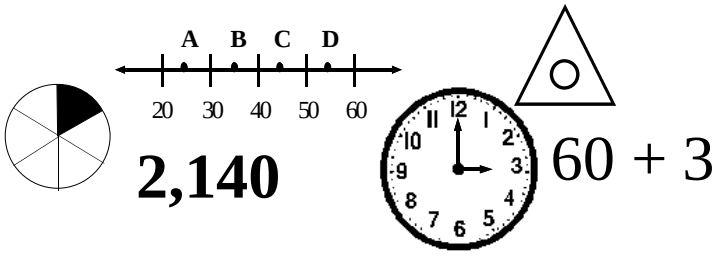
Summer Math Packet
For Students Entering Grade 4



Student's Name _____

Grade 4 Class_____

June 2012

Review and Practice of
Fairfield Math Objectives
and CMT Objectives

1. Place Value
A Solve problems involving I or 10 more or less

1. On Monday, the doughnut shop sold 54 cups of coffee before noon and 10 more cups of coffee after noon. How many cups of coffee did the doughnut shop sell on Monday?

a. 44
b. 54
c. 64
d. 59

2. There were 47 people at last night's concert. We expect 10 less people to. come tonight. How many people do we expect to come tonight?

a. 47
b. 37
c. 57
d. 27

1 Place Value
B Identify alternative forms of expressing whole numbers using expanded notation

3. Which means the same as 400 + 20 + 3?

a. 40,203
b. 400,203
c. 4,023
d. 423

4. Which means the same as 525?

a. 500 + 200 + 50
b. 500+20+5
c. 50+20+5
d. 500+20+50

1. Place Value
C. Identify alternative forms of expressing whole numbers using regrouping

5. Which means the same as 4 tens 14 ones

a. 44
b. 414
c. 54
d. 4014

6. Which means the same as 6 hundreds 7 tens 13 ones

a. 673
b. 671
c. 683
d. 613

Place Value Use place value concepts to interpret the meaning of numbers

7. In which number does the 4 have the GREATEST value?

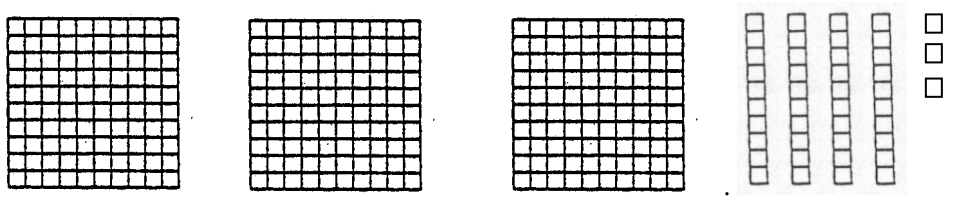
a. 5364
b. 4635
c. 6435
d. 3645

8. In which number does the 6 have the LEAST value?

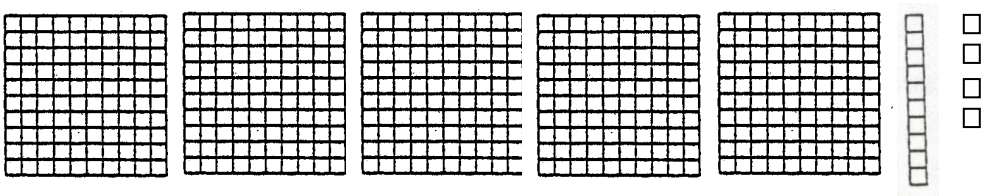
a. 9628
b. 2986
c. 8962
d. 6289

2. Pictorial Representations of Numbers A. Relate pictorial representations using base ten blocks to whole numbers and vice versa

9.



a. 334
b. 443
c. 1,343
d. 343

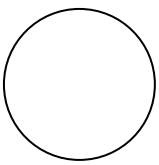
10. 

