



Adaptations Design with Robots



WHAT ARE YOUR BASIC NEEDS?

- 1. FOOD**
- 2. WATER**
- 3. SHELTER**
- 4. OXYGEN**

Animals have specialized body parts (ADAPTATIONS!) that help them get their basic needs



http://www.fws.gov/pacific/highlights_archive/Feature.cfm?id=13682

HEREDITY



**Adaptations are passed down
from parents to offspring**

Adaptations come in many forms

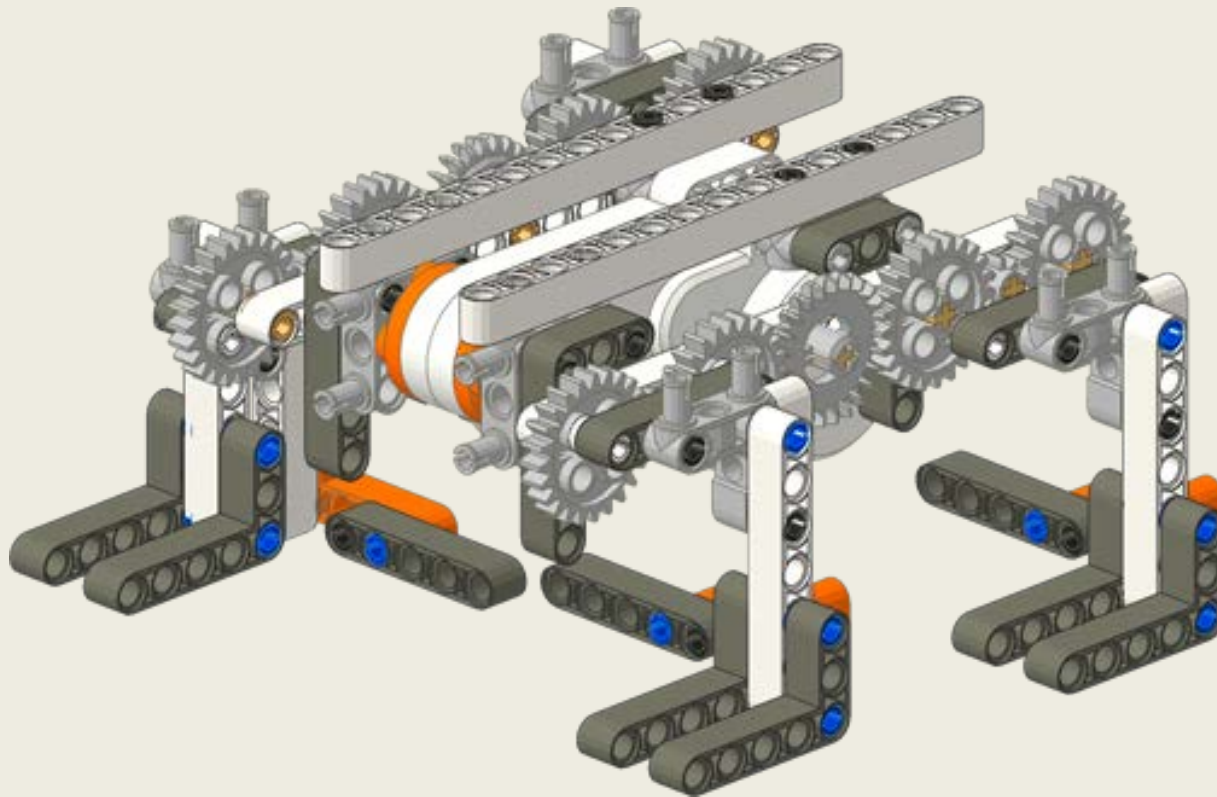
**Today we will learn about one way
adaptations help:**

LOCOMOTION

LOCOMOTION



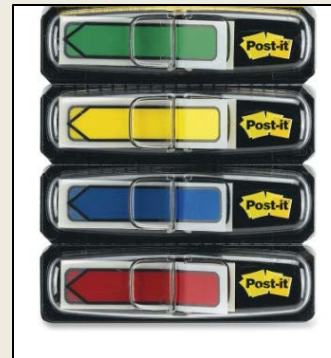
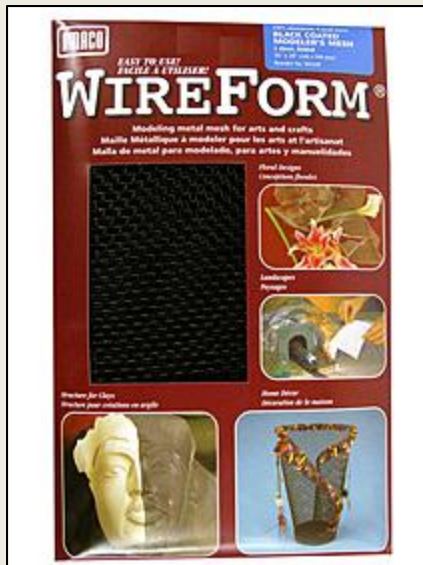
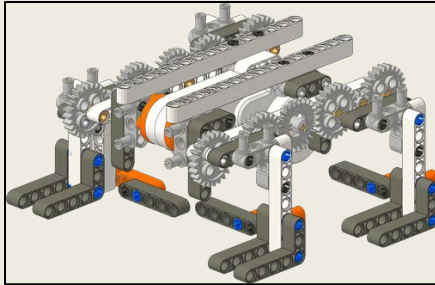
Four Legged Walker Bot



