FINDING SHAPES

DIRECTIONS: Circle any shape that exactly matches one of the overlapping shapes in the figure on the left.
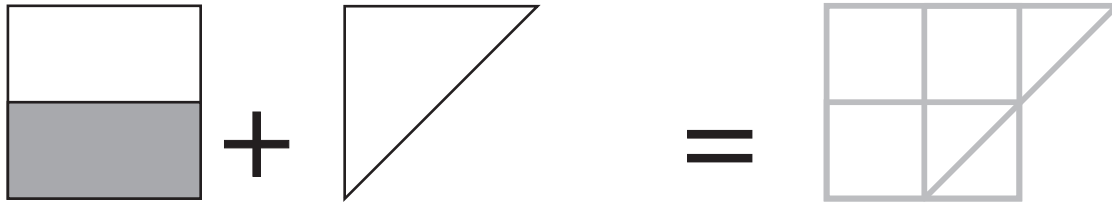
B-49

a.

b.

c.
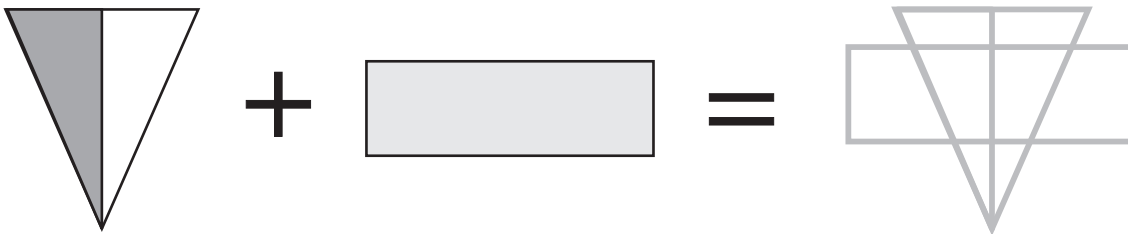
d.

B-50

a.

b.

c.

d.

STACKING SHAPES—SUPPLY

DIRECTIONS: Shade in the shapes to show how each pair of shapes will look after they are stacked according to the directions.
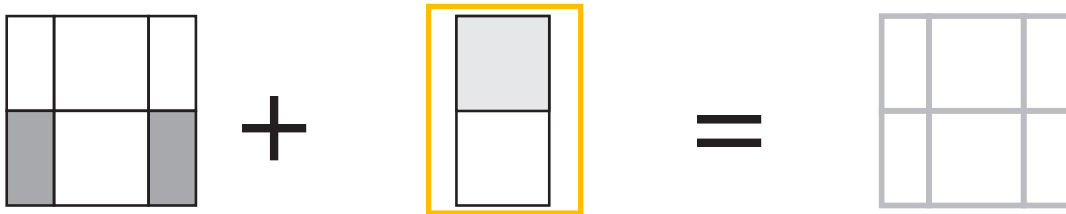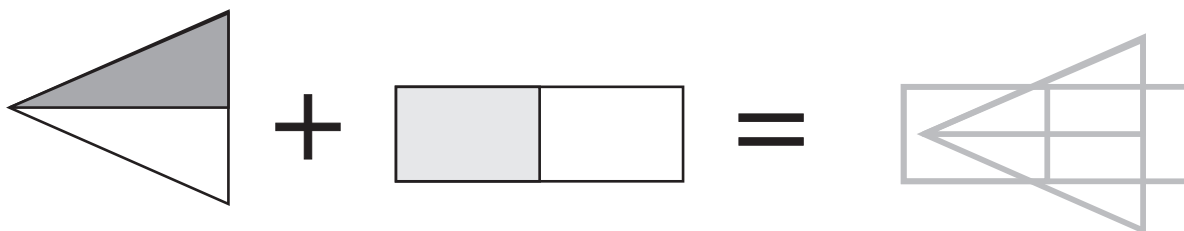
C-56 Put the square on the triangle.

C-57 Put the rectangle on the triangle.

C-58 Put the rectangle on the square.

C-59 Put the triangle on the rectangle.

COMMON SEQUENCES

DIRECTIONS: Many things you do must be done in order. List the phrases in the order they should occur.

H-131   Steps in Planning a Candy Sale

Buy the materials to make candy
Cook the candy
Decide on the type of candy you will make
Find a recipe for the candy
Package the candy
Sell the candy

1. _____

2. _____

3. _____

4. _____

5. _____

6. _____

H-132   Steps in Adopting a Dog

Ask your parents if you can have a dog
Go to the animal shelter with your family
Pay for the license and adoption fee
Pick out the dog
Take the dog home
Talk with your family about the kind of dog that is best for the family

1. _____

2. _____

3. _____

4. _____

5. _____

6. _____

DEDUCTIVE REASONING

H-147   In science class, students learn the eating habits of several types of animals. Some animals eat meat and others eat plants. Some animals eat both plants and animals. Some animals eat plankton. For her science project, Marisa picked four animals of different sizes and studied their eating habits. From the clues below, match the eating habits with the sizes of the four animals. The animal sizes can be described as small, medium, large, and very large.

a. The large animal is neither a meat eater nor a plankton eater.

b. The medium-sized animal is larger than the plankton eater.

c. The meat eater is larger than the plant eater.

d. The plant eater is larger than the meat & plant eater.