a. 514
b. 541
c. 5,514
d. 414

2.	Pictorial Representations of Numbers
B	Identify, label or shade fractional parts of regions and sets

11. What fraction of the group is shaded?

a. 1/2
b. 2/3
c. 3/2
d. 2/5

12. Shade 1/4 of the circle 

4. Order, Magnitude and Rounding of Numbers
A. Order whole numbers

13. Which list shows the numbers in order from LEAST to GREATEST?

a. 53, 63, 54, 62
b. 54, 53, 62, 63
c. 53, 54, 62, 63
d. 53, 63, 54, 62

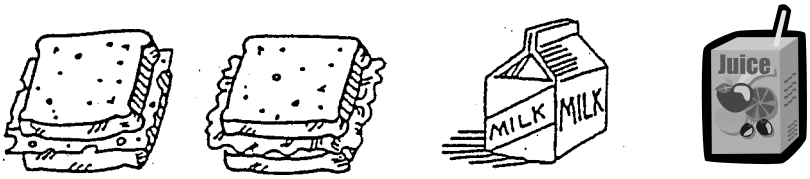
14. Which group of numbers is in order from LEAST to GREATEST?

a. 71, 17, 45, 21
b. 35, 52, 71, 18
c. 29, 36, 72, 81
d. 41, 14, 54, 65

Order, Magnitude and Rounding of Numbers B Describe the magnitude of whole numbers

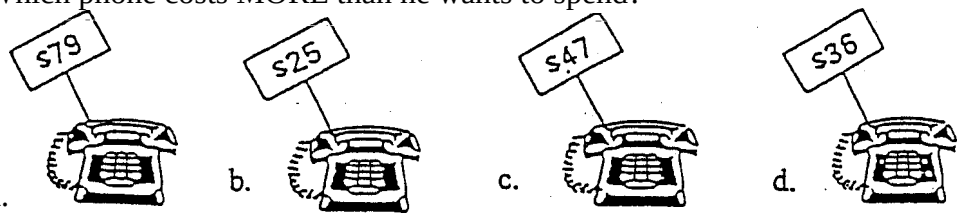
15. Tammy has $.3.00 to spend for lunch. Which item costs more than she wants to spend?

Cheese Sandwich	tuna sandwich	milk	Apple Juice



a. $3.00 b. $3.75 c. $.75 d. $.80

16. Mark wants to buy a new telephone for his office. He does not want to spend more than $55. Which phone costs MORE than he wants to spend?



a. b. c. d.

4 Order, Magnitude and Rounding of Numbers C Round whole numbers in context

17. Beth read 18 books last summer. This number is CLOSEST to

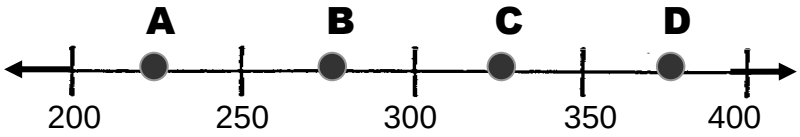
a. 10
b. 15
c. 20
d. 25

18. Cleo and Roger rented video tapes for $19 and spent $28 to buy cassette tapes. ABOUT how much did they spend?

a. $30
b. $40

c. $50
d. $60

4. Order, Magnitude and Rounding of Numbers D Identify points representing whole numbers on a number line and vice versa



19. The number 265 would be CLOSEST to which point marked on the number line?
a. A
b. B
c. C
d. D

20. Complete a number line:

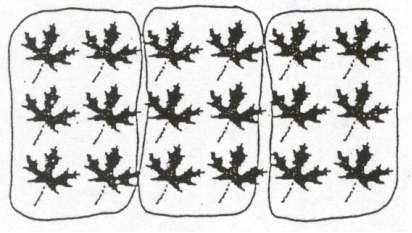
Draw and label a point on the number line that represents 325.

5 Models for Operations A Relate multiplication and division facts to rectangular arrays and pictures

21. Which multiplication fact is represented by this array

a. 2 x 2
b. 8 x 1
c. 2 x 4
d. 4 x 4

22. Which division fact is represented by this picture?



a. $6 \div 3 = 2$
b. $18 \div 6 = 3$
c. $6 \div 2 = 3$
d. $18 \div 3 = 6$

5 Models for Operations B Identify the appropriate operation or number sentence to solve a story problem

23. Martha had 6 plants in her front yard and 4 plants in her backyard. Which number sentence could be used to find out how many plants Martha had all together?

