

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 Reviving Old Books

1.1 Background Information

I recently acquired a rare three-volume set of historically significant astronomical information. Each volume has exactly 2500 numbered pages of text and illustrations. I saw that mold had damaged every page and cover from the front of volume 1, though that cover was undamaged, to the back cover of volume 3, though it too was undamaged. Everything in between was moldy. I called the local book repair shop and the archivist said that it would cost a penny per page and fifty cents per cover to repair the set. He told me to bring the books to the shop and come back in a week.

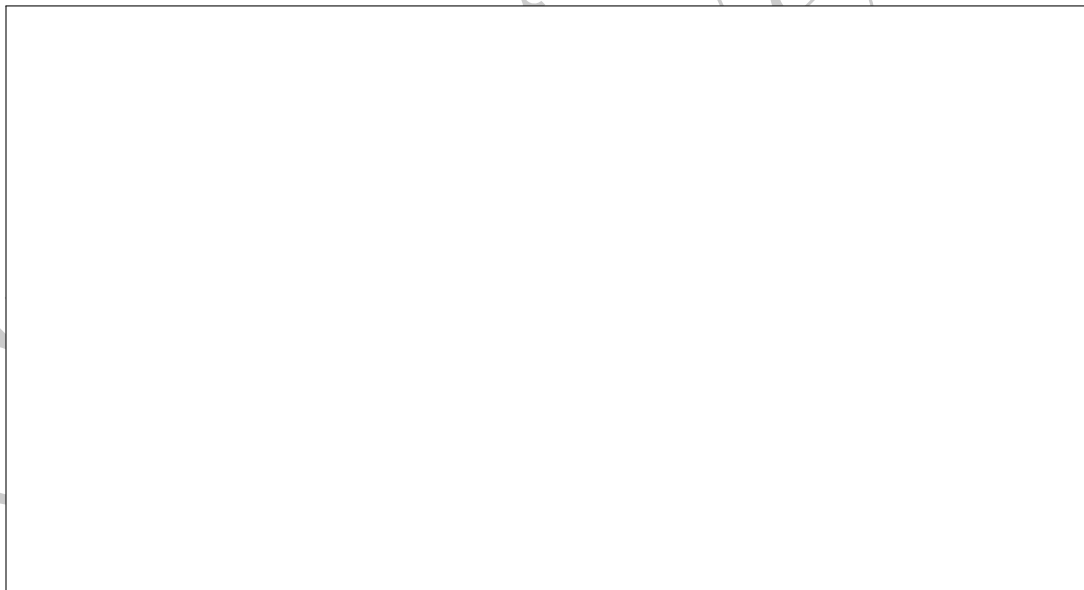
1.2 The Puzzle Worked Individually

1. So I showed up one week later, prepared to pay the bill, which is about half of what I expected it to be. How much was the repair?



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.

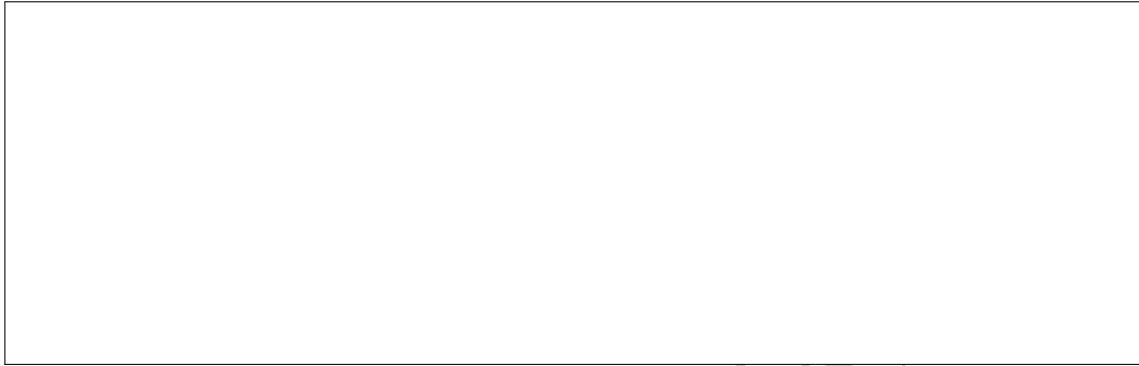
4. Would you trust an individual's answer more than you would trust a group's answer? Defend your choice.

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