



Pakistan School
Kingdom of Bahrain

PAKISTAN SCHOOL, KINGDOM OF BAHRAIN.

Chapter : 1

Introduction to Biology

Objectives:

At the end of this lesson students will be able to:

- ▶ Inter-relate Biology with other Sciences.
- ▶ Identify the relationship of some verses of Holy Quran with biology

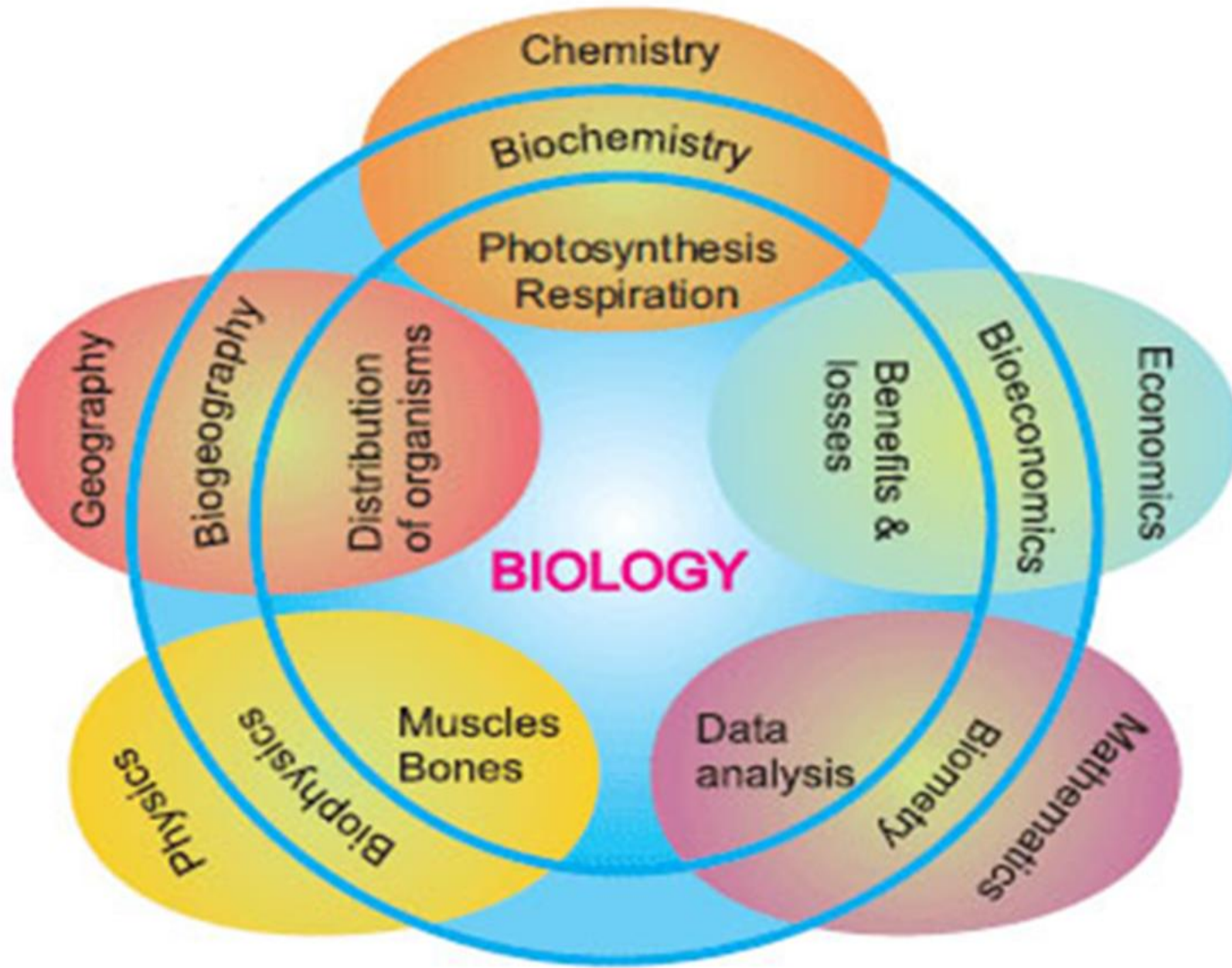
Relationship of Biology with other sciences

Biology includes information on various aspects of living things but these information relate to the other branches of science as well.

Each branch of science has relationship with all other branches.

Example:

When studying the process of movement in animals the biologists have to refer to the laws of motion in Physics. This forms the basis of **INTERDISCIPLINARY SCIENCES**. (involving two or more different subjects or areas of knowledge)

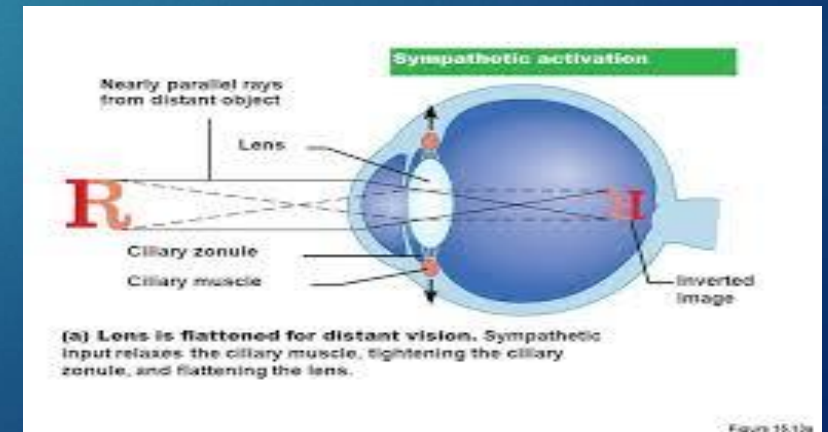
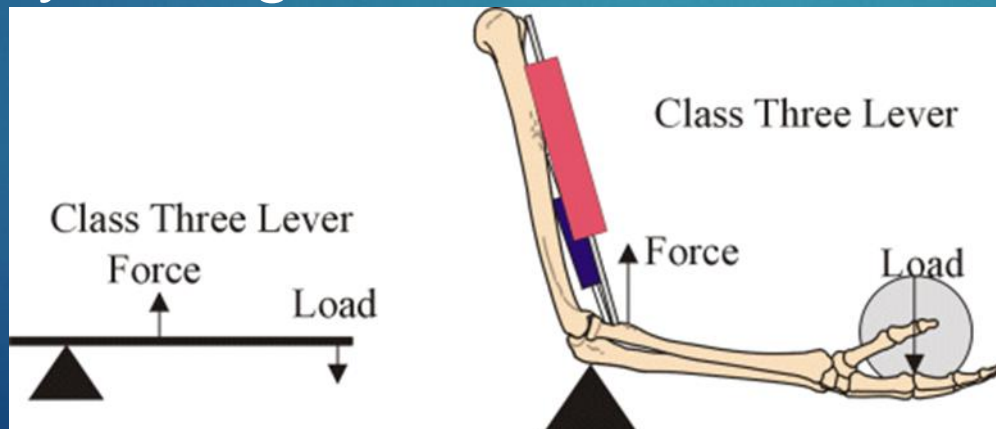


BIOPHYSICS

Biology and Physics

It deals with the study of the principles of physics which are applicable to biological phenomena.

- ▶ Biology uses instruments that work based on the principles of physics such as microscopes and x-rays.
- ▶ The principle of optics helps to study the human eyes which are affected by the light.

