

# **Attribute Block Activities**

## **(English and Spanish)**

The activities on the CD are in 4 formats:

1. English Version - Word 97 format
2. Spanish Version - Word 97 format
3. English Version - PDF format
4. Spanish Version - PDF format

We have included masters for the attribute blocks in both the Word 97 format and the PDF format. With these "blocks" you can try the activities without purchasing the expensive sets that are found in teachers' supply stores. Three versions of the blocks are on the masters: English version, Spanish Version and unmarked version. Print the thick blocks on tag board, and the thin ones on paper. Laminate all the sets that you are going to use, and cut them apart.

The individual activities can easily be done with pairs or small groups of students. The sheets may be printed and laminated for use with the blocks. They may also be printed on sheets for individual students to record their answers. There are multiple correct answers to many of the activities.

The group activities may be laminated and cut into four small cards each if you are using them as a group activity. If they are laminated and left as one sheet, they can easily become an individual activity. There may be multiple correct answers to some of the activities.

The puzzles may be used either as individual or group activities. There are multiple correct answers to many of the puzzles.

## Descriptions of the Activities

- I Individual Activities - There may be multiple correct answers to many activities.
- A. AB01 - Introduction to Attribute Blocks - 1  
Given one block, find a block that is different in the number of ways indicated.
  - B. AB02 - Introduction to Attribute Blocks - 2  
Given two blocks, find a block that is different from each of them in the number of ways indicated.
  - C. AB3 - Introduction to Patterns with Attribute Blocks - 1  
Fill in the patterns that have the first block indicated. Practice with 1-difference, 2-difference, 3-difference, and 4-difference attribute chains.
  - D. AB4 - Introduction to Patterns with Attribute Blocks - 2  
Fill in the patterns that have the first and last blocks given. Practice with 1-difference, 2-difference, 3-difference, and 4-difference attribute chains.
  - E. Patterns  
Find the number of differences between each pair of blocks shown and look for a number pattern. Use that pattern to make a new chain of blocks.
  - F. Brain Teasers  
Find the blocks that complete each brainteaser according to the number of differences indicated between the sections of each brainteaser.
  - G. Changes  
Using attribute blocks, copy the shapes given, then make a new shape by changing the attributes indicated. Record the solution.
- II Group Activities
- A. Trains - Introductory Activities  
Arrange a specific group of blocks so that they make 1-difference, 2-difference, 3-difference, and 4-difference attribute trains
  - B. Pattern Trains - Introductory Pattern Activities  
Arrange a specific group of blocks so that they make the pattern indicated in the activity.
  - C. Change Patterns - Intermediate Pattern Activities  
Given two sets of blocks, find third set that follows the same pattern.
  - D. Replace 1 - Advanced Pattern Activities  
Given a set of blocks and a pattern, replace the block that does not fit.
- III Puzzles - There may be multiple correct answers to many of the puzzles.
- A. Circle Puzzles  
Find an attribute block that is different from the blocks in the adjoining circles. The number of differences is indicated between the circles.
  - B. Square Puzzles  
Find an attribute block that is different from the blocks in the adjoining squares. The characteristics that should differ are indicated between the squares.
  - C. Curve Puzzles - Advanced  
The blocks in the first and last section of the puzzle are shown. Make a pattern of blocks so that both the first and last blocks will fit. Record the blocks and the patterns.
  - D. Venn Diagrams - Advanced  
Some blocks are shown in the diagrams. Determine what other blocks belong in the diagram, and what the labels (characteristics) should be.

## Examples of the Individual Activities

E. AB01 - Introduction to Attribute Blocks - 1

Find an attribute block that differs in color from this one.



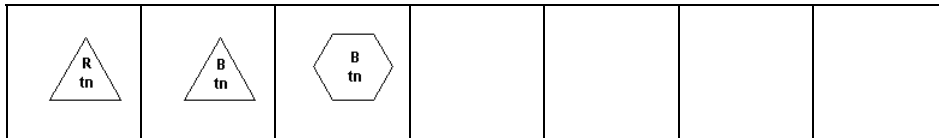
F. AB02 - Introduction to Attribute Blocks - 2

Find a block for the middle space. It must differ in 1 way from each of end blocks..



G. AB3 - Introduction to Patterns with Attribute Blocks - 1

Fill each blank space with an attribute block. Each block must be different in 1 way from the blocks next to it.



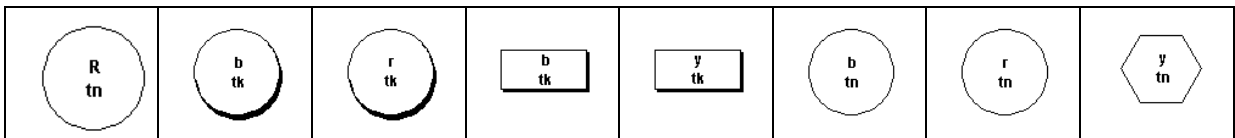
H. AB4 - Introduction to Patterns with Attribute Blocks - 2

Fill each part of the line with an attribute block. Each block must be different in one way from each block next to it.



I. Patterns

Write the number of differences between each pair of blocks in the top line. Look for the number pattern. Use the same number pattern to fill in blocks for the bottom line.

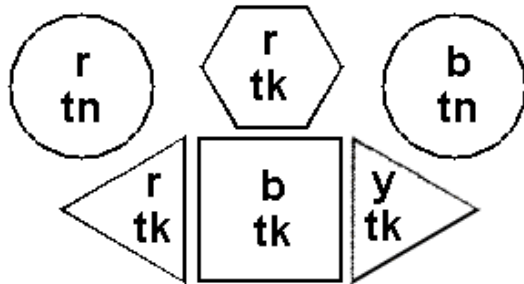


J. Brain Teasers

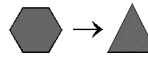
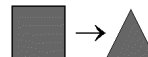
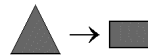
Find the rule used to arrange the blocks in the rows and columns. Find the blocks you need to fill the empty spaces.


K. Changes

1. Make this pattern with the attribute blocks shown. Make the changes. Sketch the new design.



**Change:**



r → Y

y → R

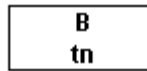
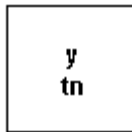
b → B

tn → tk

IV Group Activities - Sample

Make a train in which the sequence is repeated.

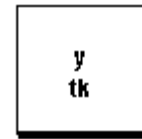
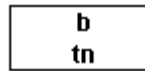
Use 10 attribute blocks in all.



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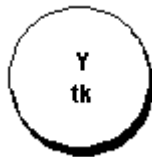
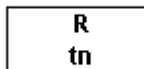
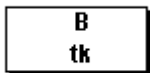
Put the blocks in a line so that the number of differences between the blocks makes this pattern:

1 difference, 2 differences,  
2 differences, 1 difference,  
2 differences, 2 differences, etc.



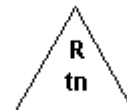
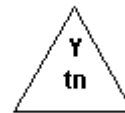
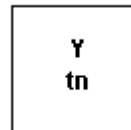
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Use:



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Use:



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