a. $6 \times 4 = \square$

b. $6 - 4 = \square$

c. $6 + 4 = \square$

d. $6 \div 4 = \square$

24. There are 4 plates that each have 5 cookies on them. Which equation will tell you how many cookies there are in all?

a. $4 + 5$
b. $4 \div 5$
c. $5 + 4$
d. 4×5

5 Models for Operations C Write story problems for addition and subtraction number sentences

25. Write a story problem that can be solved using the number sentence

$9 + 6 = \square$

26. Write a story problem that can be solved using the number sentence

17 – 9 = ❒

6. Basic Facts
A Add and subtract facts to 18

27. 17 – 8 = _____

a. 9
b. 25
c. 8
d. 11

28. 5 + 12 = _____

a. 7
b. 60
c. 8
d. 17

6 Basic Facts
B Multiply and divide by 2, 5, or 10

29. 40 ÷ 5 = _____

a. 20
b. 45
c. 9
d. 8

30. 10 x 6 = _____

a. 16
b. 61
c. 60
d. 600

7 Computation with Whole Numbers and Decimals
A Add and subtract 1- and 2-digit whole numbers without regrouping

31. 95
 - 62

a. 37
b. 33
c. 35

d. 23

32.
$$\begin{array}{r} 52 \\ +27 \\ \hline \end{array}$$

a. 69
b. 25
c. 79
d. 80

7 Computation with Whole Numbers and Decimals
B Add 1- and 2-digit whole numbers with regrouping

33.
$$\begin{array}{r} 54 \\ +27 \\ \hline \end{array}$$

a. 23
b. 91
c. 82
d. 81

34.
$$\begin{array}{r} 87 \\ +\ 5 \\ \hline \end{array}$$

a. 91
b. 92
c. 82
d. 95

9 Solve Word Problems
A Solve simple story problems involving addition or subtraction

35. The Davidson's went on a 300-mile boat trip. On the first day they traveled 65 miles. On the second day of their trip they went 35 miles. How many miles did they travel onn these 2 days?

a. 30
b. 35
c. 100
d. 400

36. A paint store ordered an extra 125 cans of paint for a sale. On Monday they sold 31 cans of paint. On Tuesday, 53 cans of paint were sold. How many more cans of paint. were sold on Tuesday than on Monday?

a. 93
b. 22
c. 84
d. 24

9 Solve Simple Word Problems
B Solve simple problems involving addition or subtraction with extraneous information

37. Emily scored 413 points on a video game. Mallory's score was 118 and Laura's score was 215. Show how to find the difference between Laura's score and Emily's score.

a. 413 + 215
b. 118 + 215
c. 413 + 118
d. 413 - 215

38. At the Osbom Hill School Carnival Amanda won 36 prize tickets. Julie collected 61 and Robin got 44. Show how to find the sum of Amanda's and Julie's tickets.

a. 61 – 36
b. 36 + 61
c. 36 + 44
d. 97 + 44

10 Numerical Estimation Strategies
A Identify the best expression to find an estimate

39. Gregory needs to add 395 to 789. Which of the following would be the BEST for Gregory to use to ESTIMATE the sum?

a. 400 + 700
b. 400 + 800
c. 300 + 800
d. 300 + 700

40. Buzz needs to subtract 446 from 875. Which of the following would be the BEST for Buzz to use to ESTIMATE the difference?

a. 800 – 400
b. 800 – 500
c. 900 – 400
d. 900 – 500

11. Estimating Solutions to Problems
A Estimate a reasonable answer to a problem

41. Tarzan and Jane rented video tapes for $ 9 and spent $17 to buy cassette tapes. ABOUT how much did they spend?

a. a little less than $20
b. a little more than $20
c. a little less than $30
d. a little more than $30

42. Dr. Judy had $80 before she spent $39.75 for a necklace. ABOUT how. much money did she have left?

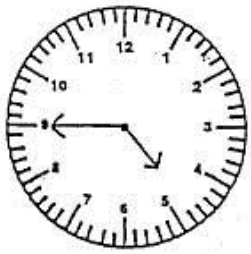
a. a little less than $30
b. a little more than $30
c. a little less than $40
d. a little more than $40

Time
A Tell time to the nearest hour, half-hour, and quarter-hour using analog and digital clocks