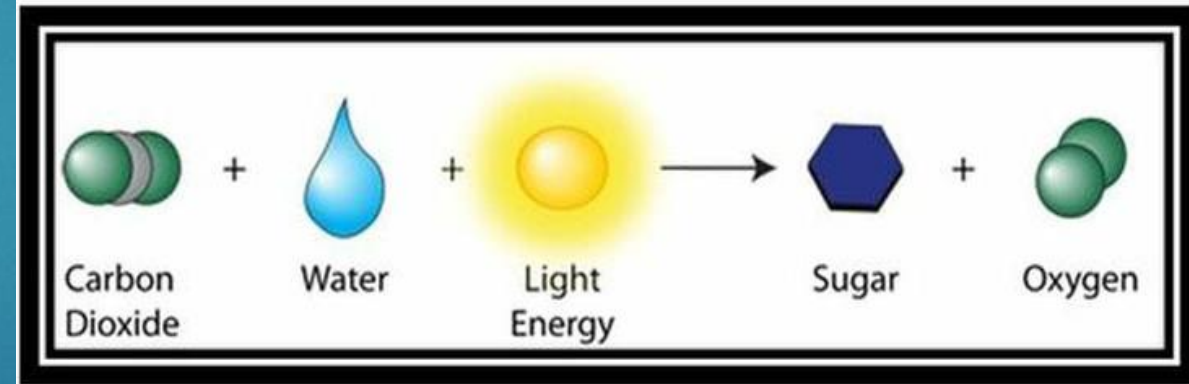


BIOCHEMISTRY

Biology and Chemistry

It deals with the study of chemistry of different compounds and processes occurring in living organisms. It has helped biologists