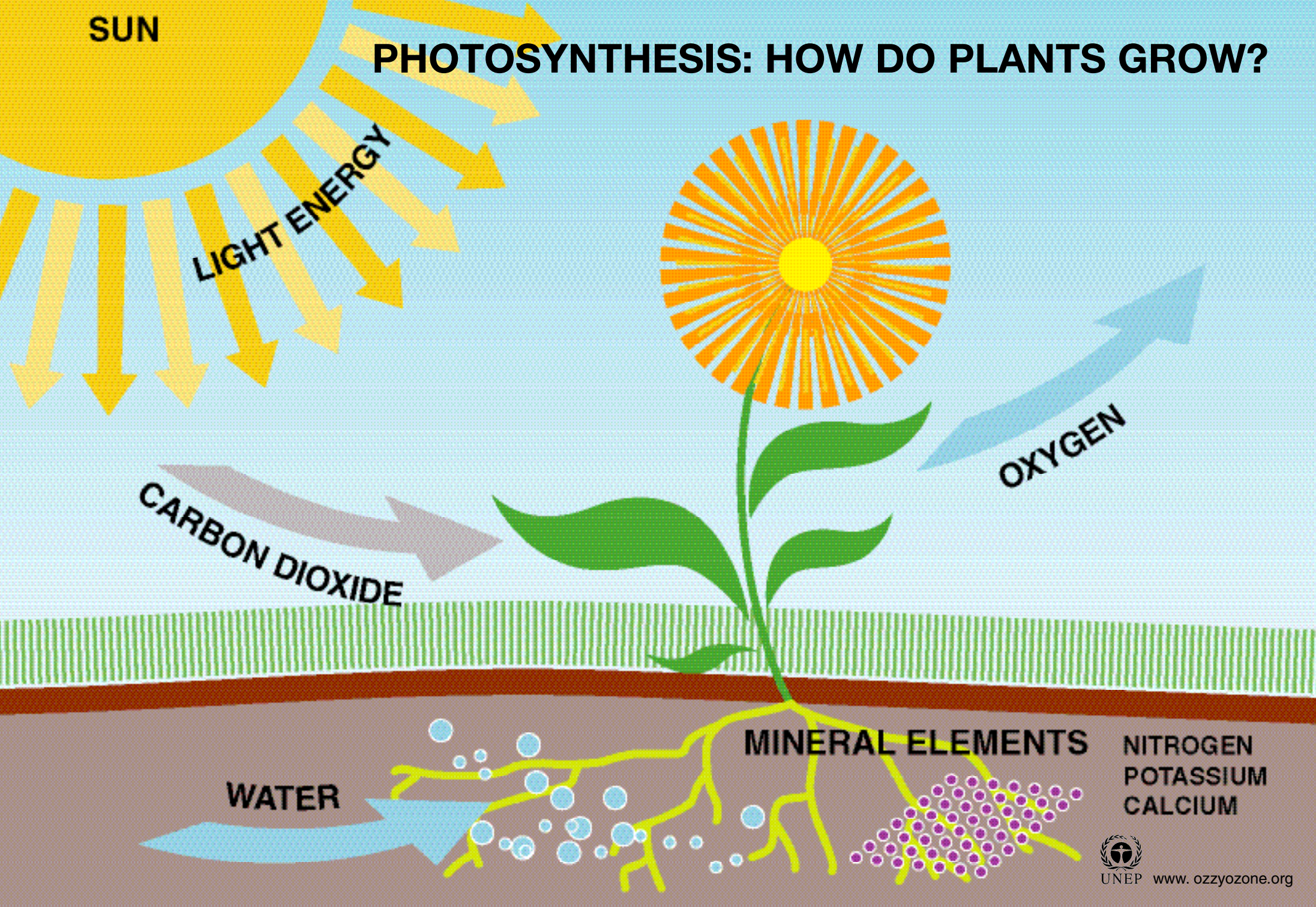
OXYGEN

CARBON DIOXIDE

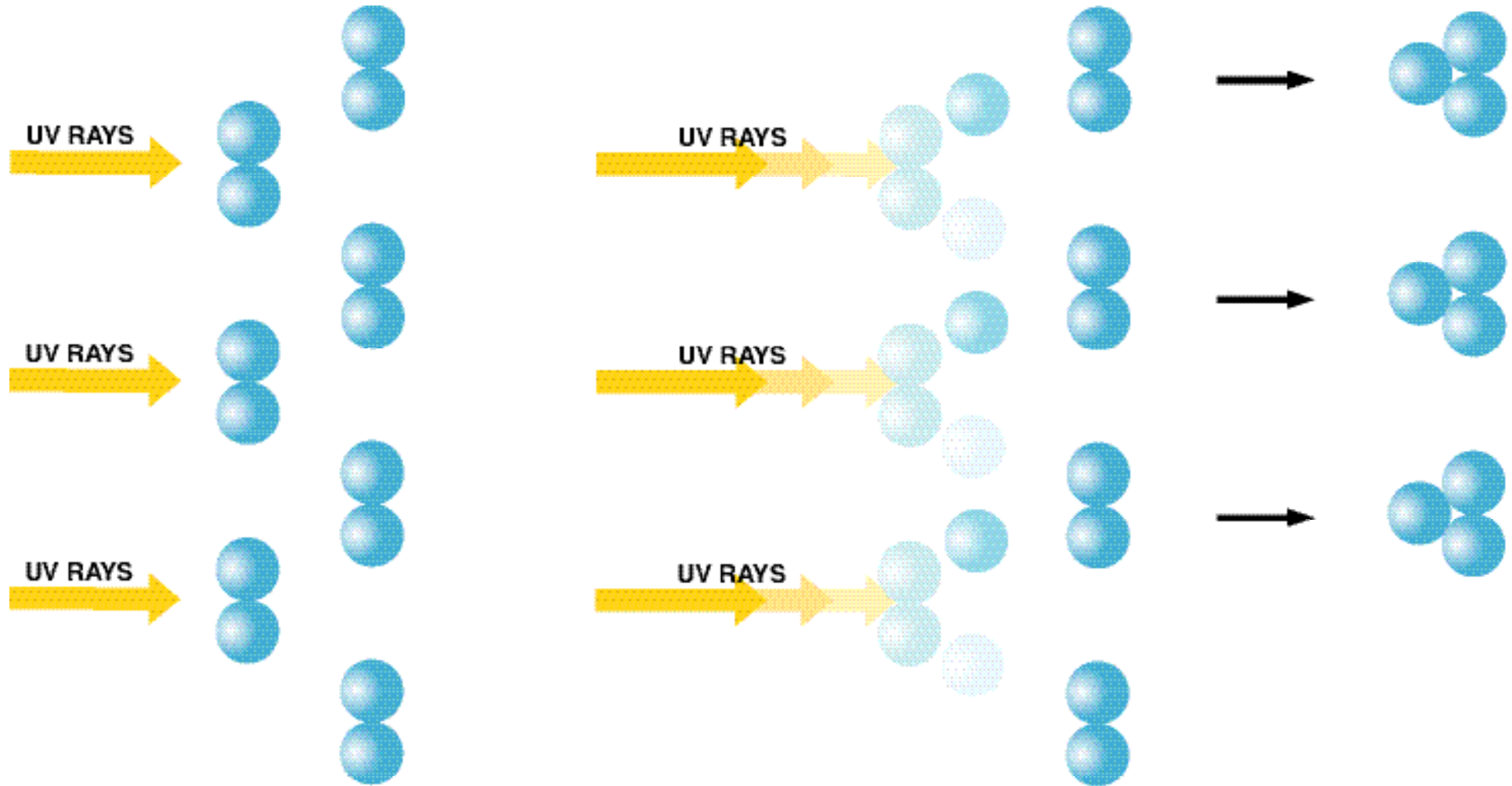
WATER

MINERAL ELEMENTS

NITROGEN
POTASSIUM
CALCIUM



FORMATION OF NATURAL OZONE



Oxygen molecules (O₂)...

are broken by UV rays
and split into
single Oxygen atoms (O)...

which then join other
Oxygen molecules (O₂)
to form...

