# SURVIVAL NEEDS OF ORGANISMS

# INTRO ACTIVITY You are assigned an organism.

- Think to yourself what your organism needs to survive.
- Get with someone that is the same organism with you and share your ideas.
- Get together with your group of organisms and share your ideas.
  - Have someone in your group write down the list of what you came up with.
  - Can you put these into categories?

Each group will share with the class their basic needs for survival.

# BASIC NEEDS OF A LIVING ORGANISM

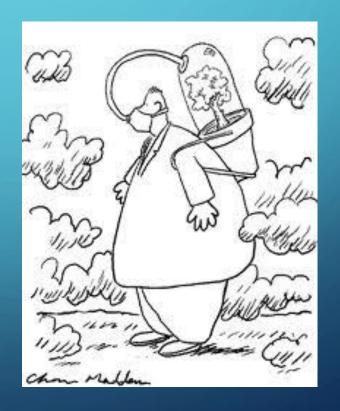


- Air
- Water
- Sunlight
- Food (Nutrients)
- Habitat

- AIR- OXYGEN

  Oxygen is produced by green plants and certain micro-organisms
- This oxygen is used by animals and most other micro-organisms
- Organisms use air/oxygen in different ways
  - You and other land organisms get oxygen from air.
  - Fish use oxygen in the water.
  - Marine mammals come to surface for oxygen.
  - Green plants use carbon dioxide, water and sunlight to make food.

• Plants and animals can't survive without oxygen



### WATER

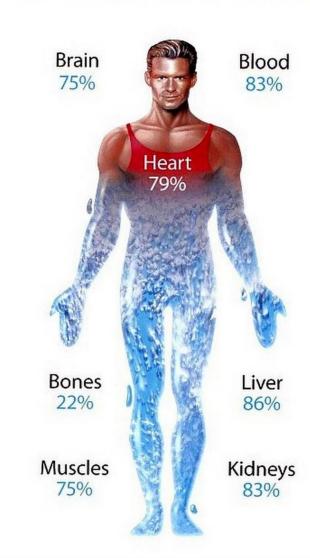
- O Most living things contain between50 and 90 % water.
- O Without water, you could only live for a few days.
- o Organisms that live in dry environments such as cacti, have methods for **storing** moisture in their stems or leaves.
- O Water carries nutrients from one place to another in an ecosystem

Without water, NO ORGANISM
 WOULD SURVIVE



### Water % of Human Body

o You are about two-thirds water.



### **NUTRIENTS-FOOD**

### Nutrients

- Substances required for healthy growth
- Found in foods and soil
- Provide energy for growth, development and reproduction







- > How organisms get nutrients varies
  - Plants use the sun to make their own food
  - > Aphids feed on plants
  - > Spiders and birds eat aphids
  - ...the Sun is passing energy from one living thing to another...

### LIGHT

OSunlight required for photosynthesis

oWithout light, plants would not be able to convert solar energy into the chemical energy needed to survive

Photosynthesis provides
 energy to ecosystem
 not



- Forest canopy vs. forest floor
- Deep water vs. surface water

### HABITAT- A HOME

OA place to live

ORequired to be the right size and have the right conditions

oConditions include

Nutrients and energy

**o Water** 

o Air

**O Temperature** 

OUsually habitats are shared between many organisms

o Coral reefs- plants, animals and

Components of a habitat

- Food
- Water
- Shelter
- Space

 These are required to be in an arrangement appropriate to the animals needs

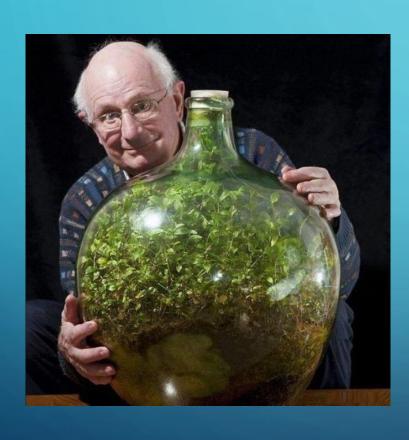
# SUMMARIZE YOUR KNOWLEDGE

Need of organism	Two examples of how organisms meet this need

## **ACTIVITIES**

- Habitat Sit- with notes
- Next Days
- Habitat Tracks
- Habitat Rummy 2 days
  - Library for one day

# COULD THE NEEDS OF A LIVING ORGANISM BE MET IN THIS???



- Is there air?
- Is there water?
- Is there light?
- Is there nutrients
- Is there a habitat?

More info