describe metabolic processes that occur in living bodies such as digestion, respiration and photosynthesis.

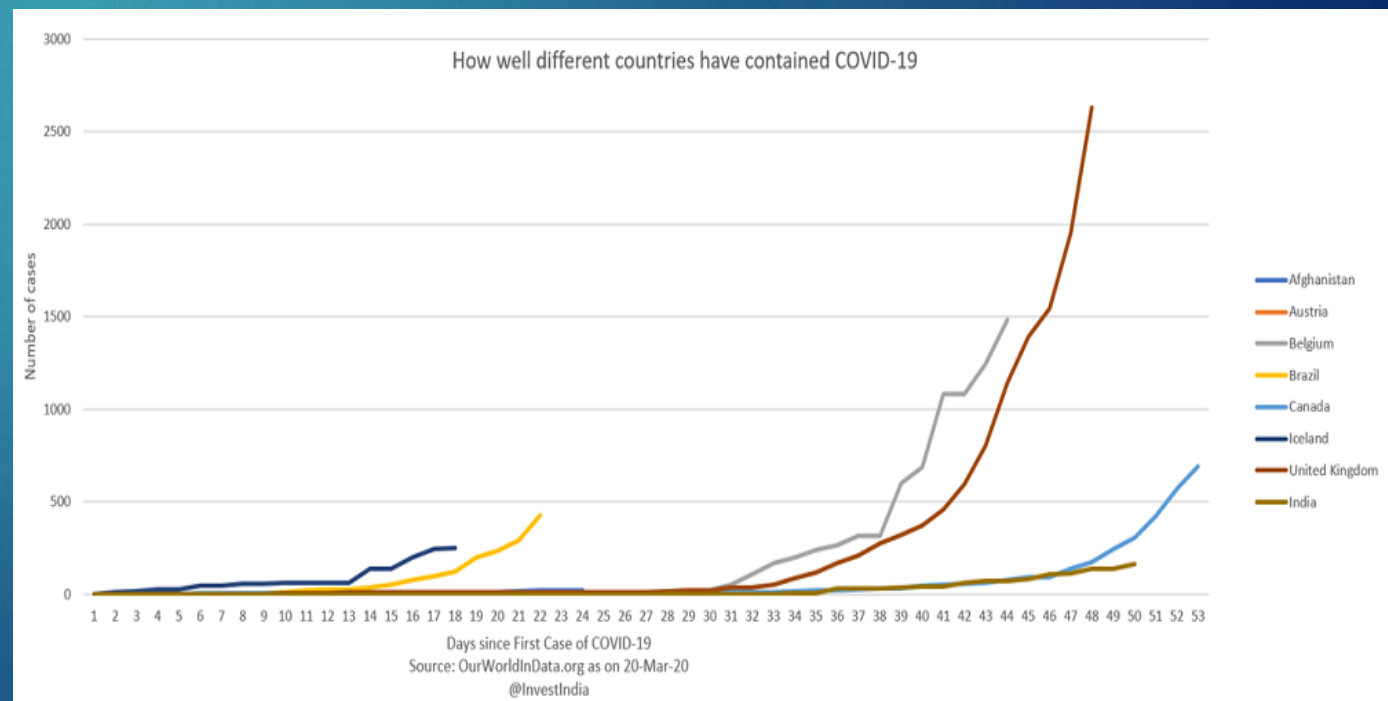
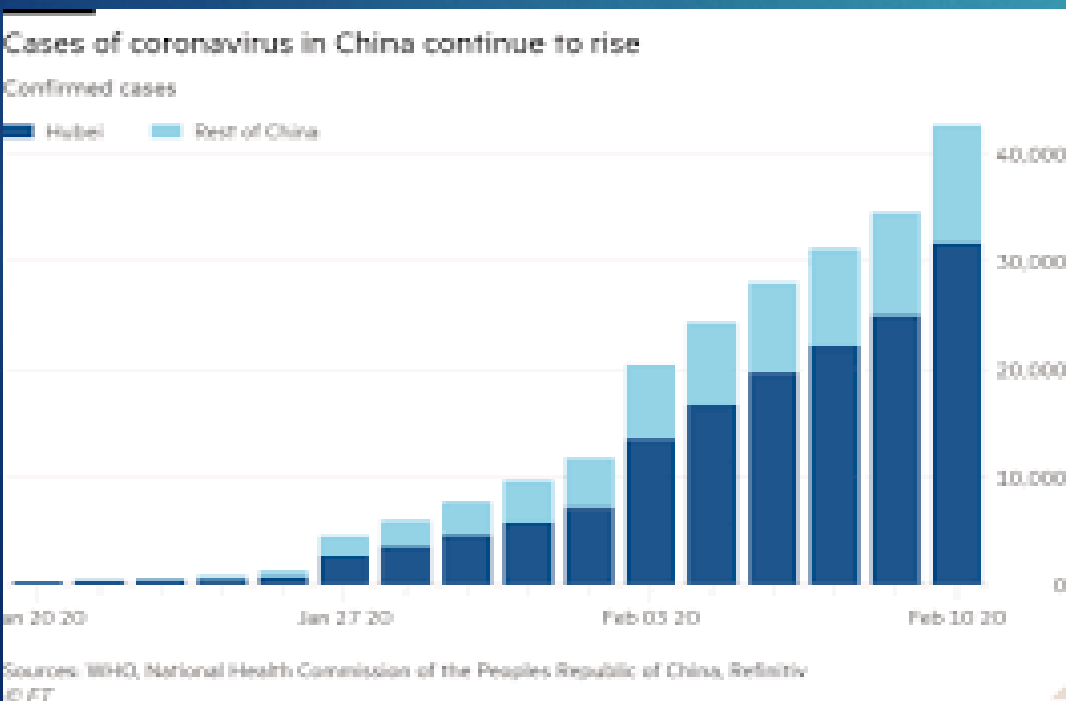
Photosynthesis Equation