	Meat	Plant	Meat & Plant	Plankton
Small				
Medium				
Large				
Very Large				

Panel 1 (page 2)

Building Thinking Skills® — Book Two — Describing Shapes

DESCRIBING SHAPES—SELECT

DIRECTIONS: Look at each shape. Read the words in the choice box. Complete each sentence with the correct words from the choice box.

CHOICE BOX: narrow, short, tall, wide

EXAMPLE: This shape is _short_ and _wide_.

A-1 This parallelogram is _tall_ and _wide_.

A-2 This parallelogram is _tall_ and _narrow_.

A-3 This trapezoid is _short_ and _wide_.

A-4 This trapezoid is _tall_ and _wide_.

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Panel 2 (page 3)

Building Thinking Skills® — Book Two — Describing Shapes

DESCRIBING SHAPES—SELECT

DIRECTIONS: Look at each shape. Read the words in the choice box. Complete each sentence with the correct words from the choice box.

CHOICE BOX: no, one, two, three, four, five, six

EXAMPLE This parallelogram has _four_ sides and _four_ angles.

A-5 This quadrilateral has _four_ sides and _four_ angles.

A-6 This triangle has _three_ sides and _three_ angles.

A-7 This pentagon has _five_ sides and _five_ angles.

A-8 This hexagon has _six_ sides and _six_ angles.

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Panel 3 (page 4)

Building Thinking Skills® — Book Two — Describing Shapes

DESCRIBING SHAPES—SELECT

DIRECTIONS: Look at each shape. Read the words in the choice box. Complete each sentence with the correct words from the choice box.

CHOICE BOX: all, none, one, two, three, four, five, six

EXAMPLE: This triangle has _three_ sides and _three_ angles. _One_ of the angles is square.

A-9 This rectangle has _four_ sides and _four_ angles. _All OR Four_ of the angles are square.

A-10 This square has _four_ sides and _four_ angles. _All OR Four_ of the angles are square.

A-11 This irregular pentagon has _five_ sides and _five_ angles. _Two_ of the angles are square.

A-12 This hexagon has _six_ sides and _six_ angles. _None_ of the angles are square.

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Panel 4 (page 5)

Building Thinking Skills® — Book Two — Describing Shapes

DESCRIBING SHAPES—SELECT

DIRECTIONS: Look at each shape. Read the words in the choice box. Complete each sentence with the correct words from the choice box.

CHOICE BOX: all, none, one, two, three, four, five, six, hexagon, pentagon, rectangle, square, trapezoid, triangle

A-13 This _triangle_ (shape name) has _three_ sides and _all OR three_ are the same length.

A-14 This _square_ (shape name) has _four_ sides and _all OR four_ are the same length.

A-15 This _triangle_ (shape name) has _three_ sides and _two_ are the same length.

A-16 This _trapezoid_ (shape name) has _four_ sides and _two_ are the same length.

A-17 This _rectangle_ (shape name) has _four_ sides and _two OR two pair_ are the same length

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Panel 5 (page 6)

Building Thinking Skills® — Book Two — Describing Shapes

DESCRIBING SHAPES—SELECT

DIRECTIONS: Look at each shape. Read the words in the choice box. Complete each sentence with the correct words from the choice box. Use the most specific name for each shape.

CHOICE BOX: all, none, one, two, three, four, five, six, hexagon, parallelogram, pentagon, quadrilateral, rectangle, square, triangle

A-18 This _triangle_ (shape name) has _three_ sides and _none_ are the same length.

A-19 This _pentagon_ (shape name) has _five_ sides and _two pairs_ are the same length.

A-20 This _quadrilateral_ (shape name) has _four_ sides and _none_ are the same length.

A-21 This _parallelogram_ (shape name) has _four_ sides and _two pairs_ are the same length.

A-22 This _hexagon_ (shape name) has _six_ sides and _all OR six_ are the same length.

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Panel 6 (page 7)

Building Thinking Skills® — Book Two — Describing Shapes

DESCRIBING SHAPES—EXPLAIN

DIRECTIONS: In each description box, describe the shape in the picture at the left. Use complete sentences in your descriptions.

EXAMPLE   3 in.   2 in.

DESCRIPTION
This rectangle has four square corners. The rectangle is three inches high and two inches wide. Two sides are three inches long and the other two sides (top and bottom) are two inches long.

A-23   3 in.   2 in.

DESCRIPTION
This triangle has three sides and three angles. It has one square corner. The triangle is 3 inches tall (high) and 2 inches wide (across).

Sample Answer

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Panel 7 (page 8)

Building Thinking Skills® — Book Two — Describing Shapes

DESCRIBING SHAPES—EXPLAIN

DIRECTIONS: In each description box, describe the shape in the picture at the left. Use complete sentences in your descriptions.