Ozone molecule (O₃)
 $O + O_2 \rightarrow O_3$



HIGH UV RADIATION FACTORS

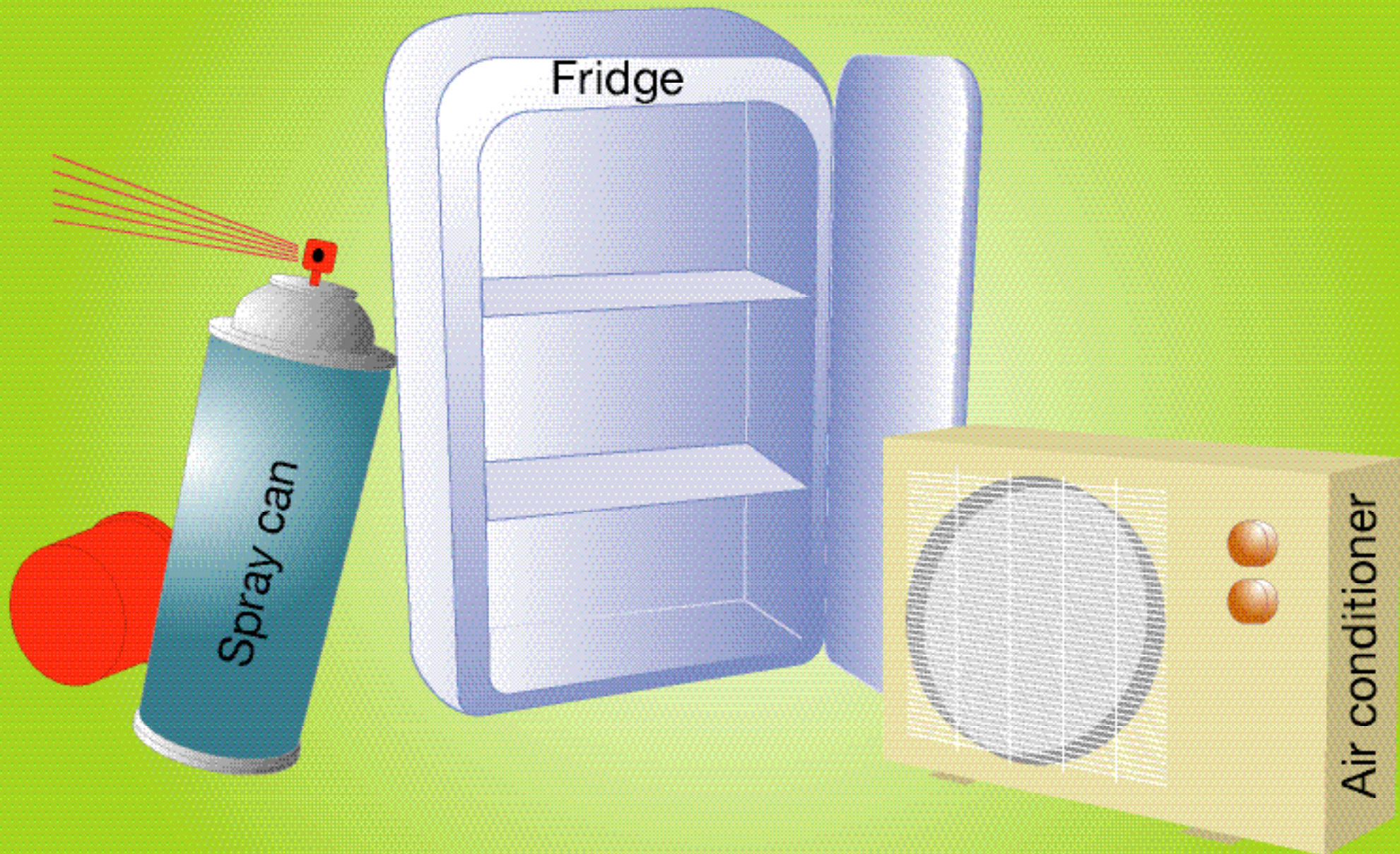
UV factors	High UV radiation
Time of the day	From 10 am to 4 pm
Time of the year	Summer or hot seasons
Location	Close to the equator
Elevation	Altitude above sea level
Reflection	Sand, water, snow
Weather	No dark clouds in the sky

