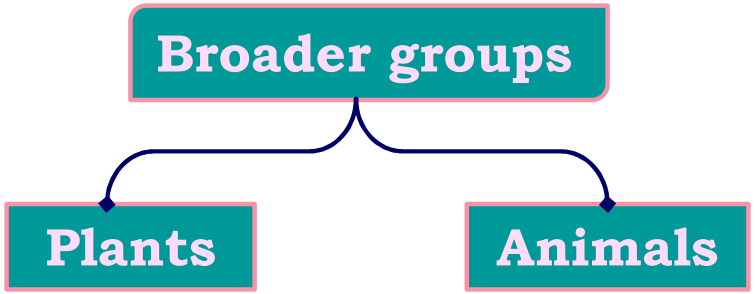
Scientists created a new system of classification by studying different characteristics of different organisms.

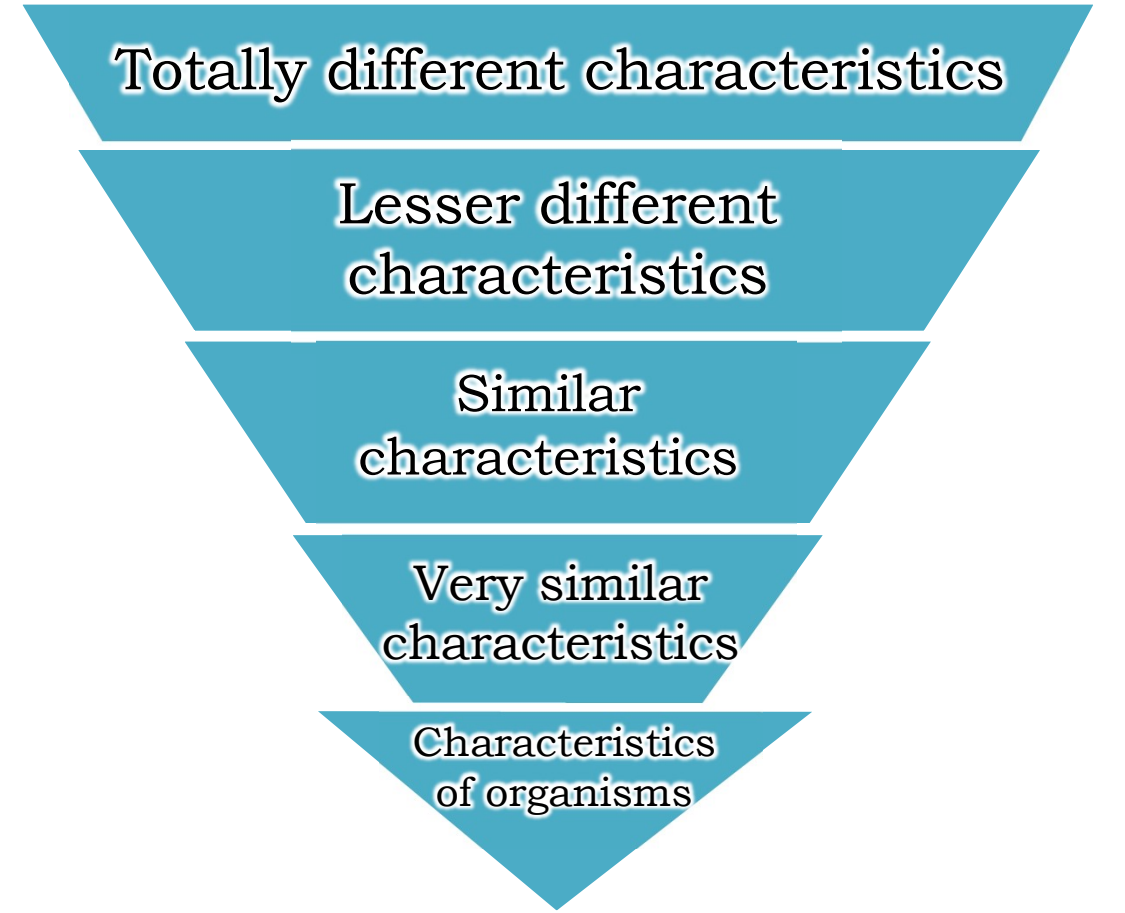
Major different characteristics created



Lesser different characteristics makes smaller groups

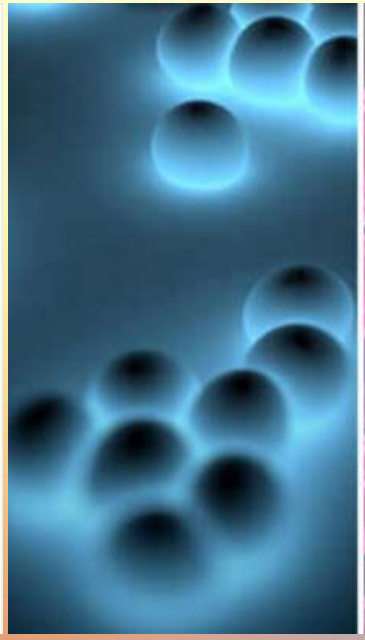