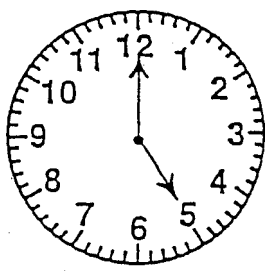
43. When Jo looked at her watch it showed the time below. What time did it show?

a. 4:00 b. 4:25

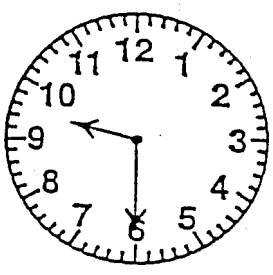
c. 4:30 d. 4:45



44. June went to the beach at half past 3. Which clock shows this time?



a.



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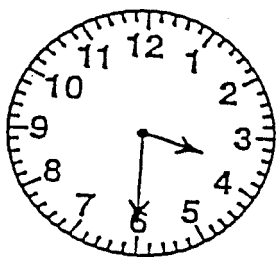

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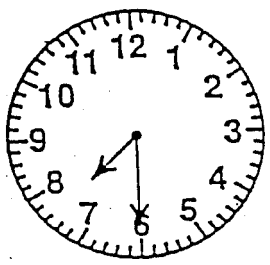


d

Time
B Solve problems involving time, elapsed time, and calendars

45.

July

Sun	Mon	Tues	Wed	Thur	Fri	Sat
				1	2	
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	

Justine got her allowance on the 4th day of this month What day was that?

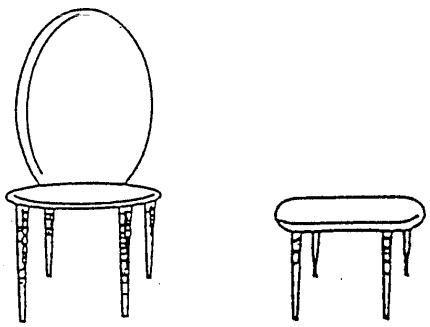
a. Monday
b. Wednesday
c. Saturday
d. Sunday

46. The clock says 9:15. What time will it be in a half hour?

a. 9:45
b. 9:30
c. 10:15
d. 10:00

15 Approximating Measures
A Estimate lengths and areas

47.

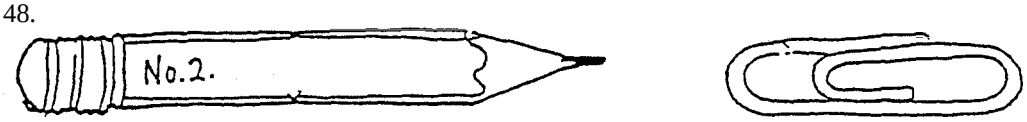


ABOUT how many footstools would be the same height as the chair?

a. 1
b. 3
c. 4

d. 5

48.

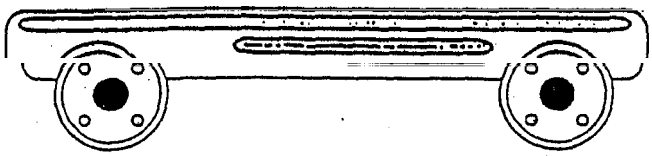


ABOUT how many paperclips would be the same length as the pencil?

a. 1
b. 2
c. 3
d. 4

16 Customary and Metric Measures A Measure or draw lengths to the nearest inch or centimeter

49.

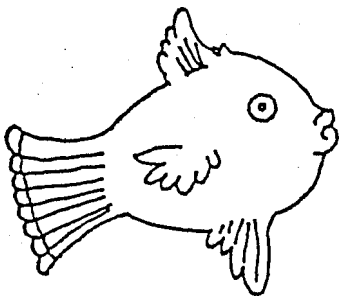


4

Use your ruler to measure the <u>length</u> of the wagon in this picture to the NEAREST centimeter.

a. 5 centimeters
b. 8 centimeters
c. 12 centimeters
d. 15 centimeters

50.