THE UV INDEX

Exposure category and risk for health	UVI range
Low	<2
Moderate	3 to 5
High	6 to 7
Very high	8 to 10
Extrem	11+



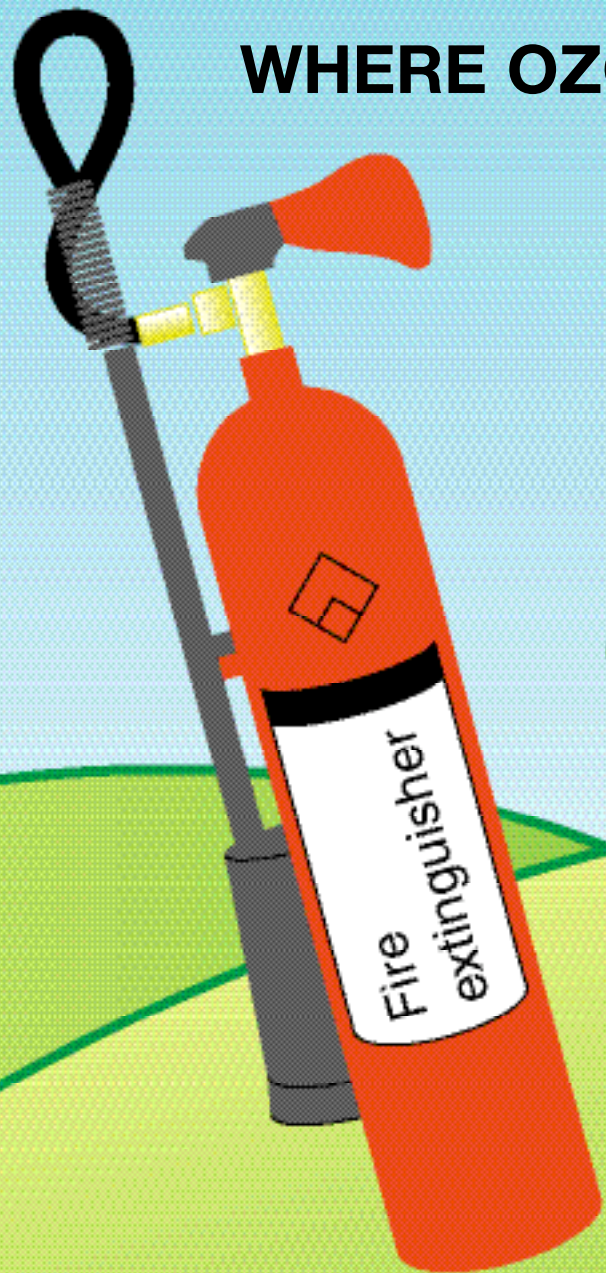
WHERE OZONE DEPLETING SUBSTANCES CAN BE FOUND