More similar characteristics make more smaller sub groups.

This is called 'Hierarchy'.



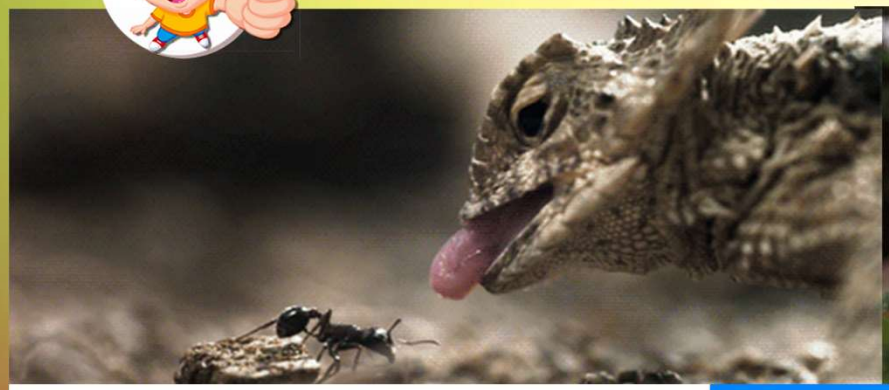
CLASSIFICATION AND EVOLUTION

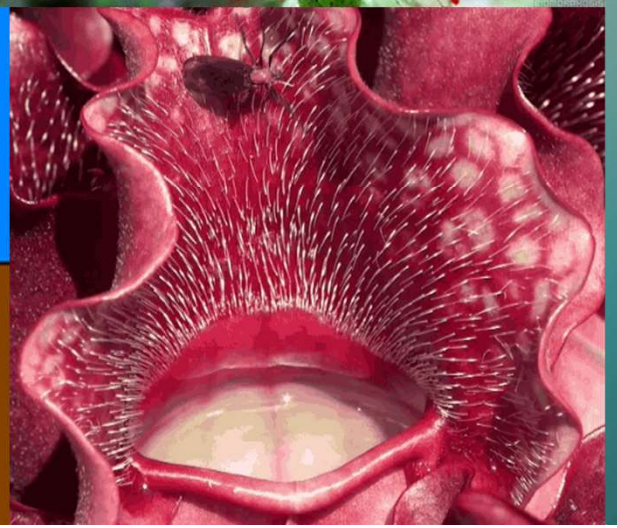
All living things are IDENTIFIED AND CATEGORIZED on the basis of their BODY DESIGN in form and function.



