

Questions

Is there a disadvantage to working alone? Is there an advantage to working in groups?

Materials Needed

For this activity, you will need the following materials:

- a pencil (do not use ink)
- the ability to read and follow directions

Points To Remember

Unless otherwise explicitly instructed, your responses must not contain personal opinions. All of your responses must be in the form of complete sentences; the fewer sentences the better. Spelling and grammar must be correct. Effective communication is essential for both learning and doing science.

Don't ask instructors for answers to questions posed in activities; you won't get them. You may ask questions regarding the clarity of the instructions or the soundness of your reasoning. If you encounter a word you are not familiar with, don't ask the instructor about it. Look it up first in your glossary and then a dictionary or some other source if necessary. Ensure that all definitions are unanimously agreed upon before proceeding. There are, of course, sound reasons for these policies. See the instructor if you have questions, but do not complain about these policies. They are not negotiable.

1 Boarding A Plane

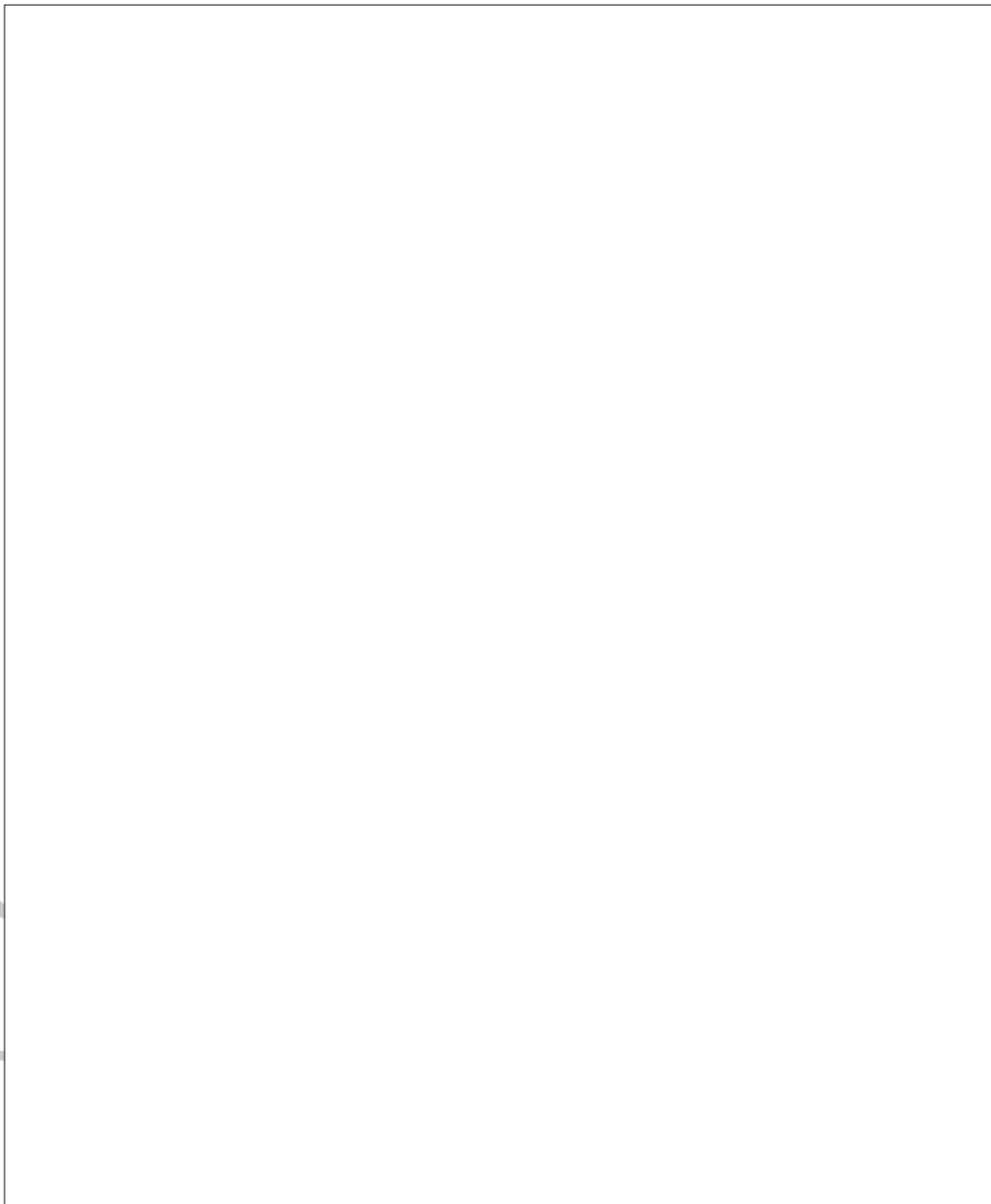
1.1 Background Information

You're one of a hundred people standing in line to get onto an airplane that has 100 seats. There's a seat for every person who's in line, and each of you has a boarding pass for your assigned seat. The first person to walk onto the plane drops his boarding pass and, instead of picking it up, decides, "I'm just going to sit anywhere." He takes a seat at random.

Now, each remaining passenger will board the plane in order and take either his/her assigned seat or, if that seat is taken, that passenger will take any seat at random. Because you are such a kind, generous, and accommodating person, you are the last passenger to walk onto the plane. Obviously, there's going to be one seat left, because everyone else is sitting in his correct seat, or not.

