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**X. Living things have DNA in their cells**

\* **DNA**- deoxyribonucleic acid

\* **DNA-**  a long molecule that contains the unique instructions for an organism’s cell growth, reproduction, and processes necessary to survive.

\* The instructions on DNA contain a code used to make **Proteins.**

* Humans make thousands of different proteins that carry out many different and important functions in the body.

**IX. Adapt:**

* **Adaptation-** physical trait or structure on an organism or behaviors that help an organism to survive in their own, unique, or particular environment.

**Example:**

* Rigid edge of a leaf (structure)
* Thick fur of an animal that lives in the arctic

(structure)

**VII. Exchange of Gases:**

* Animals require **OXYGEN** and release carbon dioxide (CO2) as waste.
* Plants require **CARBON DIOXIDE** (CO2) and release oxygen.

**VIII. Movement:**

* All animals move at some stage in their life cycle.
* Plants move in the direction of sunlight or other resources. This is called **phototropism.**

**VI: Use of Energy:**

* All living things must find and use ENERGY.
* Plants and some bacteria (producers/autotrophs) produce their own food using light, H2O, and CO2 in the process called **PHOTOSYNTHESIS.**
* Animals (consumers/phototrophs) must consume plants and other animals as energy sources.
* Both use **glucose** to create an energy-containing molecule called **ATP** in a process called **Cellular Respiration.**

**V. Homeostasis:**

- an organism’s ability to maintain steady internal conditions when outside conditions change.

Example: sweating when it’s hot outside