- *Example:* Polar bears have a thick layer of fur and blubber to survive in the freezing Arctic.

4. **Nocturnal Behavior (Behavioral):**
    - *Explanation:* Activity during the night for better survival chances.
    - *Example:* Hedgehogs are nocturnal, minimizing exposure to daytime predators.
5. **Desert Adaptations (Physiological):**
    - *Explanation:* Efficient water use and tolerance to high temperatures.
    - *Example:* The kangaroo rat can extract water from the seeds it eats, reducing its need for external water sources in the desert.
6. **Echolocation (Behavioral):**
    - *Explanation:* Emitting sound waves and interpreting echoes for navigation and locating prey.
    - *Example:* Bats use echolocation to navigate and hunt in the dark.
7. **Aquatic Adaptations (Structural):**
    - *Explanation:* Features that enhance survival in aquatic environments.
    - *Example:* Fish have gills for extracting oxygen from water, allowing them to breathe underwater.
8. **Mimicry (Structural/Behavioral):**
    - *Explanation:* Resembling another organism to gain protection or advantages.
    - *Example:* The stick insect mimics the appearance of a twig, making it harder for predators to spot.

Examples Across Environments:

1. **Desert Adaptations:**
    - Nocturnal activity to avoid extreme daytime temperatures.
    - Efficient water conservation mechanisms, such as concentrated urine.
2. **Arctic Adaptations:**
    - Insulating fur or blubber to withstand cold temperatures.
    - Large paws and claws for effective movement on snow and ice.
3. **Forest Adaptations:**
    - Camouflage for concealment from predators or prey.
    - Arboreal adaptations, such as prehensile tails or grasping feet for tree-dwelling.

Importance of Adaptations: