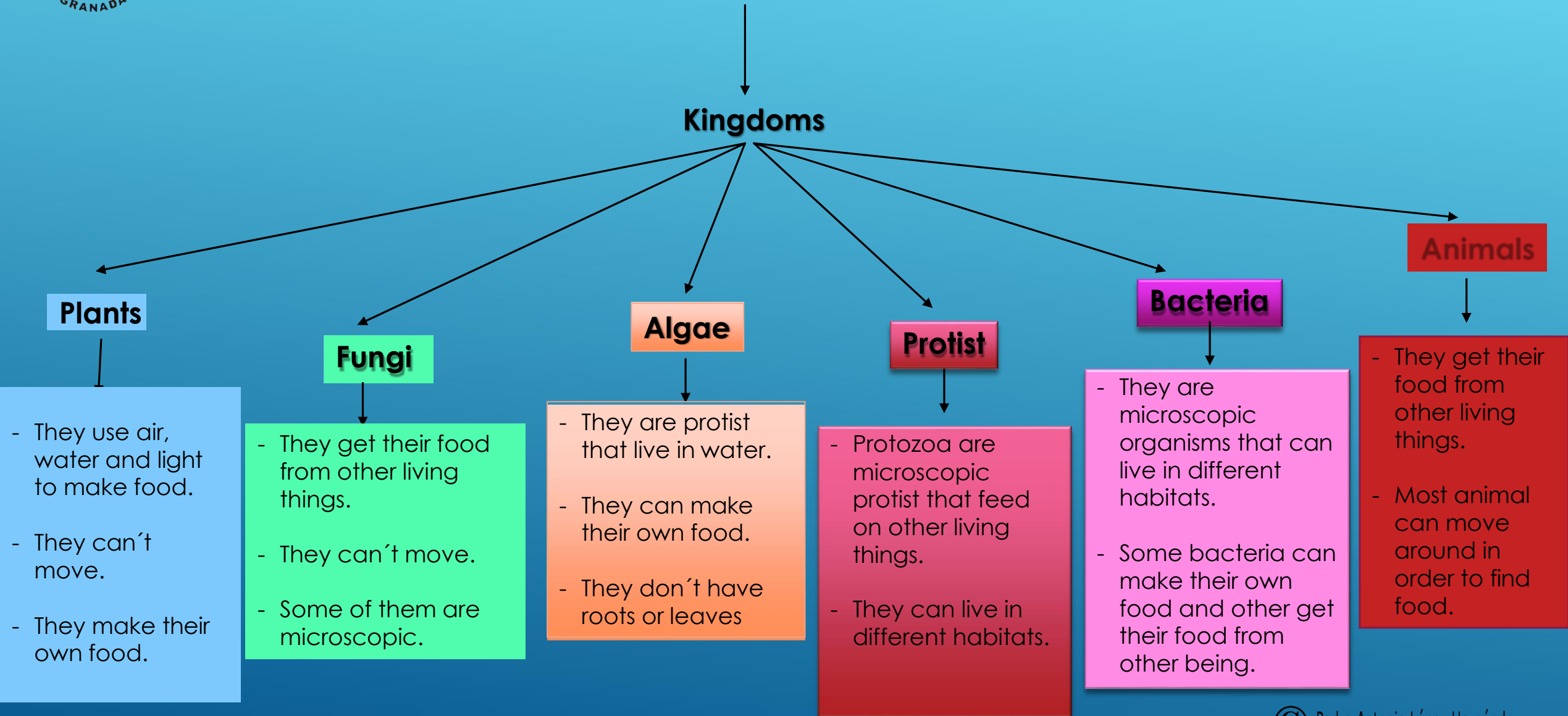


UNIT 1. LIVING THINGS

4th grade / Natural Science

CLASSIFYING LIVING THINGS



THE PLANT KINGDOM

Parts of the plant



Roots

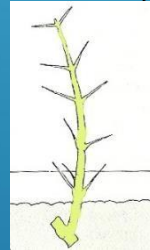


(They **grow underground** and they **keep the plant fixed in one place**)

They **absorb water and minerals** from the **soil to make food**

Stem

*(In one tree it is called **trunk**)