A-24 DESCRIPTION
This trapezoid has four sides and four angles. Two of its sides are equal. It has no square corners. The trapezoid is two inches tall (high), has a four-inch lower base and a two-inch upper base.

2 in. / 2 in. / 4 in.

A-25   2 in. / 3 in. / 2 in.

DESCRIPTION
This pentagon has five sides and five angles. It has two square corners and two pairs of equal sides. The pentagon is three inches tall (high) and two inches wide (across). Three of its sides are two inches long.

Sample Answer

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Panel 8 (page 9)

Building Thinking Skills® — Book Two — Describing Shapes

DESCRIBING POSITION—SELECT

DIRECTIONS: Write the words from the choice box that correctly complete the sentences. Draw a figure as directed.

CHOICE BOX
above, below, center, circle, left, right, square, triangle

A-26
The square is _above_ the circle. The circle is _below_ the square. Draw a triangle below the circle.

A-27
The triangle is _above_ the square. The circle is on the _left_ side of the square. Draw a black triangle to the right of the square.

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Panel 9 (page 10)

Building Thinking Skills® — Book Two — Describing Shapes

DESCRIBING POSITION—SELECT

DIRECTIONS: Write the words from the choice box that correctly complete the sentences. Draw a figure as directed.

CHOICE BOX
above, below, center, circle, left, right, square, triangle

A-28
The triangle is _below_ the circle and to the _right_ of the square. Draw a black circle near the lower left corner. The black circle will be _below_ the square.

A-29
The triangle is near the upper _left_ corner. The circle is in the _center_. Draw a black square directly below the circle. The black square will be to the _left_ of the gray square.

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MATCHING SHAPES

DIRECTIONS: Circle the shapes that match the one on the left. The matching shapes must face the same direction as the shape on the left.

MATCHING SHAPES

DIRECTIONS: Circle the shapes that match the one on the left. The matching shapes must face the same direction as the shape in the box.

MATCHING FIGURES

DIRECTIONS: Circle the figures that are the same in each row.

MATCHING FIGURES

DIRECTIONS: Circle the figures that are the same in each row.

WHICH SHAPES DO NOT MATCH?

DIRECTIONS: Cross out the shapes that DO NOT match the shape on the left. The matching shapes must all face in the same direction.

WHICH SHAPE DOES NOT MATCH?

DIRECTIONS: In each row, cross out the shape or figure that does not match the other four figures.

WHICH FIGURE DOES NOT MATCH?

DIRECTIONS: In each row, cross out the figure that does not match the other four figures.

FINDING SHAPES

DIRECTIONS: Circle any shape that exactly matches one of the shapes in the figure on the left.

FINDING SHAPES

DIRECTIONS: Circle any shape that exactly matches one of the overlapping shapes in the figure on the left.

BUILDING THINKING SKILLS® — BOOK TWO   FIGURAL SIMILARITIES AND DIFFERENCES

FINDING SHAPES

DIRECTIONS: Circle any shape that exactly matches one of the overlapping shapes in the figure on the left.

B-49

a. b.
c. d.

B-50

a. b.
c. d.

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BUILDING THINKING SKILLS® — BOOK TWO   FIGURAL SIMILARITIES AND DIFFERENCES

FINDING AND TRACING PATTERNS

DIRECTIONS: Circle any figure that contains the figure on the left. The figure must be in the same position but may have extra lines. Trace over the matching figure to make sure you are right.

EXAMPLE

a. b.
Sample Pattern c. d.

B-51

a. b.
c. d.

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BUILDING THINKING SKILLS® — BOOK TWO   FIGURAL SIMILARITIES AND DIFFERENCES

FINDING AND TRACING PATTERNS

DIRECTIONS: Circle any figure that contains the shape on the left. The shape must be in the same position but may have extra lines. Trace over the matching figure to make sure you are right.

B-52

a. b.
c. d.

B-53

a. b.
c. d.

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BUILDING THINKING SKILLS® — BOOK TWO   FIGURAL SIMILARITIES AND DIFFERENCES

FINDING AND TRACING PATTERNS

DIRECTIONS: Circle any figure that contains the figure on the left. The figure must be in the same position but may have extra lines. Trace over the matching figure to make sure you are right.

B-54

a. b.
c. d.

B-55

a. b.
c. d.

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BUILDING THINKING SKILLS® — BOOK TWO   FIGURAL SIMILARITIES AND DIFFERENCES

COMBINING SHAPES

DIRECTIONS: Check the figures that can be formed by joining the three shapes in the box. Shapes may be turned or flipped.

EXAMPLE
Join these three shapes.   Which of these figures can be formed?
a. b.
c. d.

B-56
Join these three shapes.   Which of these figures can be formed?
a. b.
c. d.

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BUILDING THINKING SKILLS® — BOOK TWO   FIGURAL SIMILARITIES AND DIFFERENCES

COMBINING SHAPES

DIRECTIONS: Check the figures that can be formed by joining the three shapes in the box. Shapes may be turned or flipped.

B-57
Join these three shapes.   Which of these figures can be formed?
a. b.
c. d.