CLASSIFICATION AND EVOLUTION

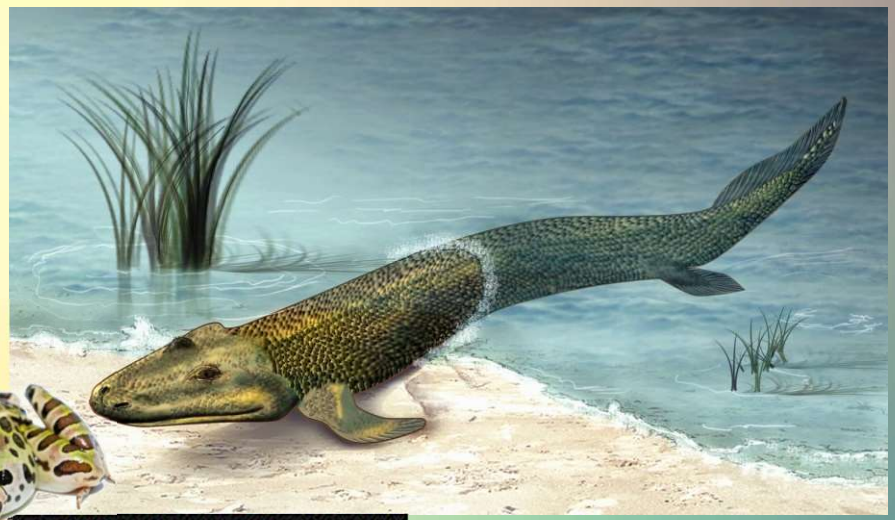
Some **CHARACTERISTICS** are likely to make more **WIDE-RANGING CHANGES IN BODY DESIGN** than others.





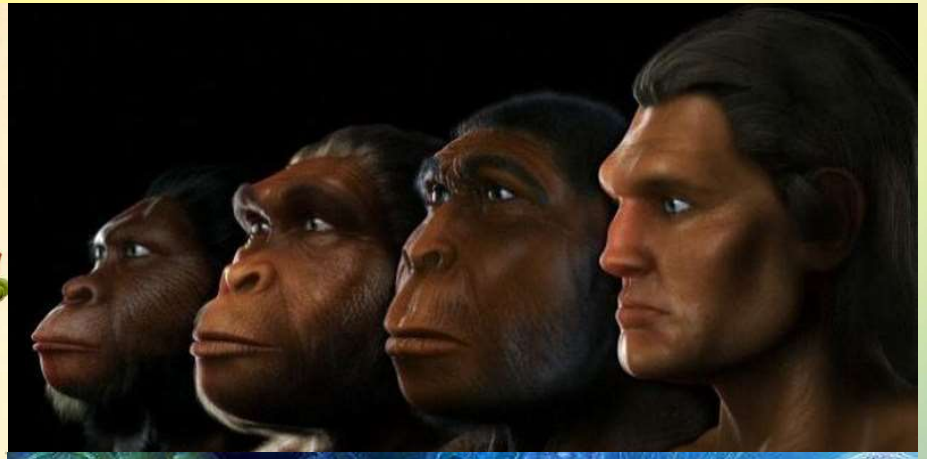
CLASSIFICATION AND EVOLUTION

There is a
ROLE OF TIME
in this as
well.



CLASSIFICATION AND EVOLUTION

So, once a certain body design comes into existence, it will SHAPE THE EFFECTS Of All Other Subsequent Design Changes, simply because it already exists.

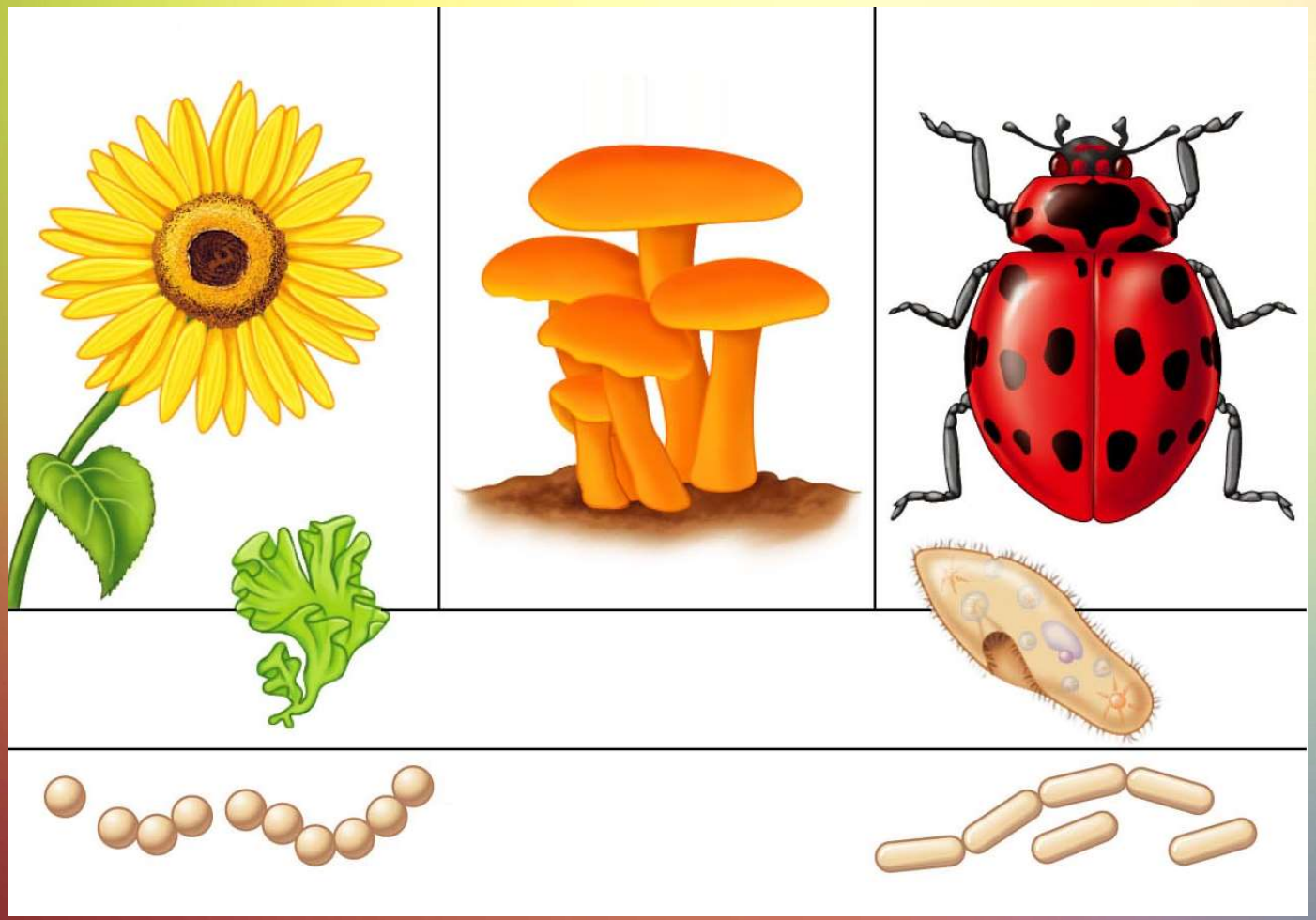


CLASSIFICATION AND EVOLUTION

Characteristics That Came Into Existence Earlier Are Likely To Be More Basic

THAN characteristics that have come into existence later.