Use your ruler to measure the <u>length</u> of the fish in this picture to the NEAREST centimeter.

a. 2 centimeters
b. 3 centimeters
c. 4 centimeters

d. 6 centimeters

16 Customary and Metric Measure
B Identify appropriate customary or metric units of measure for a given situation

51. ABOUT how long is a new pencil?

a. 7 inches
b. 7 feet
c. 7 years
d. 7 miles

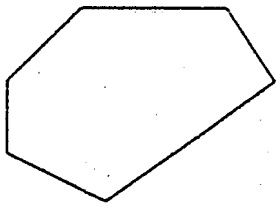
52. ABOUT how wide is your finger?

a. 1 gram
b. 1 centimeter
c. 1 meter
d. 1 kilometer

17 Geometric Shapes and Properties
A Identify geometric shapes and figures including number of angles and sides of polygons

53. How many angles does this shape have?

a. 4
b. 5
c. 6
d. 7



54. What is the name of a geometric figure with 5 sides?

a. pentagon
b. square
c. quadrilateral
d. hexagon

17 Geometric Shapes and Properties
B Draw geometric shapes and figures

55.

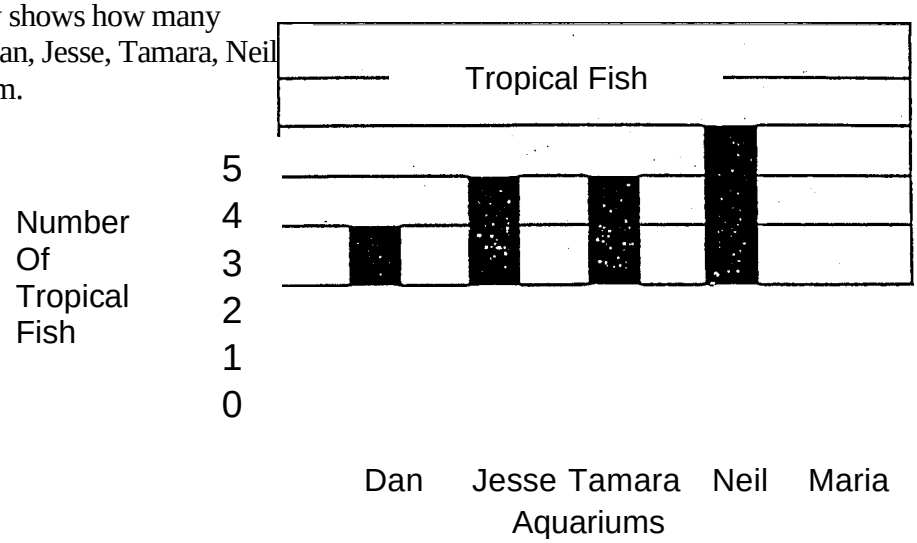
Draw a trapezoid

56.

Draw a rectangle

19 Tables, Graphs, and Charts
A Identify correct information from tables, graphs, and charts

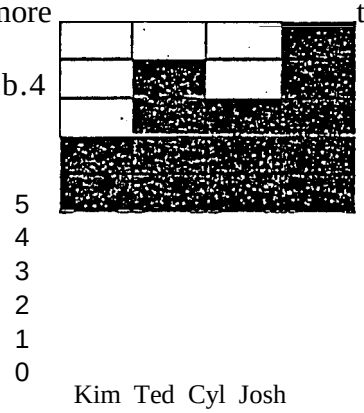
57. The graph below shows how many tropical fish are in Dan, Jesse, Tamara, Neil and Maria's aquarium.



If Neil gets 1 more tropical fish, how many fish will be in his aquarium?

a. 2 b.4 d. 12

58.



Altogether, how many points do Cyl, Josh, and Ted have?