B-58
Join these three shapes.   Which of these figures can be formed?
a. b.
c. d.

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BUILDING THINKING SKILLS® — BOOK TWO   FIGURAL SIMILARITIES AND DIFFERENCES

COMBINING SHAPES

DIRECTIONS: If each square was cut into three parts, check the figures that could be formed by joining those parts.

B-59
If this figure were cut along the dotted lines,   which of these figures could be formed?
a. b.
c. d.

B-60
If this figure were cut along the dotted lines,   which of these figures could be formed?
a. b.
c. d.

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BUILDING THINKING SKILLS® — BOOK TWO   FIGURAL SIMILARITIES AND DIFFERENCES

DIVIDING SHAPES INTO EQUAL PARTS—A

DIRECTIONS: Look at the two parts of the square. Answer the question, **"Are the parts exactly alike?"** Write *yes* or *no* in the blank below each question.

EXAMPLE
A
B
Are parts "A" and "B" exactly alike?
_____yes_____
(Parts "A" and "B" are exactly alike in size and shape even though they face different directions.)

B-61
C
D
Are parts "C" and "D" exactly alike?
_____yes_____

B-62
E
F
Are parts "E" and "F" exactly alike?
_____yes_____

B-63
G
H
Are parts "G" and "H" exactly alike?
_____no_____

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BUILDING THINKING SKILLS® — BOOK TWO   FIGURAL SIMILARITIES AND DIFFERENCES

DIVIDING SHAPES INTO EQUAL PARTS—A

DIRECTIONS: Look at the two parts of the square. Answer the question, **"Are the parts exactly alike?"** Write *yes* or *no* in the blank below each question.

B-64
I
J
Are parts "I" and "J" exactly alike?
_____yes_____

B-65
K
L
Are parts "K" and "L" exactly alike?
_____no_____

B-66
M
N
Are parts "M" and "N" exactly alike?
_____yes_____

B-67
O
P
Are parts "O" and "P" exactly alike?
_____no_____

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ENLARGING FIGURES

DIRECTIONS: Use the dot grid to draw a figure with sides twice as long as the figure on the left.

B-149

B-150

B-151

ENLARGING FIGURES

DIRECTIONS: Use the dot grid to draw a figure with sides twice as long as the figure on the left.

B-152

B-153

B-154

REDUCING FIGURES

DIRECTIONS: To reduce a figure so that each side is half as long, count the number of spaces between the dots on each side of the figure and divide by two. Count the spaces, not the dots. Use the dot grid to mark off the length of each side of the reduced figure.

Original Figure

Reduced Figure

If the pattern is not a rectangle, then the "triangle rule" may be used to reduce the size of a line drawn at an angle. Here is an example of the "triangle rule". Start at point A and go upward until your pencil is in line with point B. Then go over until your pencil is on point B. Next, count the spaces between the dots and divide by two. Finally, draw a reduced figure as shown.

6 spaces over   B   becomes   3 spaces over   B'

8 spaces up   4 spaces up   A'

A

B-155 Try the "triangle rule" on line CD.

12 spaces over   D

8 spaces over

Show your work here

C

REDUCING FIGURES

DIRECTIONS: Use the dot grid to draw a figure with sides half as long as the figure on the left.

B-156

B-157

B-158

B-159

REDUCING FIGURES

DIRECTIONS: Use the dot grid to draw a figure with sides half as long as the figure on the left.

B-160

B-161

B-162

B-163

COMPARING SHAPES—EXPLAIN

DIRECTIONS: Use this diagram to organize your thinking about how a triangle and a trapezoid are alike and how they are different.

B-164

2 in.   2 in.

2 in.   2 in.

HOW ALIKE?

Both are closed, white figures; both are made with straight lines; both have a base length of two inches and are two inches high.

HOW DIFFERENT?

WITH REGARD TO

TRIANGLE		TRAPEZOID
three	NUMBER OF SIDES	four
three	NUMBER OF ANGLES	four
none	NUMBER OF PARALLEL SIDES	two

COMPARING SHAPES—EXPLAIN

DIRECTIONS: Use this diagram to organize your thinking about how a square and a parallelogram are alike and how they are different.

B-165

2 in.   2 in.

2 in.   1 in.

HOW ALIKE?

Both are white; both have four sides; both are two inches high; both have two pairs of parallel sides.

HOW DIFFERENT?

WITH REGARD TO

SQUARE		PARALLELOGRAM
four equal angles	NUMBER OF EQUAL ANGLES	two sets of equal angles
all sides are equal	LOCATION OF EQUAL SIDES	opposite sides are equal
two inches	SIZE OF BASE	one inch

COMPARING SHAPES—EXPLAIN

DIRECTIONS: Use this diagram to organize your thinking about how a rectangle and a parallelogram are alike and how they are different.

B-166

2 in.   2 in.

1 in.   1 in.

HOW ALIKE?

Both are white; both are four-sided shapes; both have a one-inch base and are two inches high; both have opposite sides parallel.

HOW DIFFERENT?

