

Target Grade: 5

Science Standard 5, Objective 2

Describe how some characteristics could give a species a survival advantage in a particular environment.

Objective: Students will investigate the characteristics that give them a survival advantage over other animals.

Materials: blindfolds, sock-ball, jackets with zippers, shoes with laces

Time: 40 minutes

In this activity, students will participate in an "Adaptations Olympics" to explore some of the different adaptations that humans have. An adaptation is a characteristic or behavior that a plant or animal possesses that helps it to survive and thrive where it lives.

Lesson Plan:

1. Explain that the students will be involved in several activities that require the use of special adaptations that humans have. Divide the class into three groups, and have each group rotate through the three events. Each event should take about 5 minutes.
2. **Event 1: Four-fingered Fumbling:** Our opposable thumbs are one adaptation that makes it easy for us to use our hands for many tasks. Imagine trying to use a fork or button a jacket if we had hooves like deer or elk. Have the students try a variety of activities without using their thumbs: writing down numbers 1 through 10, zipping up jackets, tying shoes. You can either pair up the students and have one person from each pair do the activities without their thumbs, or have everyone do the activities and compare how long it takes them to do the activities with or without thumbs.
3. **Event 2: Binocular Vision:** This activity illustrates how important our two eyes are, giving us binocular vision and helping us navigate and see where things really are. Hand out a blindfold and have each participant cover one eye with the blindfold. Have the group stand in a circle and toss a soft ball, like one made from a couple of socks, to each other. They should find hand-eye coordination is difficult with only one eye.
4. **Event 4: 50-yard Walk or Crawl:** Our skeletons are built for moving on two legs, not four. Select half the group to race on their hands and feet, and the other half to race on just their legs. Have the groups switch and do the race again.
5. After the groups have completed all the events, gather them back together and talk about what adaptation made each event easy or difficult.