BIOMATHEMATICS / BIOMETRY

Biology and Mathematics

Biology uses mathematical rules, techniques and tools to process, analyze and present experimental research of biological processes in living organisms.

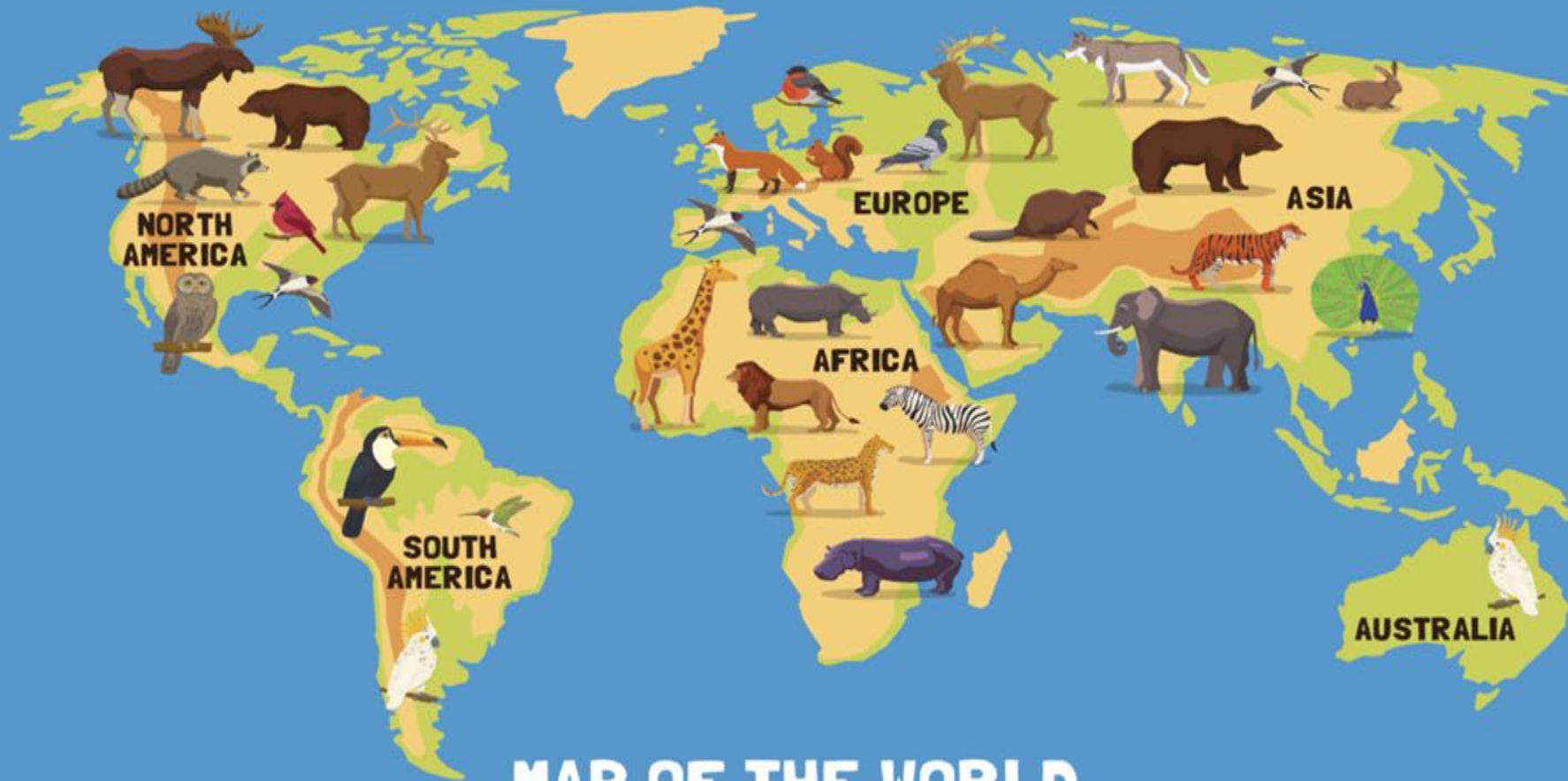


BIOGEOGRAPHY

Biology and Geography

It deals with the study of occurrence and distribution of different species of living organisms in different geographical regions of the world. It applies the knowledge of the characteristics of particular geographical regions to determine the types of living organisms found there.