WITH REGARD TO

RECTANGLE		PARALLELOGRAM
four	NUMBER OF EQUAL ANGLES	two pairs of equal angles
all angles are equal	LOCATION OF EQUAL ANGLES	opposite angles are equal
90 degrees (square)	SIZE OF ANGLES	2 are smaller than a right angle and 2 are larger than a right angle

SEQUENCE OF FIGURES—SELECT

DIRECTIONS: Here are examples of three sequences. The correct figure that completes each sequence is circled and a description of the kind of sequence is given.

EXAMPLE

a.   b.
c.   d.

This sequence shows "flipping" horizontally, like the pages of a book.

EXAMPLE

a.   b.
c.   d.

This sequence shows "turning." The arrow is turning to the left.

EXAMPLE

a.   b.
c.   d.

This sequence shows "subtracting detail."

SEQUENCE OF FIGURES—SELECT

DIRECTIONS: Circle the figure that best continues the sequence.

C-1

C-2

C-3

SEQUENCE OF FIGURES—SELECT

DIRECTIONS: Circle the figure that best continues the sequence.

C-4

C-5

C-6

SEQUENCE OF FIGURES—SELECT

DIRECTIONS: Circle the figure that best continues the sequence.

C-7

C-8

C-9

SEQUENCE OF FIGURES—SUPPLY

DIRECTIONS: Shade in the fourth shape in each row to continue each sequence.

C-10

C-11

C-12

C-13

C-14

SEQUENCE OF FIGURES—SUPPLY

DIRECTIONS: Shade in the fourth shape in each row to continue each sequence.

C-15

C-16

C-17

C-18

C-19

TUMBLING—SHADING

DIRECTIONS: As a shape tumbles along, the side that is on the ground changes. Darken the following figures to show how they look as they tumble across the page.

EXAMPLE   Direction of tumbling (rotating)

Direction shape moves

C-20   Direction of tumbling (rotating)

Direction shape moves

C-21   Direction of tumbling (rotating)

Direction shape moves

TUMBLING—SHADING

DIRECTIONS: As a shape tumbles along, the side that is on the ground changes. Darken the following figures to show how they look as they tumble across the page. You may not need to fill in all the shapes.

C-22 Darken each square to show how it will look as it turns to the right.

Direction of tumbling (rotating)

turned once   turned twice

C-23 Darken each square to show how it will look as it turns to the left.

Direction of tumbling (rotating)

turned twice   turned once

C-24 Starting with the circle in the middle, darken another circle to show how the middle circle will look as it turns once to the left.

TUMBLING—SHADING

DIRECTIONS: As a shape tumbles along, the side that is on the ground changes. Darken the following figures to show how they look as they tumble across the page. You may not need to fill in all the shapes.

C-25 Darken the figures to show how the square will look as it turns three times to the right.

Direction of tumbling (rotating)

C-26 Darken the figures to show how the square will look as it turns two times to the left.

Direction of tumbling (rotating)

C-27 Darken the figures to show how the square will look as it turns four times to the right.

TURNING (ROTATING) FIGURES

DIRECTIONS: Explain how the first figure has been turned to produce the second by filling in the number of position changes and the direction of change.

EXAMPLE   Before turning   After turning   Direction of turning (rotating)

Turns ___1___   Direction ___right___

EXAMPLE   After turning   Before turning   Direction of turning

Turns ___2___   Direction ___left___

C-28   Before turning   After turning

Turns ___2___   Direction ___right___

Panel 1:

BUILDING THINKING SKILLS® — BOOK TWO   FIGURAL SEQUENCES

TURNING (ROTATING) FIGURES

DIRECTIONS: Explain how the first figure has been turned to produce the second by filling in the number of position changes and the direction of change.

C-29

Before turning   After turning

Turns _1_   Direction _right_

C-30

After turning   Before turning

Turns _2_   Direction _left_

C-31

Before turning   After turning

Turns _3_   Direction _right_

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Panel 2:

BUILDING THINKING SKILLS® — BOOK TWO   FIGURAL SEQUENCES

PATTERN FOLDING—SELECT

DIRECTIONS: The pattern on the left is a wrapper for one of the solids on the right. Draw a circle around the correct solid.

EXAMPLE   a. (circled)   b.   c.   d.

C-32   a.   b. (circled)   c.   d.

C-33   a.   b. (circled)   c.   d.

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Panel 3:

88   BUILDING THINKING SKILLS® — BOOK TWO   FIGURAL SEQUENCES

PATTERN FOLDING—SUPPLY

DIRECTIONS: The patterns at the bottom of the page, when folded, produce the cube at the top of the page. Fill in the blanks on the pattern with the correct position number for that face of the cube.

4 on the back   6 on the side   5 on the bottom   (cube labeled 3, 1, 2)

EXAMPLE
3
1   2   4   6
5

C-34
3
_6_   1   2
_5_
_4_

C-35
_4_
3   2   _5_   6
1

C-36
3
_4_   _6_   1   2
_5_

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Panel 4:

BUILDING THINKING SKILLS® — BOOK TWO   FIGURAL SEQUENCES

PATTERN FOLDING—SUPPLY

DIRECTIONS: The patterns at the bottom of the page, when folded, produce the cube at the top of the page. Fill in the blanks on the pattern with the correct position number for that face of the cube.

