

## Chapter 21

Use with Section 1

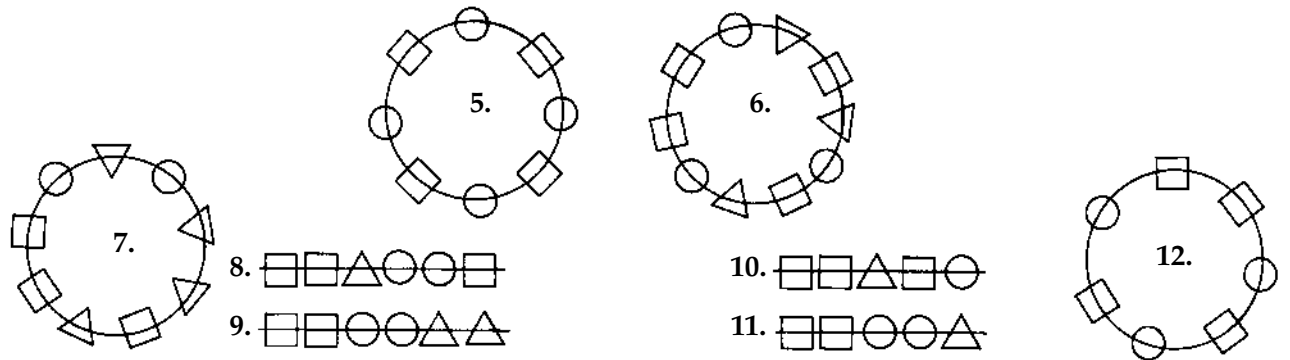
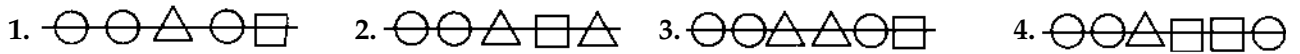
## ENRICHMENT

# • What is classification?

## Classifying Patterns

Small children classify things when they sort blocks into piles according to color, shape, or texture. Scientists have many ways of classifying both organisms and information.

In this exercise, you will classify 12 different patterns. As pictured, these are different shapes in varied orders on a "string." You could just as easily use a specific color of bead to represent each shape. This would make it easier to work with the groups. Pretend the beads or shapes are different patterns of genetic information on a chromosome and it is your job to devise a way of classifying these differences in a meaningful way.



1. Can you divide these into two groups? \_\_\_\_\_ What would each group have in common?

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2. Examine each group and find a way to divide each into two groups. What does each group now have in common? \_\_\_\_\_

\_\_\_\_\_

3. Repeat these steps until you have separated all twelve patterns into different categories. Draw a "tree" that splits into two at each choice, and write a short description indicating what the choice is at each step.