

Cell Theory

Section A1.1

The cell is the _____
_____ of living things...



_____ things are different
from _____ things...

■ You are surrounded by life, but how would you define a living thing?

Does it use _____?

Does it _____?

Does it consume _____ and
_____?

■ **Organism-** _____

Characteristics of Living Things

....(a review)

- All living things:
 - are made up of _____ (organization).
 - _____ to the _____.
 - have the ability to _____.
 - _____.
 - _____ and _____.
 - perform _____ processes.



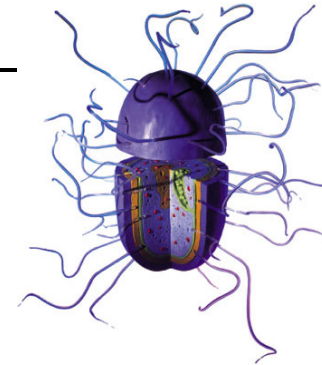
- **Metabolism** _____

Organization...

- An organism's body must be _____ which enables it to meet its needs.

- Some organisms are _____

- _____
- _____
- _____



- Some organisms are more _____ :

- When _____ parts of the organism performs different _____.
- Examples: Humans, dogs, fish, mushrooms, oak trees

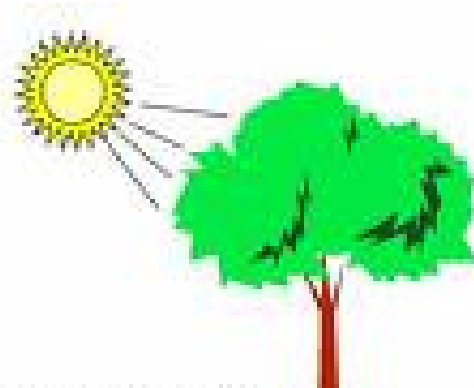
Needs for life...

- Organisms need _____, _____, and _____.

- All _____ comes from the _____.

- Some organisms use this energy _____
(_____)

- Others harness this energy by _____



- Materials needed:

- _____, _____, _____, _____

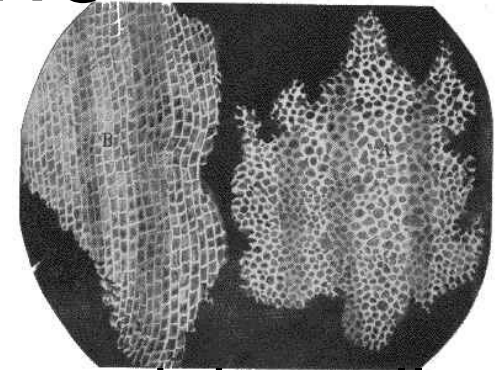
All living things are made up of cells....

- The cell is the smallest _____ of a living thing.
- If an organism is _____ all functions of life happen _____ that one cell.



- If an organism is _____, different cells have different _____ and they all work _____.

The microscope led to the discovery of cells.



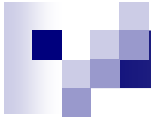
- 1660's – _____ discovered the cell
 - He looked at _____ under the microscope (30x)
 - He noticed little compartments, which he named after the little rooms that monks lived in... " _____ "
- 1670's – _____ described microorganisms in pond water
 - He looked at _____ under the microscope (300x)
 - He noticed that the water was full of _____



Cell Theory...

- With the invention of the _____ and the contributions of many scientists, a very important question was answered in the _____. The question was:

_____?

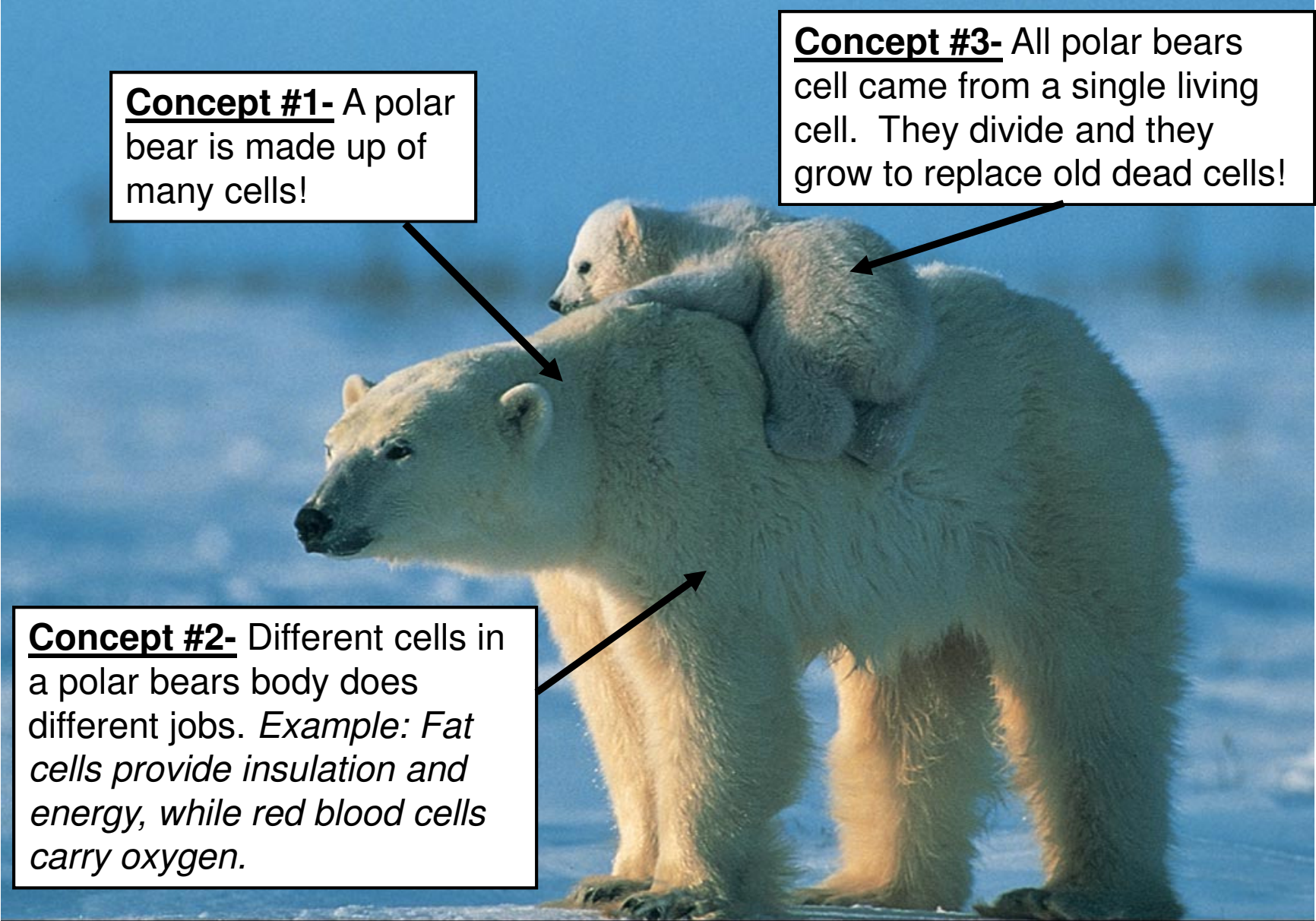


There are three concepts to the cell theory...









Concept #1- A polar bear is made up of many cells!

Concept #3- All polar bears cell came from a single living cell. They divide and they grow to replace old dead cells!

Concept #2- Different cells in a polar bears body does different jobs. *Example: Fat cells provide insulation and energy, while red blood cells carry oxygen.*