

## Flight, Freeze, or Fight?

#### **Overview**

The horned lizard in this game is trying to get to the ant mound buffet, but it encounters a lot of potential foes along the way! Students will help the horned lizard safely make it across the landscape by choosing the correct method of defense a horned lizard might deploy in response to each of the potential foes.



#### **Materials**

This activity can be performed with or without a tabletop. The materials needed will vary depending on which method you choose.

- Plastic figurines OR puppets/stuffed animals of:
  - Horned lizard, hawk, snake, coyote, roadrunner, and rabbit (or other nonpredator)
- Laminated action cards with text and illustration:
  - Squirt Blood
  - Do Nothing (Not in Danger)
  - Puff Up
  - Run Away
  - Stay Still & Use Camouflage
- Plastic corrugated board (for tabletop version)
- Paint (for decorating plastic board to look like horned lizard habitat)

#### **Directions**

- 1. To prepare, print and laminate the action cards.
- 2. Preface the game with a short talk about horned lizard life history.
- 3. Advance the horned lizard through the game using a narrative story. If using a tabletop version, the horned lizard can move along a path as if on a game board. As the horned lizard moves through the game, make it encounter, one at a time, one of the six potential foes. Each time it encounters a potential foe, display the action cards and ask the students how the horned lizard might evade the potential predator. If the students choose the incorrect action, prompt them with the cards again to have them choose the secondary action a horned lizard might take if their first line of defense doesn't work.
- 4. Ask questions to help students understand how each of the predators spot their prey, and why the particular horned lizard defense can be effective. Emphasize that despite this array of defense mechanisms, horned lizards are not invincible!
- 5. Ask students what other animals are predators of horned lizards. Examples of other predators include cats, dogs, ground squirrels or mice, and even humans.
- 6. Remind students that these situations are extremely stressful for horned lizards, and horned lizards may view humans as potential predators. Horned lizards, like all wildlife, should be respected by observing them from a distance to reduce their stress.



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## **Example Narrative**

The horned lizard is on the hunt for a good ant mound! As it walks across the desert, it has to remain vigilant because a lot of animals love to eat horned lizards. Uh oh, at the base of this cactus it spots a rattlesnake! Do you think the rattlesnake would eat the horned lizard? You're correct, the horned lizard should not stay still and do nothing because the rattlesnake does pose a threat! How should the horned lizard try to avoid being eaten? Good job, you chose the right action! This time the horned lizard was fast enough to run away from the rattlesnake. The horned lizard is continuing on its way when all of a sudden a coyote pounces on it! Does the coyote just want to play or do you think it is trying to eat the horned lizard?

Make the narrative your own! It can be adjusted for the local ecosystem, species, and predators.

### Key

Some of these predators might provoke more than one response from the horned lizard! In addition, if the wrong action is chose and the horned lizard is almost "eaten" by the predator, you can prompt students into choosing a secondary defense action when the first one fails. For example, if squirting blood doesn't work and the horned lizard is grabbed by a predator, it could puff up to drive its horns and spikes into the soft tissue of the mouth.

Animal	Action
Coyote	Squirt blood and then run away
Hawk	Stay still and use camouflage
Snake	Run away
Roadrunner	Puff up, run away
Rabbit	Do nothing (not in danger)