BIOGEOGRAPHY

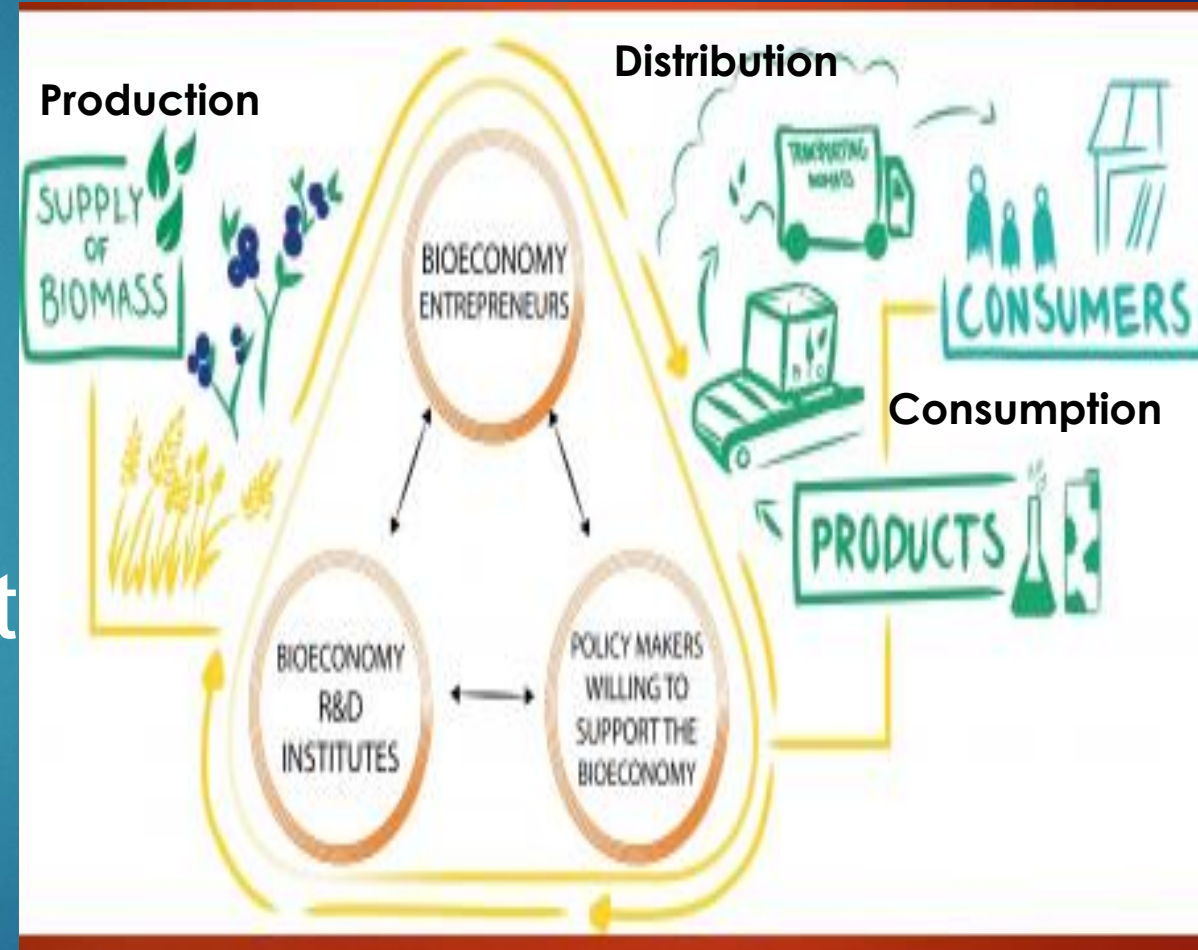


BIOECONOMICS

Biology and Economics

It deals with the study of organisms from economical point of view.

Example: The cost value and profit value of the yield of wheat can be calculated through bioeconomics and benefits and losses can be determined.

