Who has the Advantage? Lab

3rd Grade PSI

Teacher’s Notes:

- This lab requires a good deal of planning beforehand. Before this lab, you will need to decide on the best space where students can complete the tasks involved in the lab. Students will be completing these tasks either as part of a group or as an individual, depending on which they are assigned to. The tasks are as follows:

  - Racing: Students will race from one point to another.

  - Hiding: Students will try to hide from you.

  - Keeping people out of (protecting) a big area: Students will try to protect a designated territory from other classmates getting in.

  - Playing tag (the tagger represents an illness): Students will try to get away from a tagger who represents sickness. Students who are tagged are out and infect anyone they are touching.

  - Collecting giant “food”: Students will try to retrieve a large object that represents food and bring it back to their “home”. (You will have to find a good object for this, that is difficult for an individual person to carry.)

- Before the lab you will also need to decide who is going to be in a group and who will be alone, or decide how this will be selected on the day of the lab.

- This lab requires you to lead students throughout, giving them instructions when to begin each task. It is clearly written in the lab procedures that they must wait for your instructions on each task.

- The goal of this lab is for students to see that working in a group gives members an advantage in some tasks, but individuals have the advantage in other tasks. You can tweak that activities and decide on the space where students complete task to best achieve this objective. You can also change the order of the tasks if you will be completing the tasks in multiple locations it is convenient to do so.
**Answer Key**

**Answers to the Lab Questions:**

1. Who had the advantage racing?  *solitary*  
   Why?  
   *Because racing in a group means you can only go as fast as the slowest individual.*

2. Who had the advantage hiding?  *solitary*  
   Why?  
   *It is easier to find a place for an individual to hide than it is to find a place where a whole group can hide.*

3. Who had the advantage keeping others out of their territory?  *group*  
   Why?  
   *A group has more members to help keep others out. One person cannot protect a large space very easily.*

4. Who had the advantage keeping away from illness?  *solitary*  
   Why?  
   *Once one member of a group got sick, all the others got sick. A group also cannot move as fast to get away from illness.*

5. Who had the advantage bringing home large food?  *group*  
   Why?  
   *It is difficult for an individual to carry a large object.*

**Answers to the Conclusion Questions:**

1. How were the tasks you completed in this lab similar to tasks that animals might do in nature?  
   *In nature animals have to move (like racing), hide from other animals, keep other animals out of their territory, stay healthy, and bring home food.*

2. How were the tasks different than the things animals do in nature?  
   *Animals have to complete these tasks out of obligation to survive; we completed them more as an activity. Also, even animals that live in groups probably do not always complete every task as a group like we did.*

3. Does being part of a group always mean having an advantage? Why or why not?  
   *No. In some tasks being a solitary individual has that advantage over being in a group.*