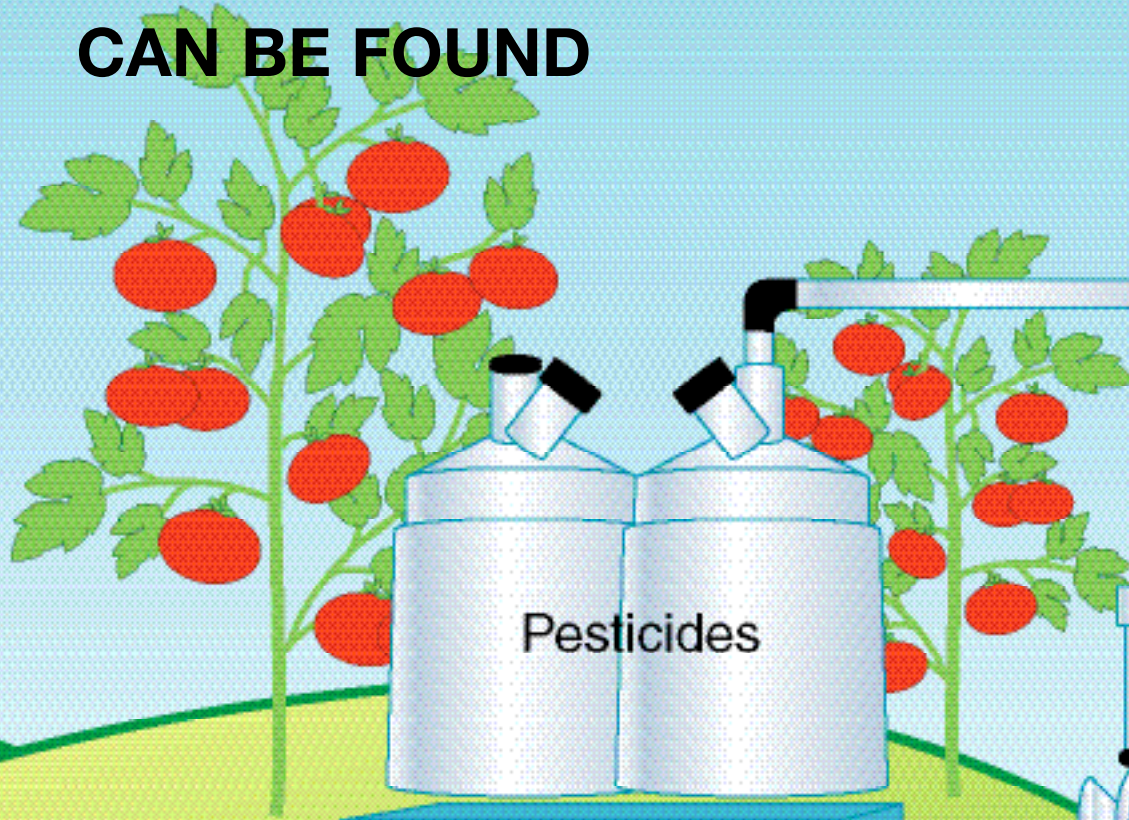
CFCs



WHERE OZONE DEPLETING SUBSTANCES CAN BE FOUND



