

Solve the Puzzles

Problem Solving Approaches

People can take very different approaches to solving problems. Sometimes these different approaches of others seem to make absolutely no sense at all, yet they arrive at the correct answer or solution the same as you do. The reason is that people differ in how they prefer to process information. This information processing style is very closely related to a person's preferred learning style. Have the youth solve the following problems.

Puzzle 1 Rows of Trees ▲▲▲▲▲▲▲▲

A resort owner is very concerned with landscaping and the aesthetic arrangement of a planting of trees. The owner has ten trees and wants the trees planted in five rows with four trees in each row. Landscapers are coming tomorrow and your assignment is to be certain that each tree is planted in exactly the right place. What is the solution to the arrangement of the trees and what will your instructions be to the landscapers?

Hint: *The solution is a familiar geometric pattern. Once you have solved the puzzle, describe your approach to the solution. Write instructions for the landscapers.*

Solution to "Building Blocks" can be found on Helper's Guide page 32.

Interpreting the Results - Puzzle 1 Rows of Trees

Visual Learner / Information Processor

If you are primarily a visual learner, you may have approached this problem by trying to picture the planting of trees in a yard or field. You might also have made drawings on paper to get a picture of how various ideas or the solution might look. Since there was a hint in the problem about a familiar geometric shape you may have pictured in your mind or drawn many different geometric shapes to see if you could find one that worked.

A visual-oriented person may have drawn a map of the tree lay out on paper. You might also write detailed instructions for the landscaper to look at.

Auditory Learner / Information Processor

As an auditory learner, you might try to talk your way through various ideas and possible tree layouts to try and arrive at a solution to the problem. You might have talked through the fact that five rows with four trees in each row would total twenty trees. Since you only have ten trees, in the solution each tree would need to be counted twice. In the final arrangement, each tree would need to be positioned so it was in two of the five straight lines.

Someone who is more auditory would want to be there to describe to the landscapers where the trees should be planted and how they should be arranged.

Kinesthetic Learner / Information Processor

If you are a kinesthetic learner, you may have actually found ten small toy trees or something to represent trees (like coins), cleared off a table top and then moved and manipulated the trees or coins until you found a solution.

If you have a kinesthetic orientation, you may have built a model by perhaps gluing the little trees on a board or model landscape of the area. Or, you might choose to bring your trees or coins with you and lay them out for the landscaper to get a feel for how the planting should be laid out.