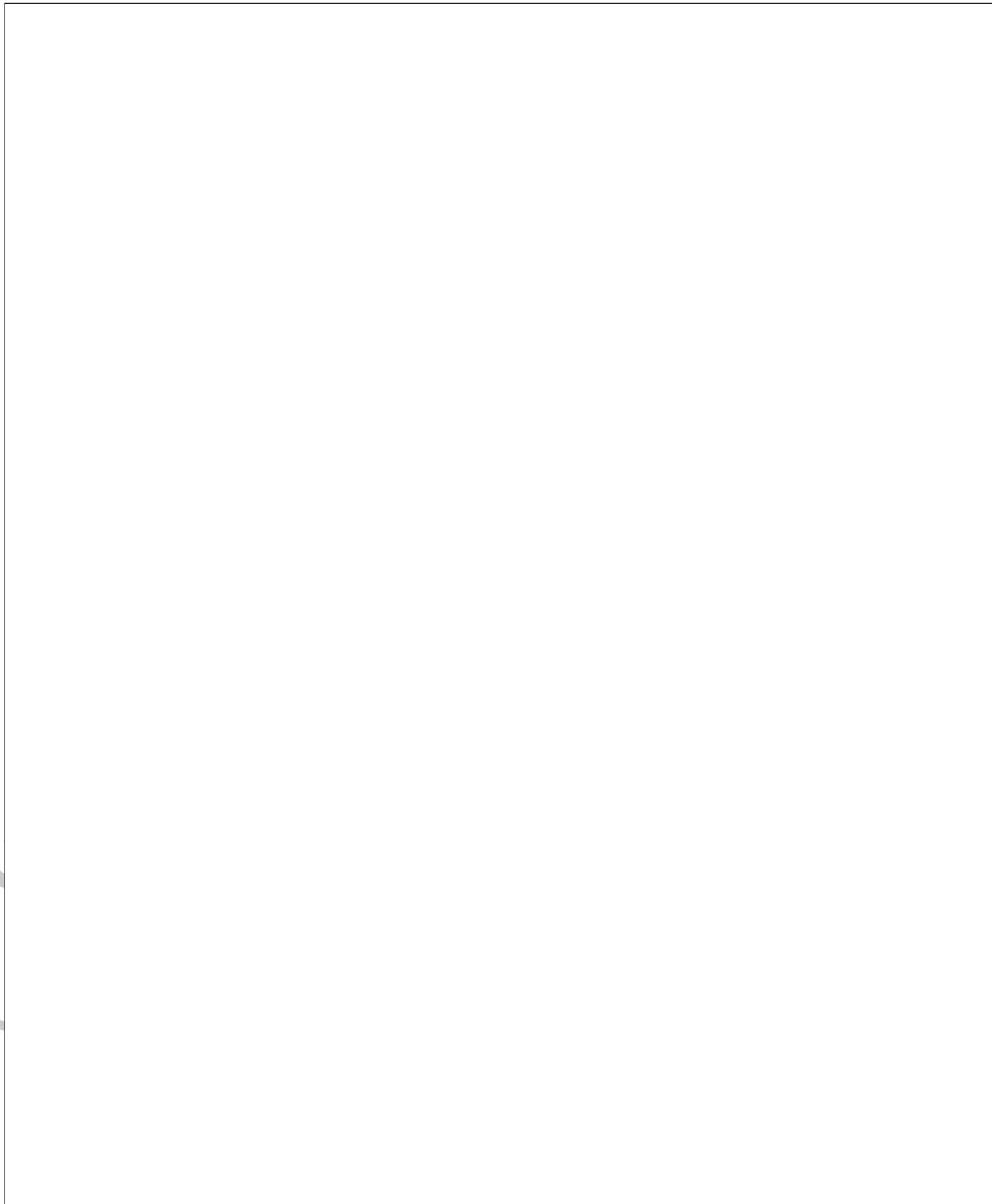
1.2 The Puzzle Worked Individually

1. What is the probability that you get to sit in your assigned seat?



1.3 The Same Puzzle Worked Cooperatively

2. Team up with one, two, or three (your instructor will specify which) and work through this puzzle again as a group. Use the space provided to work or write out anything you think might help you.



2 Inquiry

3. Did you find this puzzle easier when working individually or when working cooperatively? Defend your choice.

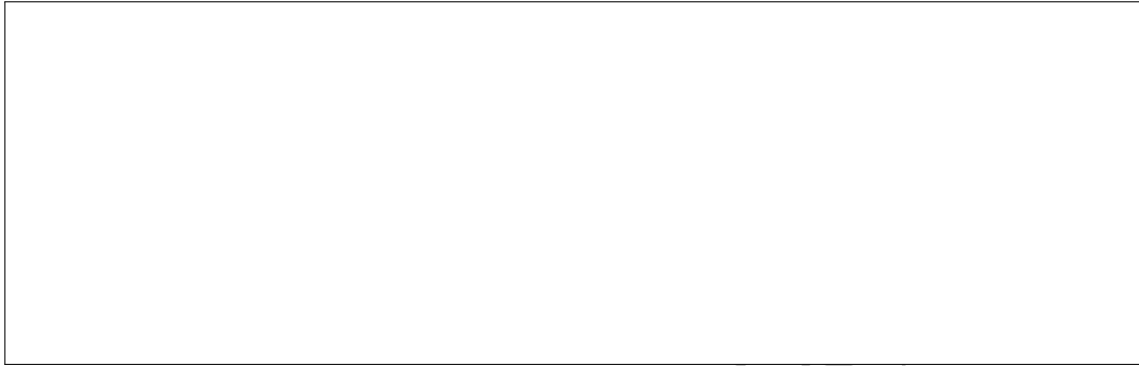
4. Would you trust an individual's answer more than you would trust a group's answer? Defend your choice.

5. Do you think scientists work better as individuals or in groups? Defend your response.

6. What, if anything, did you expect this activity to eventually address that it did not address?

———— CHECKPOINT ————

What could be done to make this activity more interesting? Please be honest.



LCTTA Activity
Student Version