

## Discover: Local Lens

The purpose of this exercise is to develop your ability to identify the abiotic (physical) and biotic (living) factors—i.e. the local context—that drive adaptations in various species, and begin to consider the system in which a given organism exists.

- Choose an organism you can observe. Something that is stationary or slow-moving will work best. Spend some time identifying its interesting features, behaviors, habitat conditions, and relationships with other organisms. Use inductive reasoning to put together what you observe, determine what you don't know, and form hypotheses.
- Sketch a diagram with your organism at the center and your observations radiating out around it.
- For each of your observations also identify relationships to contextual factors (abiotic and biotic) that may influence them. Think about the organism's needs related to shelter, food, water, communication, mating, predators, etc.

Here is an example for an elephant. Everything within the circle is observable; outside the circle are the inferred contextual factors. Complete your own diagram on the next page.