They **support the plant (branches and leaves).**

It carries water and minerals from the roots to the **leaves**

It transports the nutrients to other parts of the **plant.**

Leaf (S) Leaves (P)

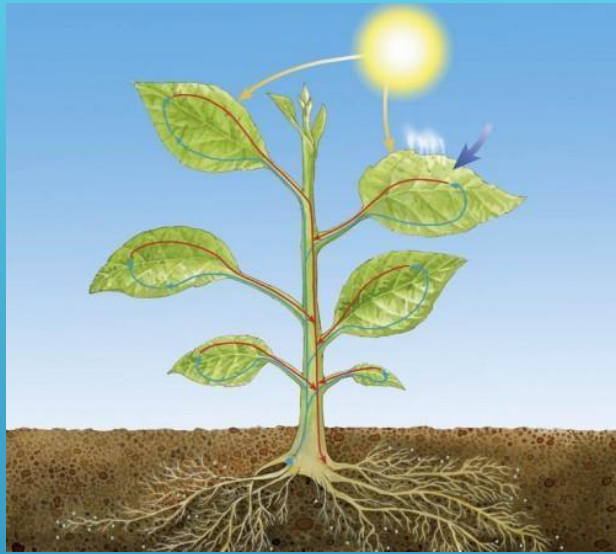


They make food from the plant. They turn water and minerals into nutrients.

Many leaves have a:

Petiole

Blade



THE VITAL FUNCTIONS OF PLANTS

Nutrition

Photosynthesis

Plants **absorb sunlight, carbon dioxide, water and minerals**

They **release oxygen** into the air

Respiration

Plants **absorb oxygen** and they **release carbon dioxide** into the air

Interaction

Some plants **move toward sunlight**

Reproduction

Plants can reproduce **by seeds**

Plants can reproduce **by one piece of the same plant**



PLANT CLASSIFICATION



“We classify plants depending on how they look and feel and how they perform their vital functions”

Flowers

It is the reproductive organ of most plants



Flowering plants

They **reproduce** through **flowers, fruits or seeds.**

Non-flowering plants

They **don't have flowers, fruits or seeds but reproduce by spores**



Stems

We also classify plants according to the look and feel of their stems

Woody plants

They have a **hard stem.** They have two groups:

- **Trees**
- **Bushes**

Herbaceous plants

They have a **thin, flexible stem.**

They are: **herbs or daisies.**



THE ANIMALS KINGDOM

“Vital functions in order to live and grow”



Nutrition

Animals need **energy** that comes **from food**.
Food contains **nutrients**.

In the **process of nutrition**, animals transform **NUTRIENTS** into **ENERGY**

There are three types of animals according with their food

- Herbivores** → They only eat plants
- Carnivores** → They only eat other animals
- Omnivores** → They eat plants and other animals

Interaction

The ability to respond to the environment.
For example:
When one animal is hot, he moves into the shade

Reproduction

“Living things can make other living things”



Viviparous → They are born alive from their mothers. For example: Dogs.



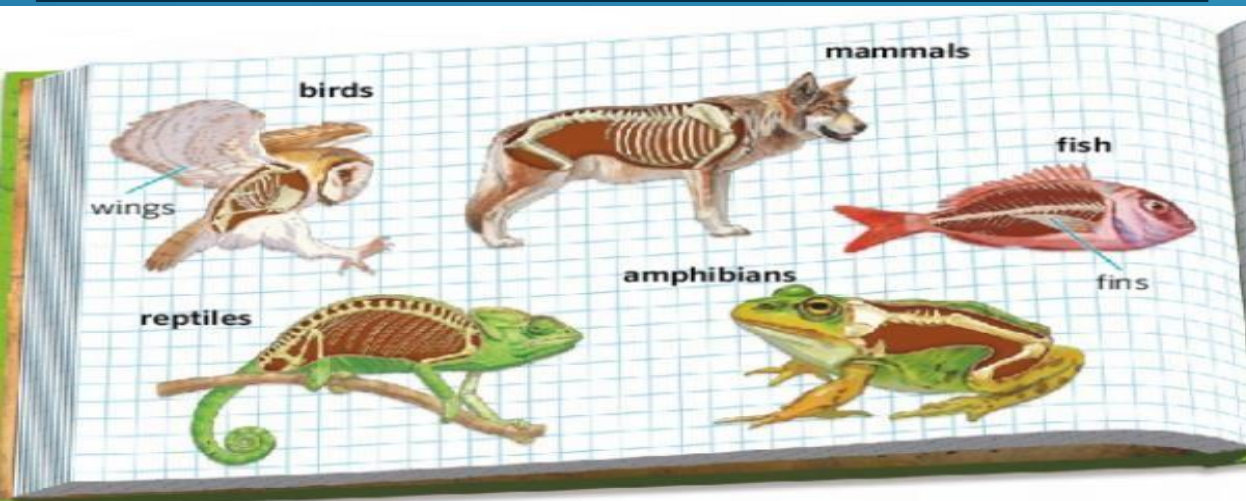
Oviparous → They are born from eggs. For example: Ducks

ANIMALS CLASSIFICATION

Vertebrates

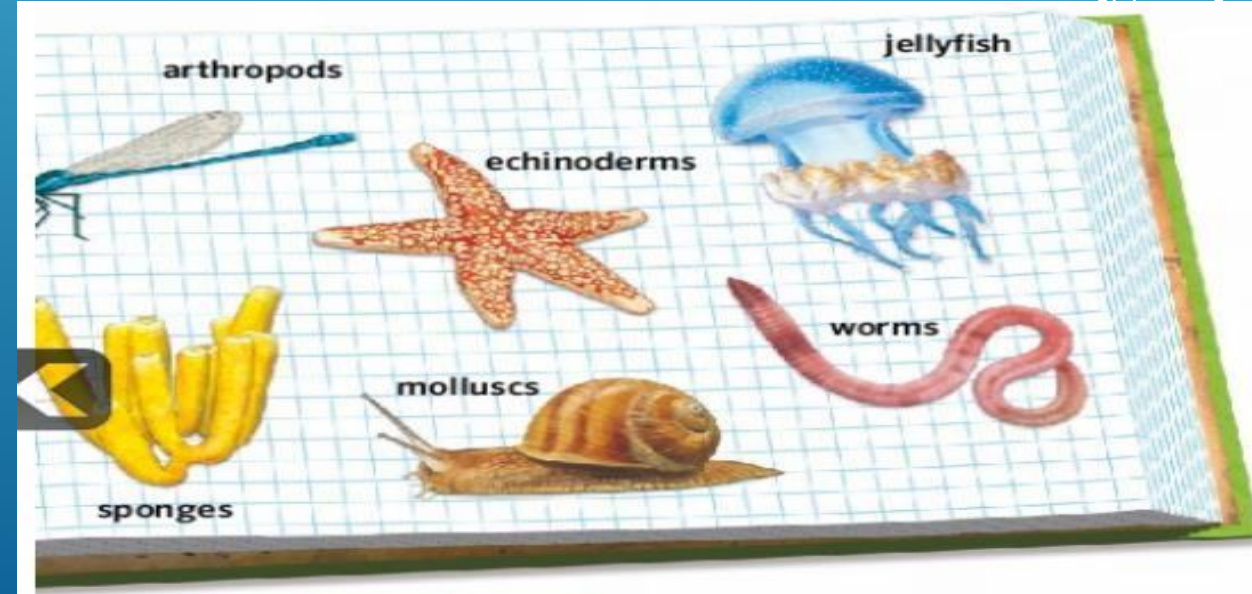
"Animals with a backbone"

- They have **an internal skeleton** with bones that support the body and protect the internal organs such as the heart or the lungs.
- Some vertebrates are **viviparous and other are oviparous**.
- All vertebrates **have head, body and limbs**.
- The **spinal column or backbone** has many individual bones that are joined together.



Invertebrates

- **Animals that don't have a backbone.**
- **They don't have an internal skeleton or bones.**
- **All invertebrates are OVIPAROUS.**



Ecosystem



“All the different living things that interact in a particular place”

Habitats

- They have a particular temperature, light, air, water and type of soil found there.

“ THESE CONDITIONS ARE KNOWN AS AN ENVIRONMENT”

Individuals and population

- Living things live together in group.
- They live with other animals of the same species.

Communities

- The group of all populations that share a habitat.
- Plants, animals and other living things can be part of the same community.

Food chains

- They show the feeding relationships between the different organisms within an ecosystem.