CLASSIFICATION AND EVOLUTION



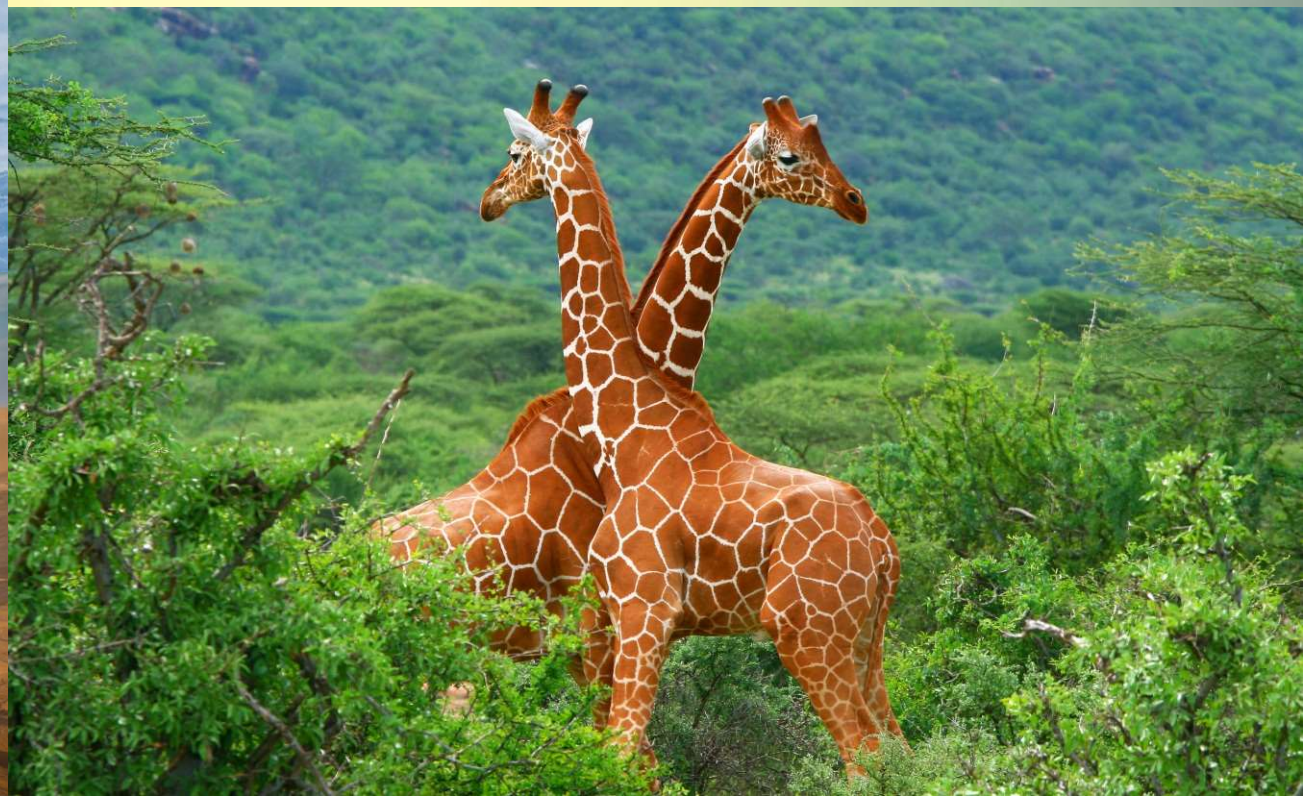
This means that the *Classification Of Life Forms Will Be Closely Related To Their Evolution*.

Most life forms that we see today have arisen by

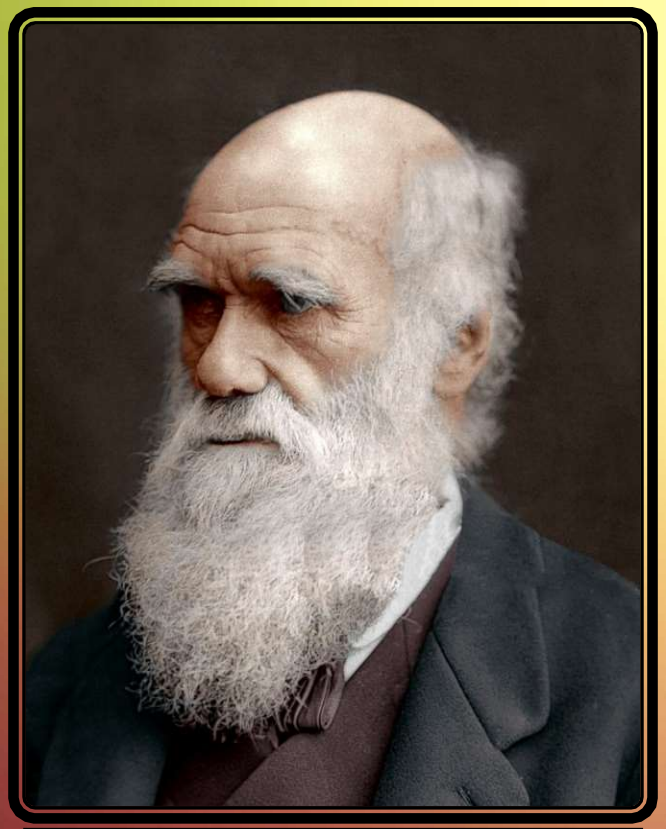
***An Accumulation Of Changes In Body Designs*.**

CLASSIFICATION AND EVOLUTION

These body designs *Allow The Organism Possessing Them To Survive Better*.