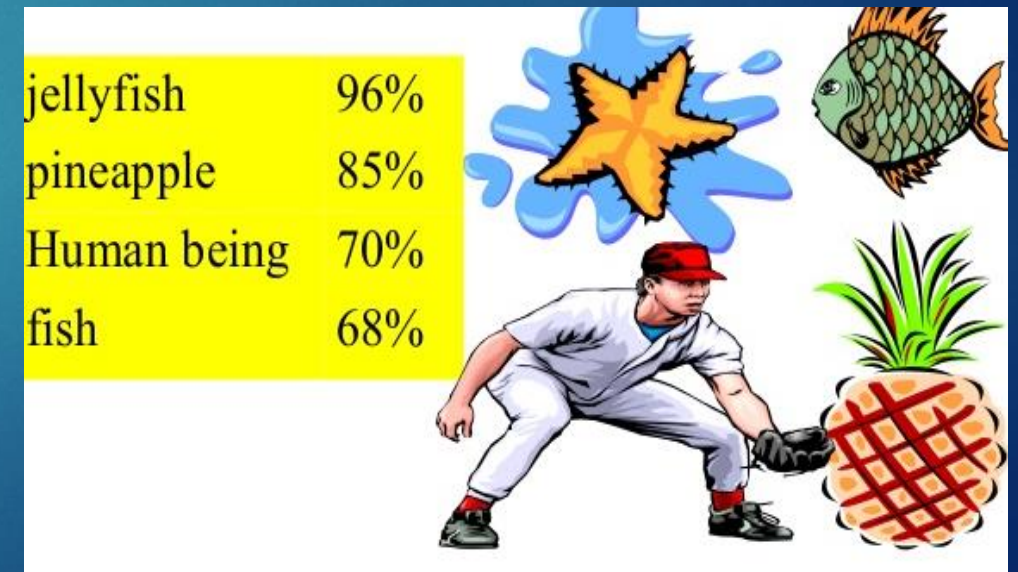
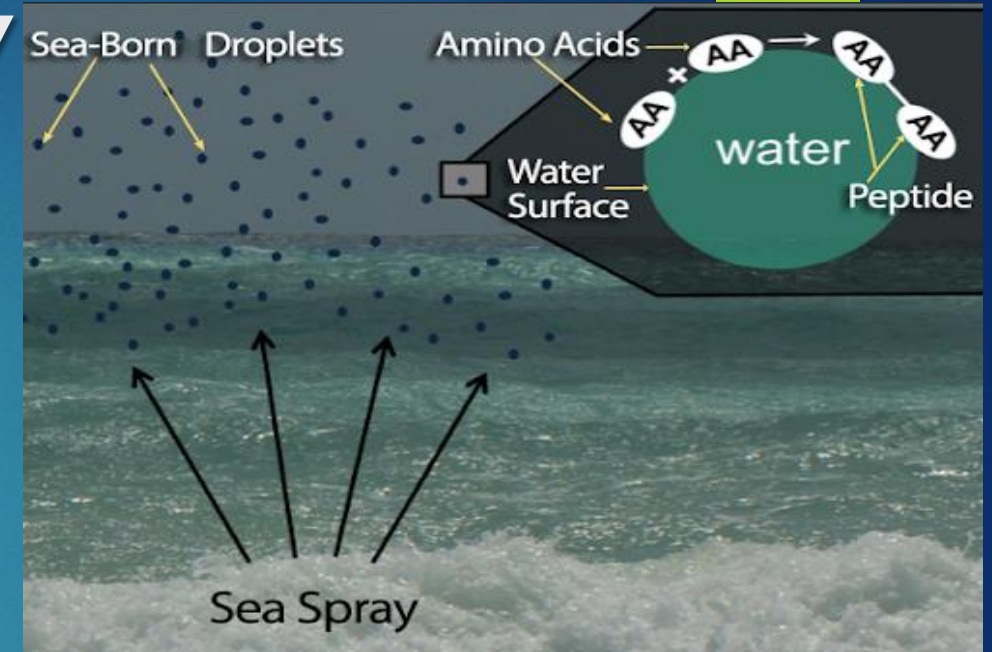


QURAN and BIOLOGY

وَجَعَلْنَا مِنَ الْمَاءِ كُلَّ شَيْءٍ حَيٍّ أَفَلَا يُؤْمِنُونَ (30)

“ We made every living thing
from water”

Surah Ambia , Verse:30



خَلَقَ الْإِنْسَانَ مِنْ صَلْصَالٍ كَالْفَخَّارِ ﴿١٤﴾

“ He made man from clay like the potter”

Surah Rehman , Verse:14

ثُمَّ خَلَقْنَا النُّطْفَةَ عَلَقَةً فَخَلَقْنَا الْعَلَقَةَ
مُضْغَةً فَخَلَقْنَا الْمُضْغَةَ عِظَامًا فَكَسَوْنَا
الْعِظَامَ لَحْمًا

“Then fashioned We the drop a clot, then fashioned We the clot a little lump, then fashioned We the little lump bones, then clothed the bones with flesh”

Surah Al-Mominoon , Verse:14

وَاللَّهُ خَلَقَ كُلَّ دَابَّةٍ مِّن مَّاءٍ فَمِنْهُمْ مَّن يَمْشِي عَلَى بَطْنِهِ وَمِنْهُمْ مَّن
يَمْشِي عَلَى رِجْلَيْنِ وَمِنْهُمْ مَّن يَمْشِي عَلَى أَرْبَعٍ يَخْلُقُ اللَّهُ مَا يَشَاءُ إِنَّ
اللَّهَ عَلَى كُلِّ شَيْءٍ قَدِيرٌ ﴿٤٥﴾

“ Allah hath created every animal from water. Then some of them creep up over their bellies, other walk on two legs, and others on four. Allah creates what He pleases.”

