
Wind Logic Puzzles

Introduction

Logic puzzles may be used to reinforce information previously learned. They promote creative thinking and hone problem solving skills.

Grade Level

Intermediate/Secondary

Time

15-30 minutes, or assigned as homework

Procedure

1. Introduce wind energy using the *Harry Spotter and the Chamber of Windy Myths* play (www.need.org/newsletter.php, use the Feb 2007 link).
2. Distribute a copy of the wind logic puzzle to each student.
3. If students are unfamiliar with logic puzzles, explain how to complete the puzzles as follows:
Use the clues to determine which combination is correct. Place an X in every box that cannot have the correct combination. Place Os in the boxes that have the correct combination.
4. Extension—Have students create their own logic puzzles after reading *Harry Spotter and the Quest for the Right Light* (www.need.org/newsletter.php, use the Sept 2007 link).

Answers

Karem—perfect site—23 mph

Keith—too many trees—13 mph

Maria—too windy—64 mph

Marta—bird sanctuary—18 mph

Becca—not enough wind—8 mph

Harry Spotter Windy Myths Logic Puzzle

Professor Huggdatreaz asked Nevi to take the researchers' reports to Professor Dieseldore. Unfortunately, a gust of wind came up and blew the reports out of Nevi's hands into the lake. Nevi remembered a few details from the reports, such as different wind speeds at the sites tested. The five researchers had rejected four sites for different reasons (too windy, not enough wind, too many trees, and bird sanctuary) before picking the perfect site.

Use the notes that Nevi remembered to match the researchers with their sites, why each was accepted or rejected and what the average wind speed was.

1. Becca's and Maria's wind speeds were rejected because the wind was either too fast or too slow to make the turbine run efficiently.
 2. Marta and Keith both had good wind speeds at their sites.
 3. The perfect site had winds that were 5 mph faster than the site with the bird sanctuary. The site with the bird sanctuary was not rejected because of its wind speed.
 4. The five sites included the one Maria researched, the one with wind speeds of 8 mph, the perfect site, Marta's site, and the one with too many trees.
 5. Keith did not pick the perfect site or have average wind speeds of 18 mph.
 6. Karem's site had 23 mph winds.
 7. Marta did not pick the perfect site.