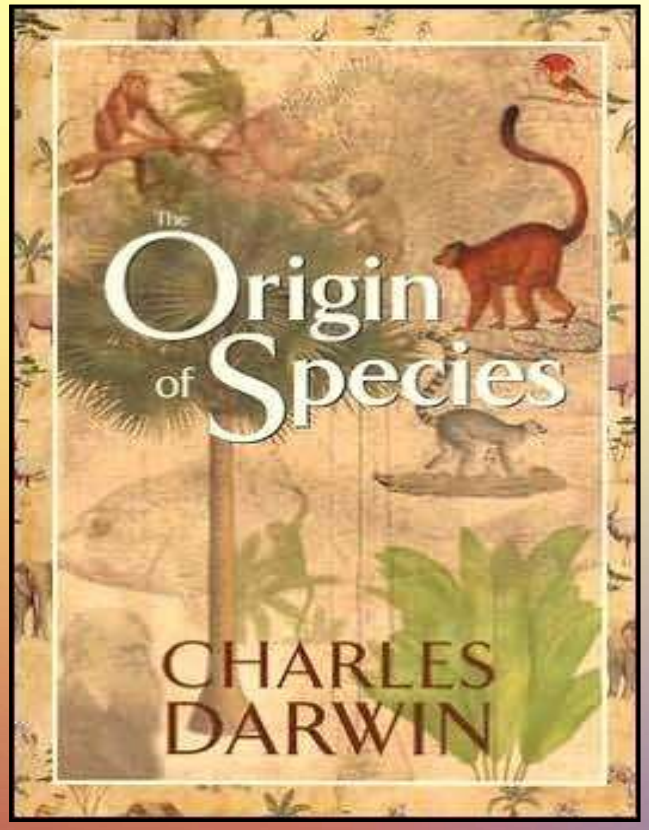


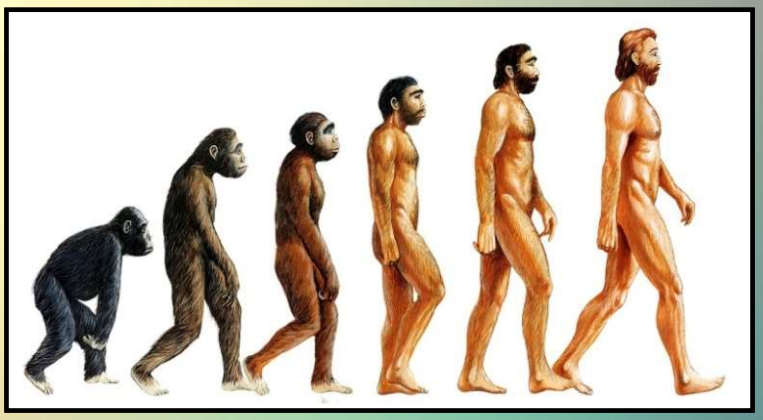
CLASSIFICATION AND EVOLUTION



Charles Robert Darwin

CHARLES DARWIN first described this IDEA OF EVOLUTION in 1859 in his book, The ORIGIN OF SPECIES.





CLASSIFICATION AND EVOLUTION

When we connect this idea of evolution to classification, we will find *some groups of organisms which have ancient body designs that have not changed very much*.

CLASSIFICATION AND EVOLUTION

We will also find *Other Groups Of Organisms* that

Have Acquired Their Particular Body Designs Relatively Recently.