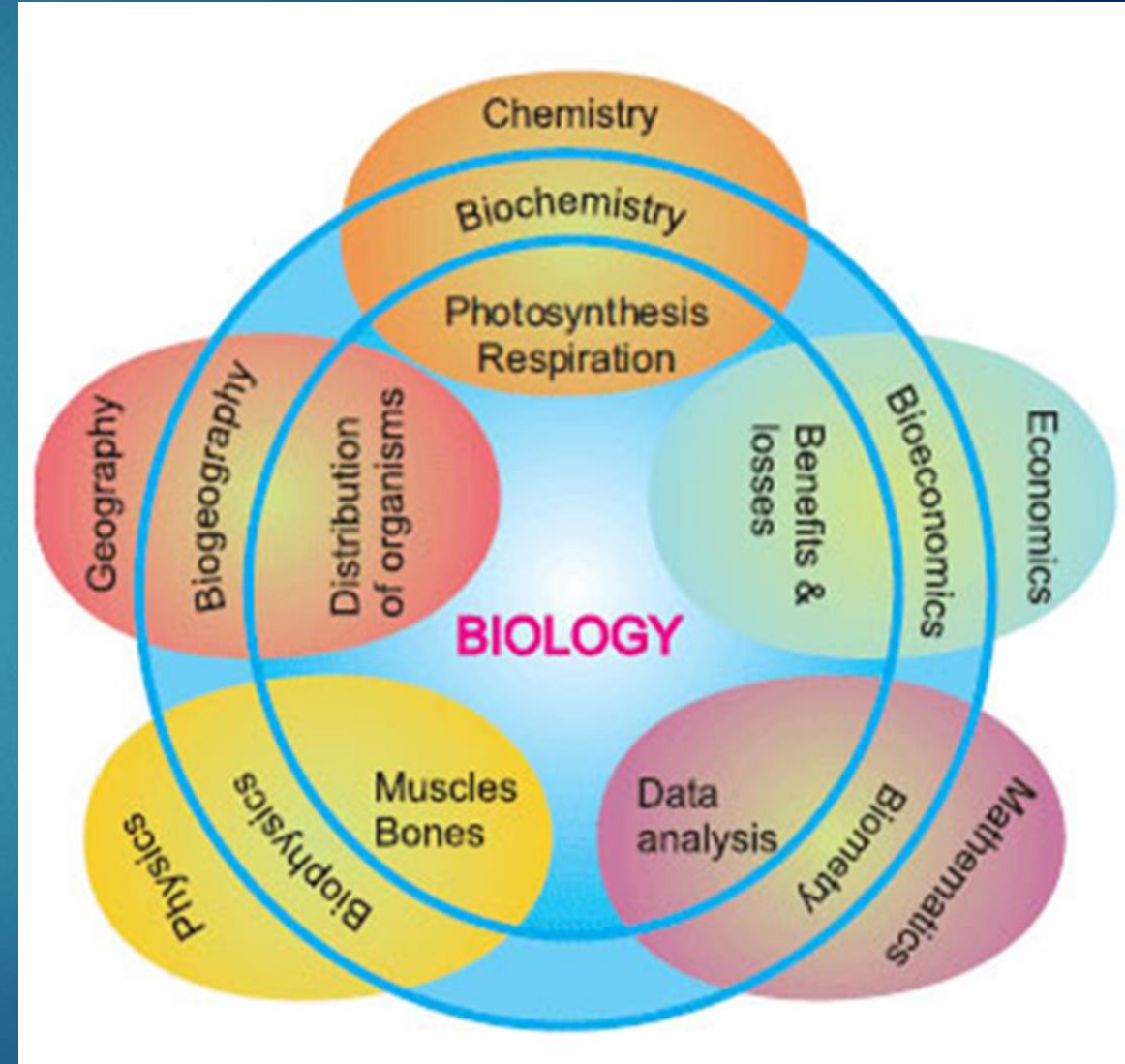
Surah Al-Nur , Verse:45



Plenary:

Which interdisciplinary science deals with this ?

1. Kangaroos are found in Australia.
2. Presentation of data of the students of Pakistan School having online classes.
3. Explaining how birds fly.
4. Detailed blood test.



Tip for Ramadan

RAMADAN TIPS

TIP 1 SUHOOR IS SUNNAH

Don't overeat

Eat foods rich in complex carbohydrates and protein, fruits or vegetables, and drink plenty of water