SnowBot



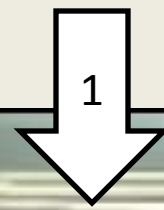
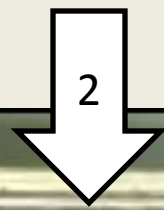
MATERIALS

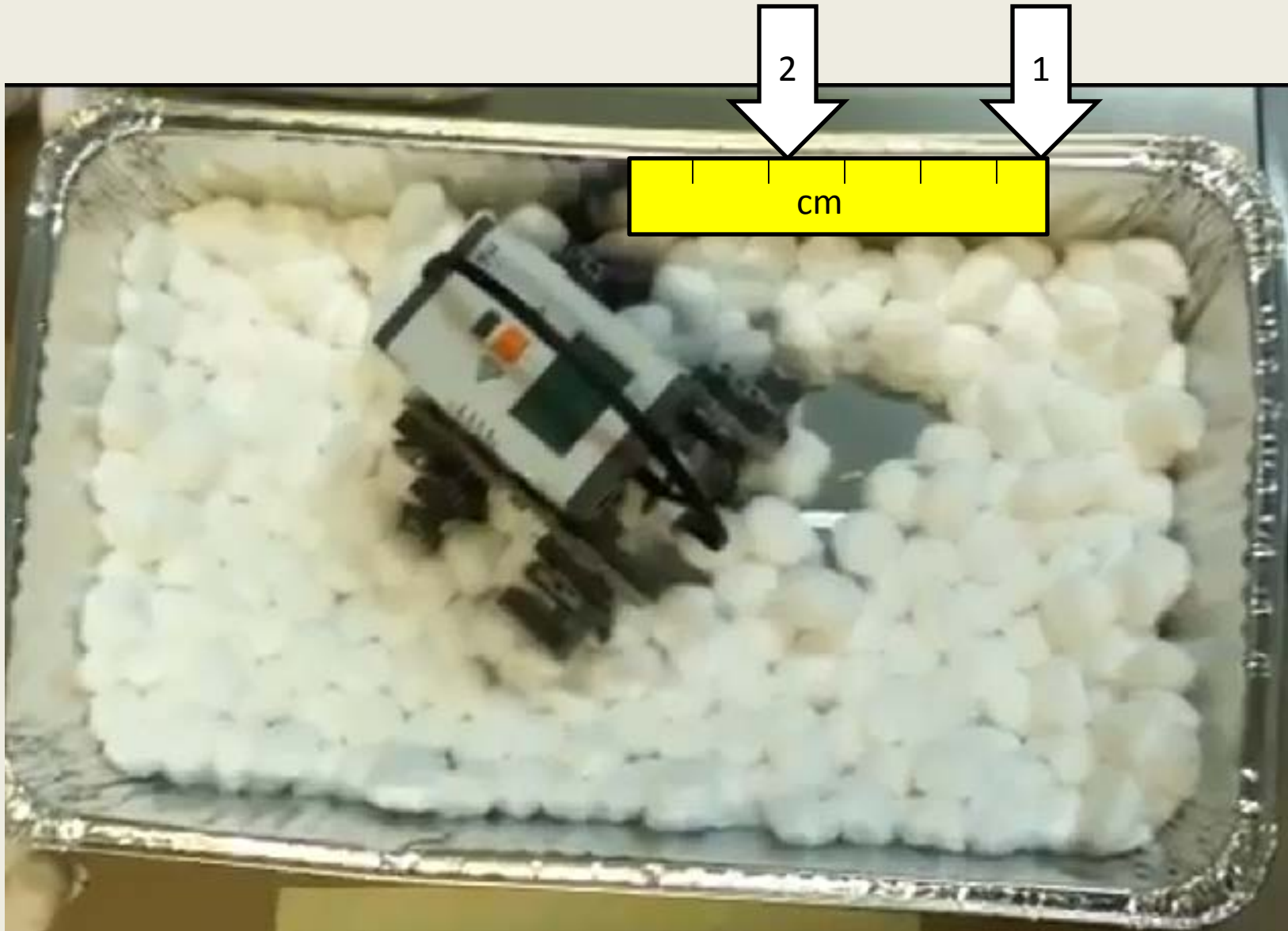




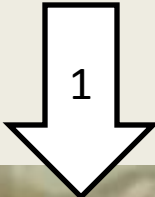
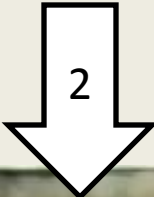
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