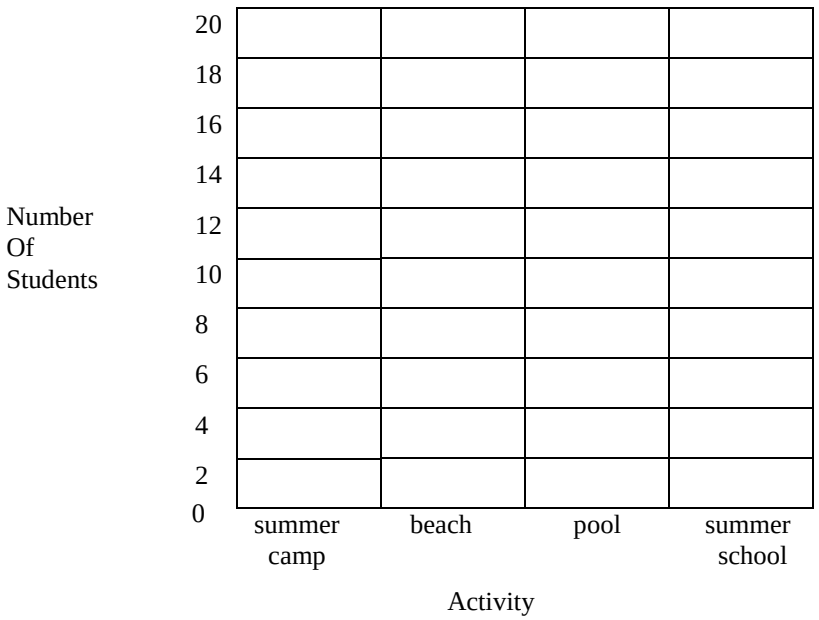
a. 4
b. 8
c. 12
d. 14

19 Tables, Graphs, and Charts B Create bar graphs and pictographs from data in tables and charts

59. The table shows places students went over a summer vacation.

Places	**Number of Students**
summer camp	5
Beach	13
Pool	15
summer school	4

Complete the BAR graph to show the same information

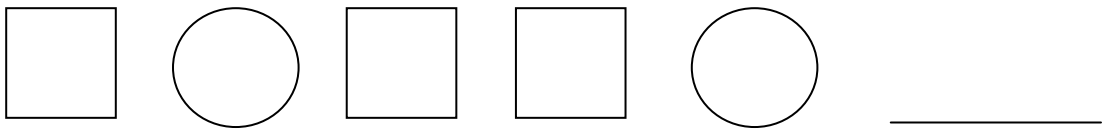


60. Draw a bar graph using the following information

Money Earned Babysitting	
Name	**Amount of Money**
Jan	$12
Ginny	$6
June	$8
Nan	$14
Carole	$6

22. Patterns
Extend or complete patterns involving whole numbers and attributes or identify or state rules for given patterns

61. Draw a figue that goes in the empty space. Write a sentence to explain your answer.

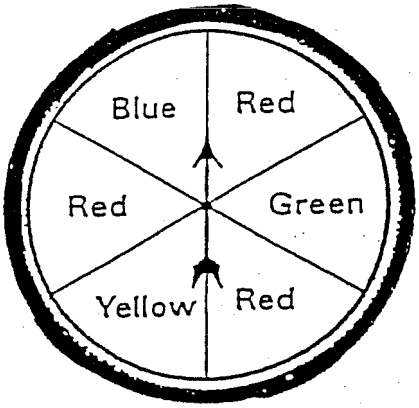


62. What is the next number in your pattern? Write the number. Then write a sentence that explains why you wrote that number.

61, 59, 57, 55, _____

21 Probability
A Solve problems involving elementary notions of probability

63.



63. If Robin spins this spinner once, on which color is the arrow MOST likely to land?

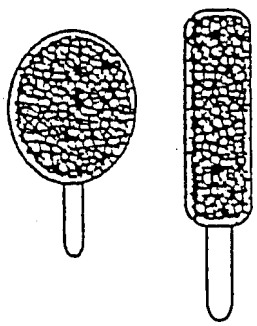
a. Red
b. Blue
c. Green
d. Yellow

64. There were 12 red, 15 yellow and 7 green candies in a dish. If Johnny chooses one piece without looking, which color candy is LEAST likely to be picked?

a. red b. yellow c. green d. red or yellow

24 Classification and Logical Reasoning
A Identify objects that are the same or different by one attribute

65. Marie bought these lollipops at the fair:



How are the lollipops the SAME?