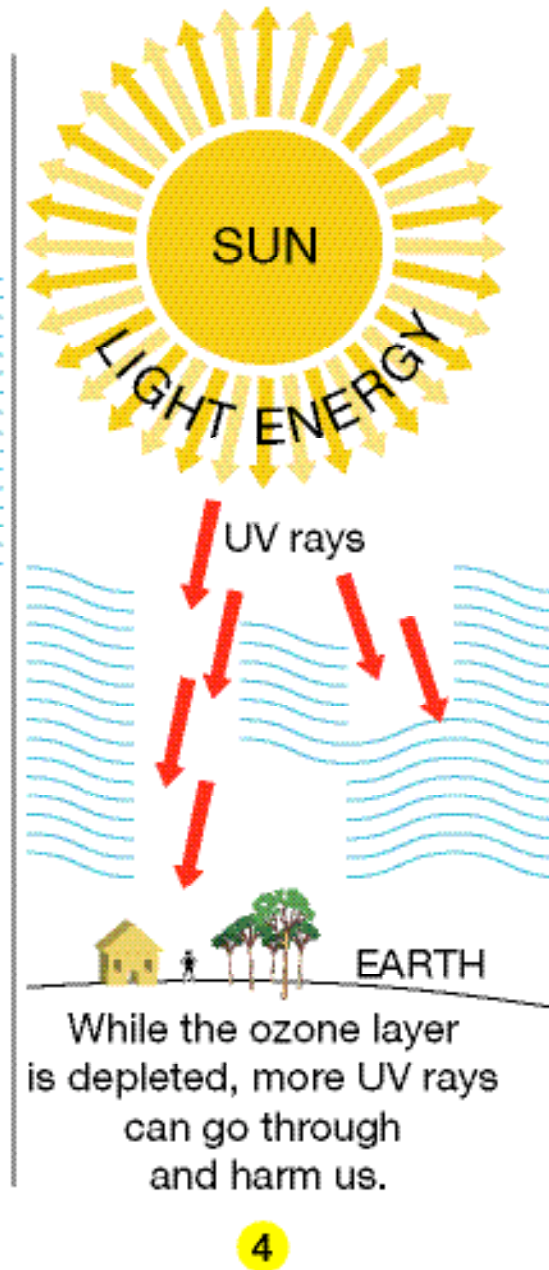
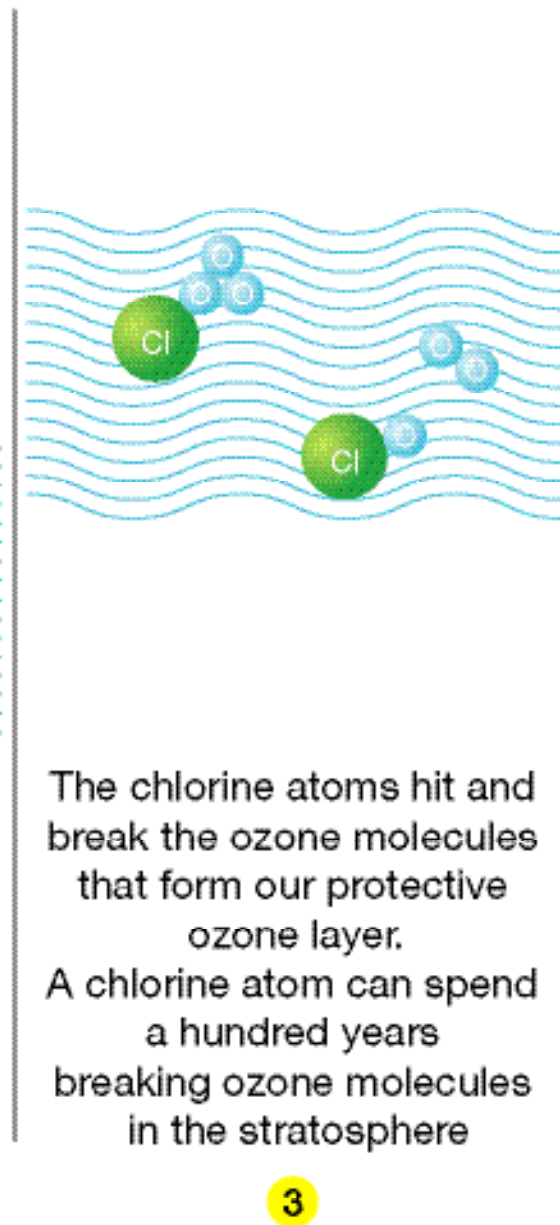