CLASSIFICATION AND EVOLUTION

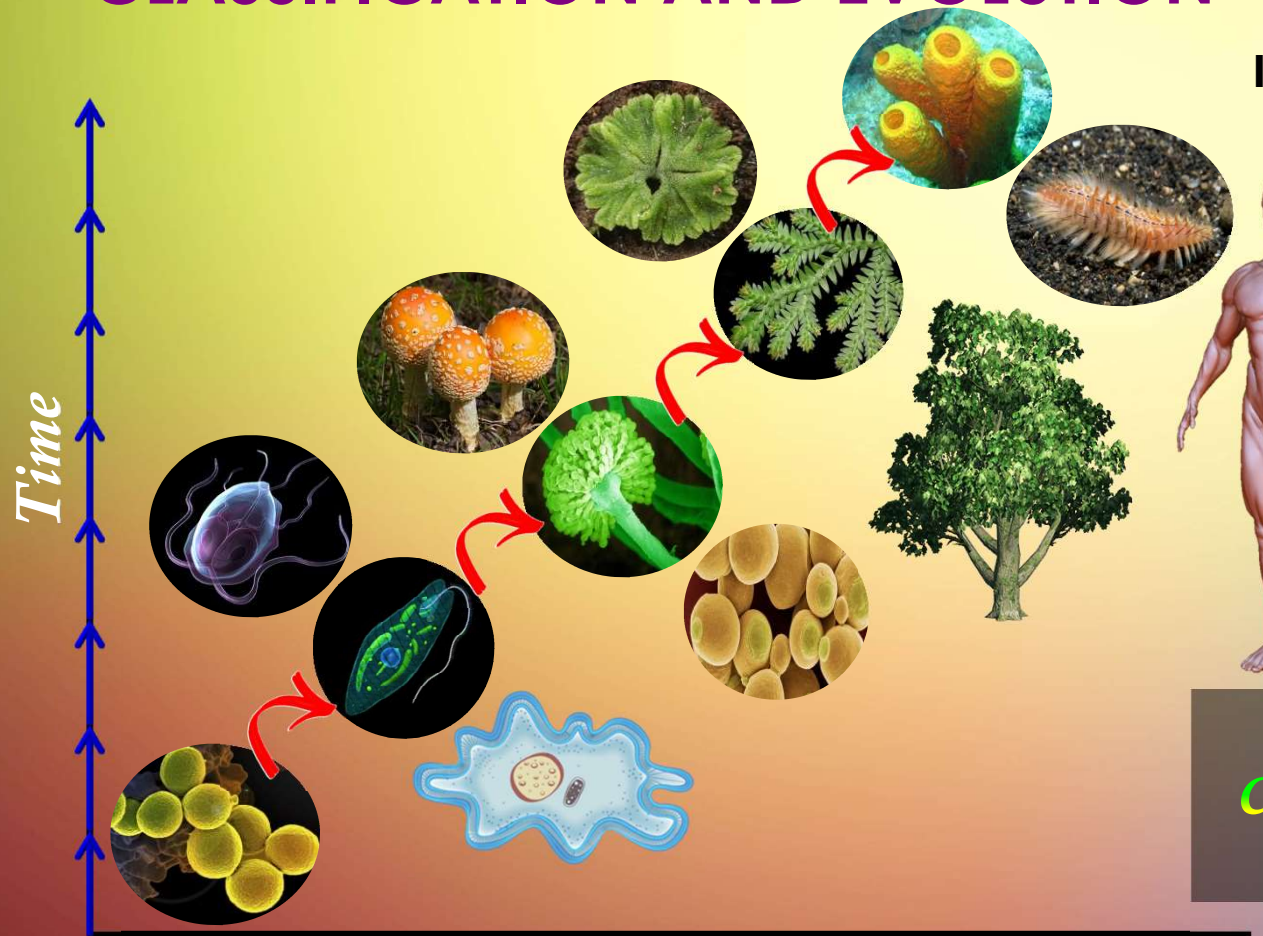
Those in the *first group* are frequently referred to as *'primitive' or 'lower'* organisms, while those in the *second group* are called *'advanced' or 'higher'* organisms.

CLASSIFICATION AND EVOLUTION

We can say is that some are *'Older'* organisms, while some are *'Younger'* organisms.

The terms 'primitive' or 'lower' and 'advanced' or 'higher' are not quite correct since they do not properly relate to the differences.

CLASSIFICATION AND EVOLUTION



It may not be wrong to say that *older organisms are simpler, while younger organisms are more complex.*

Since there is a possibility that *Complexity In Design Will Increase Over Evolutionary Time,*