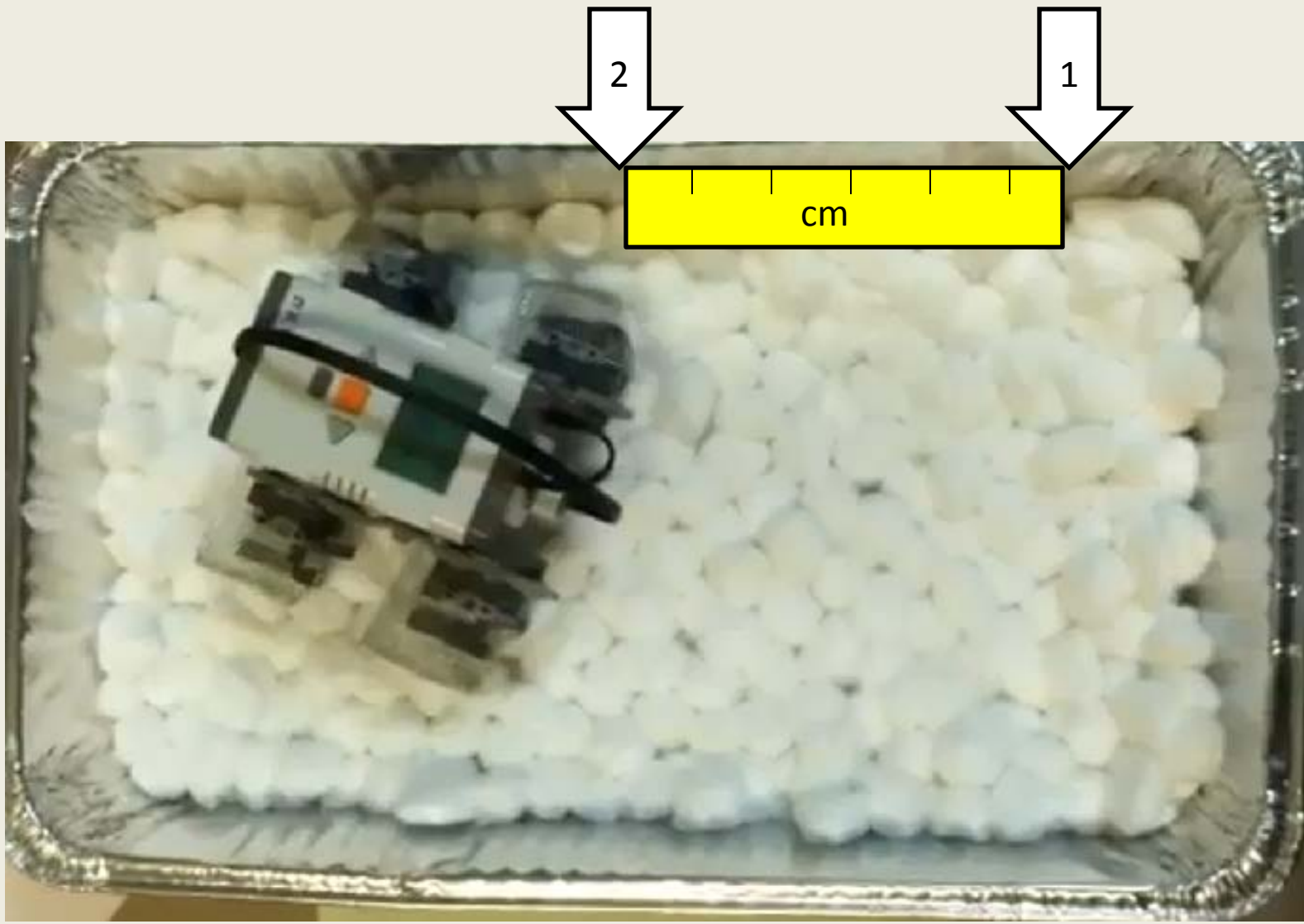












What The Activity Demonstrates

- Animals have specialized body parts that help them survive in the wild
- Locomotion
- Measuring in centimeters
- Biomimicry
- Pressure ($\text{Weight} / \text{Area}$)
- Engineering Design Process

Questions?