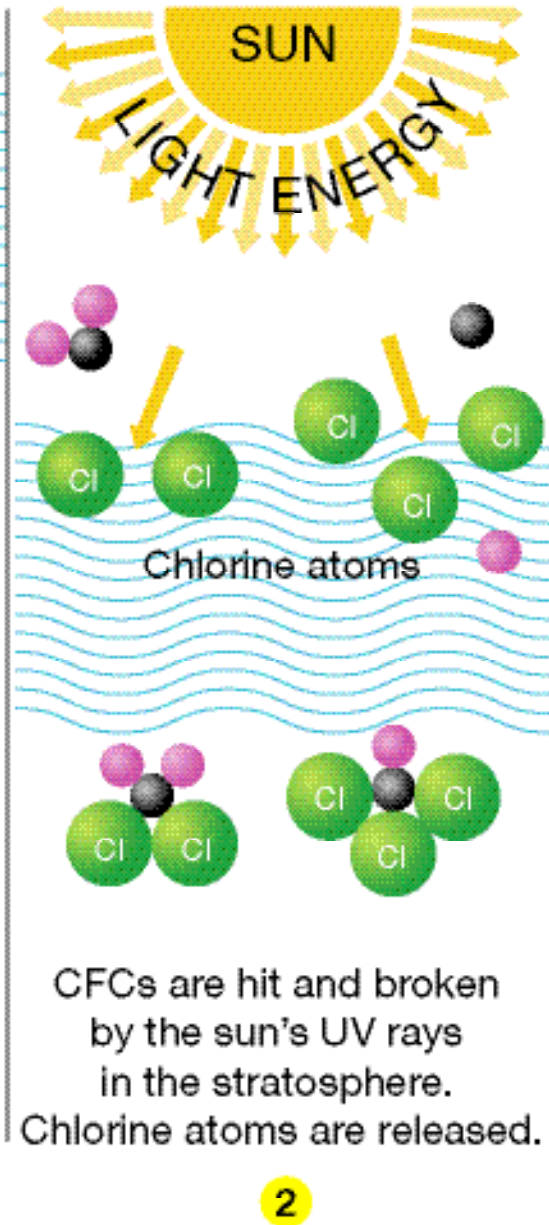
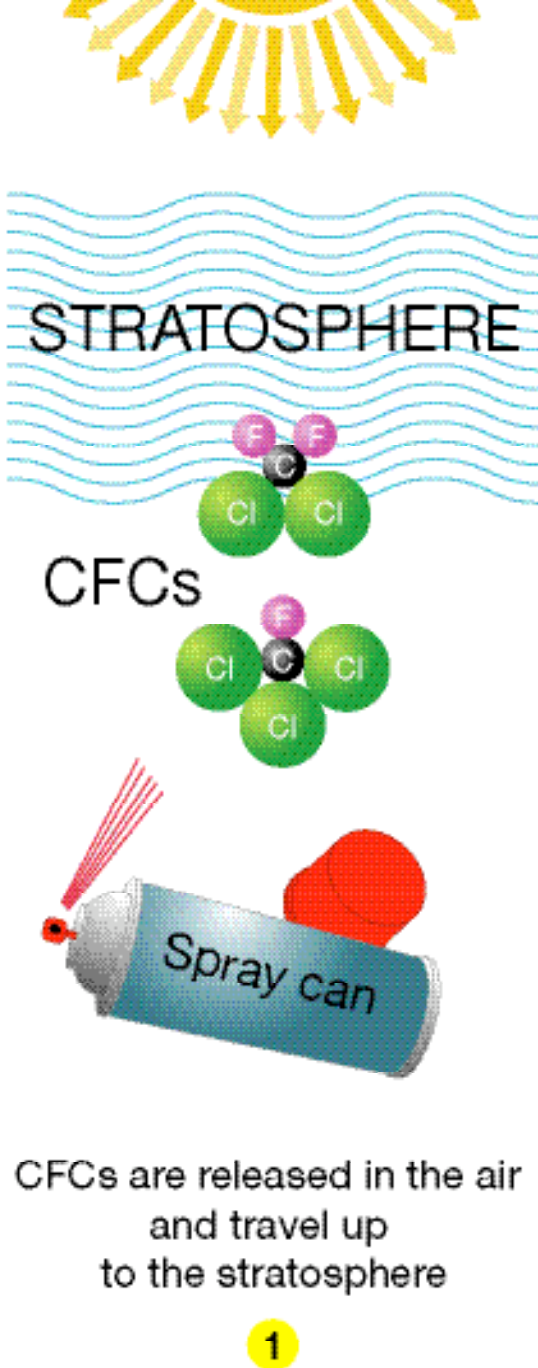
Halons



