• • • • • Make Number and Shape Patterns

Learning Notes

The children learn that patterns can be found just about anywhere in the world. They use different items, such as letters, numbers, colors, and shapes to create patterns. Children also learn that letters can be used to describe a pattern.

Materials

- pattern blocks (or several different objects that can be used to create a pattern)
- chalkboard or a piece of paper

Teaching the Lesson

Before teaching the lesson, ask the children if they know what a pattern is.

Clap and snap your hands to create a pattern. For example, use the pattern "clap, clap, snap, clap, clap, snap." Have the children continue the pattern with you. Ask the children how they would describe the pattern to someone else. At this point, introduce the idea that patterns can be labeled with letters. The "clap, clap, snap" pattern would be labeled "AAB." Use the chalkboard or a piece of paper to model how to label the pattern.

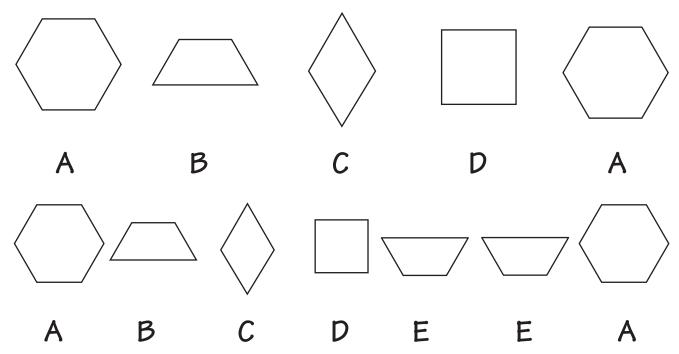
Have the children make up patterns of their own to share with their classmates.

Go over the following practice pages with the children.

Naming the Pattern (page 10): Use numbers to create familiar patterns but with unfamiliar numbers. For example, counting by 2's but start with the number 31.

Identifying the Pattern (page 11): Use shapes to make patterns and pictures.

Making a Pattern (page 12): The children use pattern blocks to create a variety of patterns. See the examples below.



Complete the patterns.

1. 8, 10, 12, _____, ____, ____, _____, _____

2. 31, 33, 35, _____, ____, ____, _____, _____

3. 25, 27, 29, _____, ____, ____, _____, _____

4. What is the counting pattern?_____

5. 15, 20, 25, _____, ____, ____, _____, _____

6. 71, 76, 81, _____, ____, ____, _____, _____

7. 47, 52, 57, _____, ____, ____, _____, _____

8. What is the counting pattern?_____

9. 50, 60, 70, _____, ____, ____, _____, _____

10. 5, 15, 25, _____, ____, ____, _____, _____

11. 43, 53, 63, _____, ____, ____, _____, _____

12. What is the counting pattern?

13. 50, 100, 150, _____, ____, ____, _____

14. 130, 180, 230, _____, ____, ____, _____

15. 610, 660, 710, _____, ____, ____, _____, _____

16. What is the counting pattern?_____

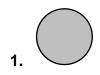
17. 300, 400, 500, _____, ____, ____, ____, _____

18. 110, 210, 310, _____, ____, ____, _____, _____

19. 275, 375, 475, _____, ____, ____, _____, _____

20. What is the counting pattern?

Complete each pattern. Use letters to label each pattern. The first pattern has been completed for you.















































4. 10 1 20 1 2 30









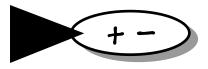








5. On the back of this page, make a pattern of your own.



Answer Key

Page 6

- 1. 2
- 2. 3
- 3. 16
- 4. 17
- 5. 14
- 6. 15
- 7. 10
- 8. 11
- 9. 6
- 10. 7
- 11. 18
- 12. 19
- 13. 8
- 14. 9
- 15. 0
- 16. 1
- 17. 12
- 18. 13
- 19. 13 20. 4
- 21. 16
- 22 10
- 22. 10 23. 1
- 24 5
- 24. 7

Page 7

- 1. already done
- 2. 18
- 3. 15
- 4. 6
- 5. 15
- 6. 157. 8
- 8. 9
- 0.)
- 9. 16 10. 12
- 11. 17
- 12. 13
- 13. 3
- 14. 4
- 15. 0
- 16. 6

Page 8

- 1. already done
- 2. 7 + 8 + 1 = 16
- 3. 6 + 5 + 9 = 20
- $4. \ 3 + 5 + 6 = 14$
- 5. 5
- 6. 15 3 = 12
 - 12 8 = 4
- 7. 14 2 = 12
 - 12 6 = 6
- 8. 17 5 = 12
 - 12 8 = 4

Page 10

- 1. 14, 16, 18, 20, 22
- 2. 37, 39, 41, 43, 45
- 3. 31, 33, 35, 37, 39
- 4. Counting by 2's
- 5. 30, 35, 40, 45, 50
- 6. 86, 91, 96, 101, 106
- 7. 62, 67, 72, 77, 82
- 8. Counting by 5's
- 9. 80, 90, 100, 110, 120
- 10. 35, 45, 55, 65, 75
- 11. 73, 83, 93, 103, 113
- 12. Counting by 10's
- 13. 200, 250, 300, 350, 400
- 14. 280, 330, 380, 430, 480
- 15. 760, 810, 860, 910, 960
- 16. Counting by 50's
- 17. 600, 700, 800, 900, 1000
- 18. 410, 510, 610, 710, 810
- 19. 575, 675, 775, 875, 975
- 20. Counting by 100's

Page 11

- 1. already done already done
- 2. balloon, cloud
 - AABCDAAB
- 3. snail
 - ABBCDDAB
- 4. 2, 3, 4
 - A, AB, ABC,
 - **ABCD**
- 5. Patterns will vary. Labeling will vary.

Page 12

Patterns and sentences will vary.

Page 14

- 1. 66
- 2. 99
- 3. 60
- 4. 87
- 5. 59
- 6. 58
- 7. 98
- 8. 92
- 9. 49
- 10. 37
- 11. 86
- 12. 88
- 13. 38
- 14. 89
- 15. 91
- 16. 37, 38, 49, 58, 59, 60, 66, 86,
 - 87, 88, 89, 91,
 - 92, 98, 99
- 92, 98, 99 17. 91, 92, 98, or 99
- 18. 49, 59, 89, or 99
- 19. 37, 38
- 20. 60

Page 15

- 1. 10
- 2. 1
- 3. 12

- 4. 50
- 5. 30
- 6. 31
- 7. 70
- 8. 33
- 9. 63
- 10. 11
- 11. 4812. 20
- 12. 20 12. 60
- 13. 6014. 21
- 15. 20
- 16. 1, 11, 21, 31, 33, 63
- 17. 10, 12, 20, 30, 48, 50, 60, 70
- 18. even number
- 19. odd number

Page 16

- 1. 15
- 2. 22
- 3. 46
- 4. 22
- 5. 46
- 6. 22
- 7. 60
- 8. 39
- 9. 30
- 10. 60
- 11. 2212. 72

Message: I am a math star!

Page 18

Answers will vary.

Page 19

- 1. 52
- 2. 70
- 80
 50
- 5. 72
- 6. 35