3 on the back   4 on the side   6 on the bottom   (cube labeled 5, 1, 2)

C-37
5
1   2   _3_   _4_
_6_

C-38
_3_
5
1   2
_4_   _6_

C-39
5
_4_   1   2   _3_
_6_

C-40
_3_
5   2   _6_   _4_
1

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Panel 5:

90   BUILDING THINKING SKILLS® — BOOK TWO   FIGURAL SEQUENCES

PATTERN FOLDING—SUPPLY

DIRECTIONS: The patterns at the bottom of the page, when folded, produce the cube at the top of the page. Fill in the blanks on the pattern with the correct position number for that face of the cube.

3 on the back   2 on the side   6 on the bottom   (cube labeled 5, 1, 4)

C-41
5
1
_2_   _6_   4
_3_

C-42
1   4
_6_
_2_
5   _3_

C-43
_3_
5   4   _6_   _2_
1

C-44
5
1   4   _3_   _2_
_6_

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Panel 6:

BUILDING THINKING SKILLS® — BOOK TWO   FIGURAL SEQUENCES

STACKING SHAPES—SELECT

DIRECTIONS: Look at the four shapes in the top box. At the bottom of the page are six combinations formed by placing one shape on another. Select the stack that fits each description.

(triangle, square, circle, hexagon)

EXAMPLE: The hexagon is on the square.   Answer: _c_

C-45 The circle is on the triangle.   Answer: _d_

C-46 The triangle is on the square.   Answer: _e_

C-47 The square is on the hexagon.   Answer: _f_

a.   b.   c.

d.   e.   f.

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Panel 7:

92   BUILDING THINKING SKILLS® — BOOK TWO   FIGURAL SEQUENCES

STACKING SHAPES—SELECT

DIRECTIONS: Look at the four shapes in the top box. At the bottom of the page are eight combinations formed by placing one shape on another. Select the stack that fits each description.

(square, square, triangle, circle)

C-48 The circle is on the square.   Answer: _c_

C-49 The triangle is on the rectangle.   Answer: _f_

C-50 The rectangle is on the square.   Answer: _h_

C-51 The square is on the circle.   Answer: _g_

C-52 The circle is on the rectangle.   Answer: _a_

a.   b.   c.   d.

e.   f.   g.   h.

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Panel 8:

BUILDING THINKING SKILLS® — BOOK TWO   FIGURAL SEQUENCES

STACKING SHAPES—SUPPLY

DIRECTIONS: Shade in the shapes to show how each pair of shapes will look after they are stacked according to the directions.

EXAMPLE ○ + ▭ = ○

Put the circle on the rectangle.

C-53 △ + ▭ = △

Put the rectangle on the triangle.

C-54 △ + ▭ = △

Put the triangle on the rectangle.

C-55 ○ + ▭ = ○

Put the rectangle on the circle.

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Panel 9:

94   BUILDING THINKING SKILLS® — BOOK TWO   FIGURAL SEQUENCES

STACKING SHAPES—SUPPLY

DIRECTIONS: Shade in the shapes to show how each pair of shapes will look after they are stacked according to the directions.

C-56 Put the square on the triangle.

C-57 Put the rectangle on the triangle.

C-58 Put the rectangle on the square.

C-59 Put the triangle on the rectangle.

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MATCHING CLASSES BY SHAPE
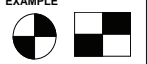
DIRECTIONS: Draw a line from each group on the left to a group on the right that belongs to the same class.

D-13 | a.
D-14 | b.
D-15 | c.
D-16 | d.
D-17 | e.

MATCHING CLASSES BY SHAPE

DIRECTIONS: Draw a line from each group on the left to a group on the right that belongs to the same class.
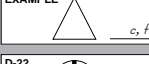
EXAMPLE | a.
D-18 | b.
D-19 | c.
D-20 | d.
D-21 | e.

CLASSIFYING MORE THAN ONE WAY—MATCHING

DIRECTIONS: Match the figure in each box on the left to all the classes on the right to which it can belong. Write the letters of the correct classes on the line next to the figure. For example, the triangle in the example belongs to both class *c* (the white class) and class *f* (the triangle class). *
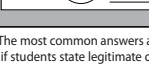
EXAMPLE   *c, f* | a.
D-22   *e* | b.
D-23   *c, f* | c.
D-24   *b,c,d,e* | d.
D-25   *a, c* | e.
D-26   *d* | f.
D-27   *c*
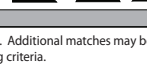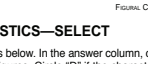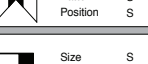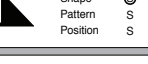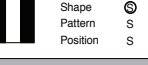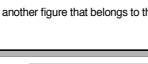
* The most common answers are given. Additional matches may be justified if students state legitimate classifying criteria.