a. Size
b. Shape
c. Color

d. Color and shape

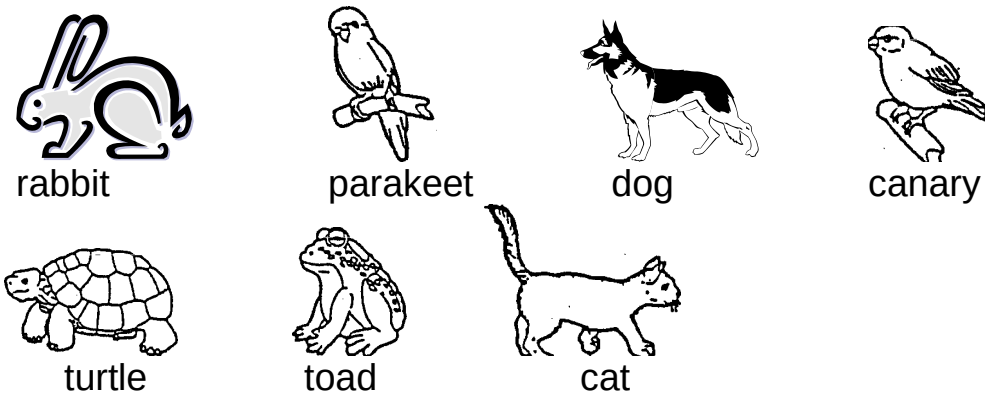
66.

How are these spiders different?

a. Size
b. Shape
c. Color
d. Shape and Color

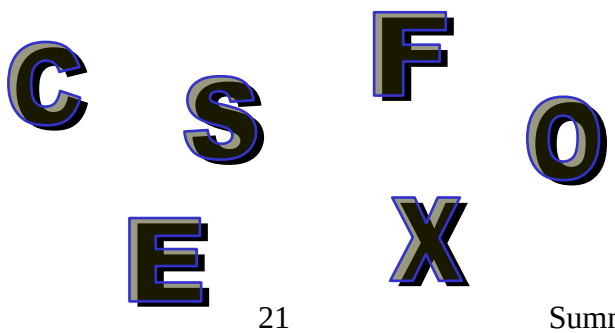
24 Classification and Logical Reasoning B Sort objects into 2 groups by common attribute

67.



Sort the animals into 2 groups so that each group has something in common. Show how you grouped the animals by writing its name onto the chart. Explain how you decided to group the animals

68. Sort these figures into 2 groups so that the figures in each group have something in common. Show how you grouped the figures by writing the letter from each figure onto the chart. Then explain how you decided to group the figures.



25 Mathematical Applications
A Numerical

69. Billy wins a $25.00 shopping spree

1. Decide what Billy could buy. Write about your choices.
2. Make a receipt that shows how many items of each price he bought
3. Show the total he spent and credit he has left, if any.
4. Repeat for another way Billy *could* spend the money.

Science Museum Store Price List		
$3.00	**$4.00**	**$5.00**
1. Origami paper	1. Kaleidoscope	1. Koosh ball
2. Crystal and gem	2. Large magnifying bug	2. Glow-in-the-dark solar system
3.. Furry stuffed seal pups	3. Sunprint kit	3. Inflatable world globe
4. Prism	4. Inflatable shark	4. Wooden dinosaur modelkit

70. Breakfast Choices

Samantha has the following types of food:

6 donuts that cost 20¢ each
3 bagels that cost 30¢ each
7 pastries that cost 40¢ each
4 granola bars that cost 50¢ each

To make breakfast bags for 5 groups of students, Samantha needs to sort ALL 20 of the food items into 5 bags.

- Each bag must contain the same total number of items.
- Each bag must contain at least three different types of items.
- No two bags can be filled exactly like another bag.

Show how Samantha can put the items into each bag and then find the total cost of each bag.

25 Mathematical Applications B Statistical

71. Jenny is selling muffins at a stand. She sells the muffins in packs of 2 and 4. This chart shows how she planned to sell each of them:

Muffins	**Cost**
2-pack	$1.50
4-pack	$2.50

Jenny sorted the 60 muffins into the two types of packs. When she was done, she found that she had the same number of 2-packs as 4-packs. Show the number and types of muffin packs Jenny sold at the stand. Show how you got your answer

72. **Outfits**

Debbie is going to visit her cousins for the weekend. She packs a pair of purple pants, a pair of jeans, and a pair of blue shorts. For shirts she take a blue tee-shirt, a white tank top, a yellow blouse, and a green shirt. How many different outfits can she make?

A picture or table will help you to organize the information.

Write a description of how you figured out your answer.