Methyl bromide



OZONE DEPLETION

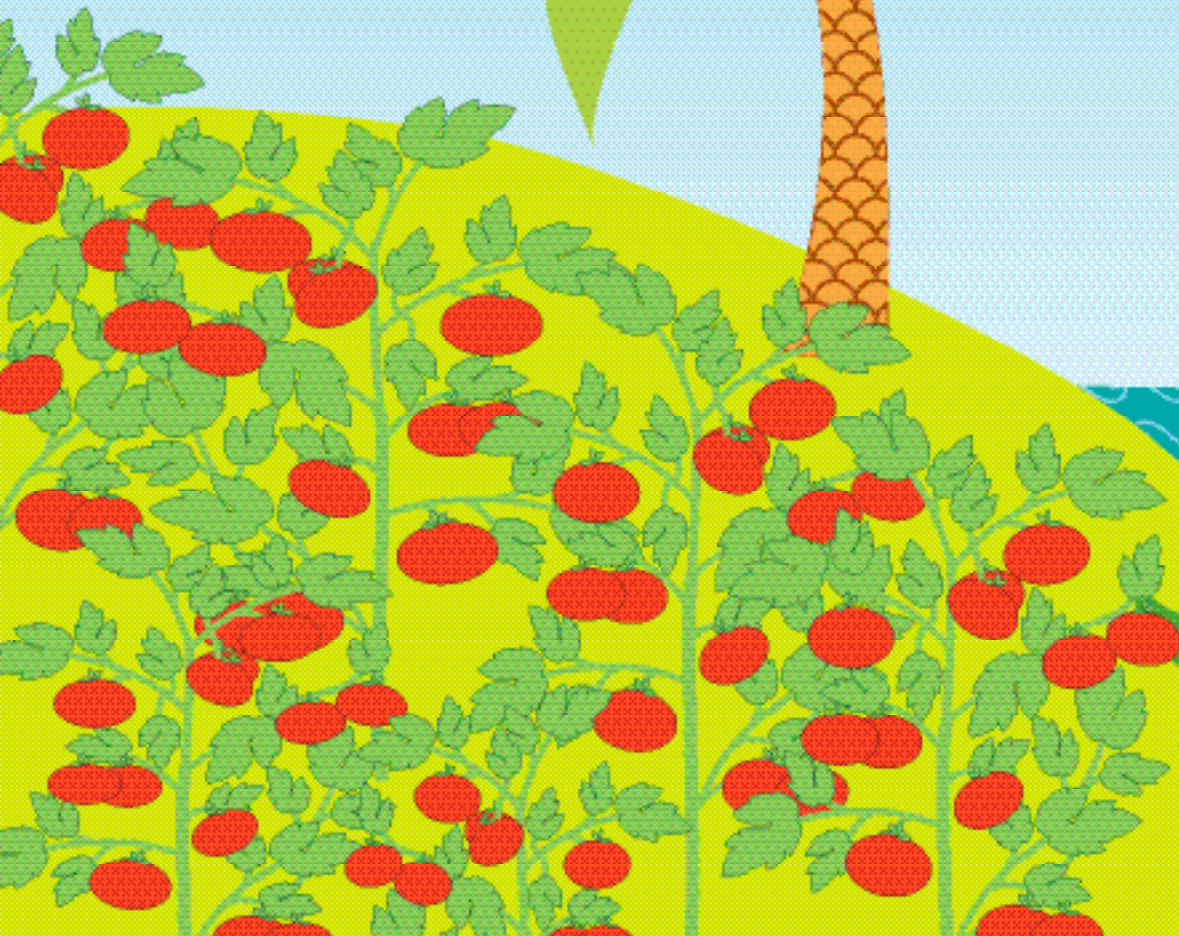


SUN EXPOSURE AND HEALTH EFFECTS

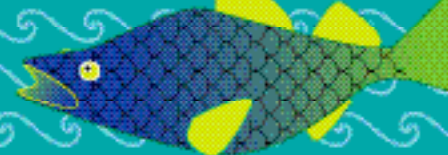


HIGH UV RADIATION AND THE ENVIRONMENT

High UV radiation slows the germination process



High UV radiation kills plankton, the basic food supply for fishes



SUN PROTECTION RULES