CLASSIFYING MORE THAN ONE WAY—MATCHING

DIRECTIONS: Match the figure in each box on the left to all the classes on the right to which it can belong. You can match the figure by one or more characteristics. Write the letters of all the classes to which it can belong.

D-28   *b, e* | a.
D-29   *c,f* | b.
D-30   *a,e* | c.
D-31   *d,f* | d.
D-32   *e,f* | e.
D-33   *a,b,c,d* | f.
D-34   *a,c,d,e*
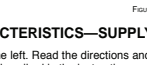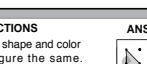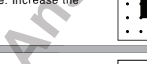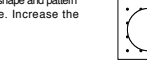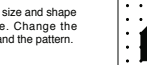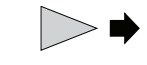
CHANGING CHARACTERISTICS—SELECT

DIRECTIONS: Look at each pair of figures below. In the answer column, circle "S" if the characteristic is the same for both figures. Circle "D" if the characteristic is different.

EXAMPLE — ANSWERS

Size — Ⓢ D
Shape — Ⓢ D
Color — S Ⓓ
Position — S Ⓓ
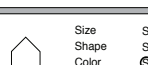
Both triangles are the same size; S is circled in the size row.
Both shapes are triangles; S is circled in the shape row.
One triangle is gray and the other is black; D is circled in the color row.
The gray triangle points to the right and the black triangle points to the left; D is circled in the position row.

D-35
Size — S Ⓓ
Shape — S Ⓓ
Color — Ⓢ D

D-36
Size — S Ⓓ
Shape — S Ⓓ
Pattern — S Ⓓ

D-37
Size — S Ⓓ
Shape — S Ⓓ
Color — Ⓢ D
Position — Ⓢ D
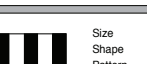
CHANGING CHARACTERISTICS—SELECT
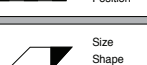
DIRECTIONS: Look at each pair of figures below. In the answer column, circle "S" if the characteristic is the same for both figures. Circle "D" if the characteristic is different.

D-38
Size — Ⓢ D
Shape — Ⓢ D
Pattern — S Ⓓ
Position — S Ⓓ

D-39
Size — S Ⓓ
Shape — Ⓢ D
Pattern — S Ⓓ

D-40
Size — Ⓢ D
Shape — Ⓢ D
Pattern — S Ⓓ
Position — S Ⓓ

D-41
Size — S Ⓓ
Shape — Ⓢ D
Pattern — S Ⓓ
Position — S Ⓓ
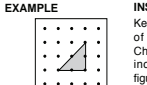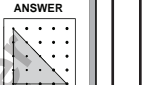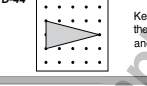
D-42
Size — Ⓢ D
Shape — Ⓢ D
Pattern — Ⓢ D
Position — S Ⓓ

CHANGING CHARACTERISTICS—SUPPLY

DIRECTIONS: Look at the figure on the left. Read the directions and then draw another figure with the characteristics described in the instructions.

EXAMPLE	INSTRUCTIONS	ANSWER
	Keep the shape and color of the figure the same. Change the position and increase the size of the figure.	
D-43	Keep the shape and color the same. Increase the size.	
D-44	Keep the shape and size the same. Change the color and position.	
D-45	Keep the shape and pattern the same. Increase the size.	
D-46	Keep the size and shape the same. Change the position and the pattern.	
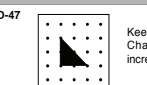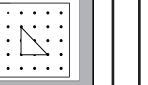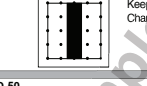
CHANGING CHARACTERISTICS—SUPPLY
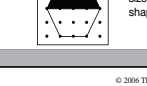
DIRECTIONS: Look at the figure on the left. Read the directions and then draw another figure with the characteristics described in the instructions.

D-47	Keep the color the same. Change the shape and increase the size.	
D-48	Keep the color the same. Change the shape and decrease the size.	
D-49	Keep the pattern the same. Change the shape and size.	
D-50	Keep the size and shape the same. Change the color and direction.	
D-51	Keep the pattern and the size the same. Change the shape.	
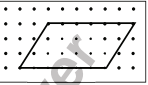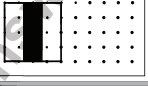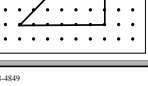
DRAW ANOTHER

DIRECTIONS: In the box on the right, draw another figure that belongs to the group on the left.

D-52
D-53
D-54
D-55
D-56

FIGURAL ANALOGIES—COMPLETE

DIRECTIONS: Shade in the last figure in each row so that the figural analogies are complete.

A : B :: C : D

E-33

E-34

E-35

E-36

E-37

FIGURAL ANALOGIES—COMPLETE

DIRECTIONS: Shade in the last figure in each row so that the analogies are complete.

A : B :: C : D

E-38

E-39

E-40

E-41

E-42

FIGURAL ANALOGIES—COMPLETE

DIRECTIONS: Shade in the last figure in each row so that the figural analogies are complete.

A : B :: C : D

E-43

E-44

E-45

E-46

E-47

FIGURAL ANALOGIES—SUPPLY

DIRECTIONS: Using the dot grid, draw in a figure to complete each analogy.

E-48

E-49

E-50

E-51

E-52

FIGURAL ANALOGIES—SUPPLY

DIRECTIONS: Using the dot grid, draw in a figure to complete each analogy.

E-53

E-54

E-55

E-56

E-57

FIGURAL ANALOGIES—SUPPLY

DIRECTIONS: Using the dot grid, draw in a figure to comlete each analogy.

E-58

E-59

E-60

E-61

E-62

FIGURAL ANALOGIES—SUPPLY A PAIR

DIRECTIONS: Using the dot grid, draw the last two figures, "C" and "D," to complete the analogy. Figures "C" and "D" should be related to each other in the same way that the first two figures, "A" and "B," are related.

A : B :: C : D

E-63

E-64

E-65

E-66

FIGURAL ANALOGIES—SUPPLY A PAIR

DIRECTIONS: Using the dot grid, draw the last two figures, "C" and "D," to complete the analogy. Figures "C" and "D" should be related to each other in the same way that the first two figures, "A" and "B," are related.

A : B :: C : D

E-67

E-68

E-69

E-70

FIGURAL ANALOGIES—FOLLOW THE RULE

DIRECTIONS: Read the rule in each box. Complete each pair in these analogies by drawing shapes which follow that rule.

E-71 Increase detail by doubling the number of parts.

E-72 Illustrate color-opposites.

E-73 Reflect about an up-down (vertical) line.
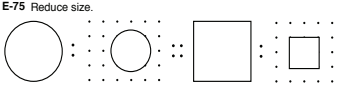
E-74 Rotate in the direction of the arrow (counterclockwise).
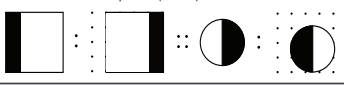
FIGURAL ANALOGIES—FOLLOW THE RULE

DIRECTIONS: Read the rule in each box. Complete each pair in these analogies by drawing shapes which follow that rule.

E-75 Reduce size.

E-76 Reflect about an up-down (vertical) line.

E-77 Rotate in the direction of the arrow (clockwise).
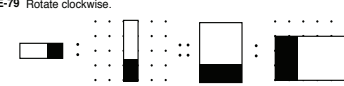
E-78 Illustrate color-opposites.
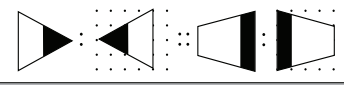
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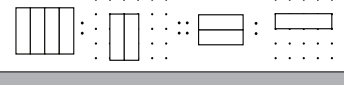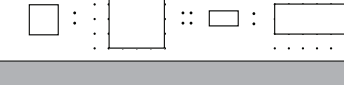
FIGURAL ANALOGIES—FOLLOW THE RULE

DIRECTIONS: Read the rule in each box. Complete each pair in these analogies by drawing shapes which follow that rule.

E-79 Rotate clockwise.

E-80 Reflect about a vertical line.

E-81 Reduce detail or number of parts.

E-82 Increase size.

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DESCRIBING FOODS—SELECT

DIRECTIONS: Each exercise contains the names of three foods, followed by descriptions of two of the words. Choose the word that fits each description and write it in the blank.

EXAMPLE

WORD CHOICES: corn, rice, wheat

A. We eat the seeds of this yellow vegetable. The seeds are protected by husks that grow on a tall stalk.
corn

B. We eat the seeds of this grain, which grows as a tall grass. The seeds are often ground into flour to make bread.
wheat

F-1 WORD CHOICES: cucumber, yellow squash, zucchini

A. This long, round, green, salad vegetable is often made into pickles.
cucumber

B. This squash looks like a cucumber and is eaten boiled or fried.
zucchini

F-2 WORD CHOICES: lemonade, milk, water

A. This liquid has no nutritional value, but we need to drink 6 to 8 glasses of it each day. It makes up most of our body.
water

B. This liquid is an important source of calcium to build strong teeth and bones. You can drink it or pour it on your cereal.
milk

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DESCRIBING ANIMALS—SELECT

DIRECTIONS: Each exercise contains the names of three animals, followed by descriptions of two of the words. Choose the word that fits each description and write it in the blank.

F-3 WORD CHOICES: deer, elk, moose

A. The largest member of the deer family, this animal has a very large head and a long flap of skin, called a bell, that hangs under its throat. The males have large, broad, spoon-shaped antlers.
moose

B. A medium-sized member of the deer family, this animal's coat is grayish brown with a white patch on its rump. In the United States, it is only found in the Rocky Mountains and in the Central Valley of California.
elk

F-4 WORD CHOICES: butterfly, moth, wasp

A. This insect is dull in color, has large wings, and flies at night.
moth

B. Groups of these stinging insects build large, paperlike, "woven" nests.
wasp

F-5 WORD CHOICES: seal, sea lion, walrus

A. This member of the seal family has ears and flippers that are larger than those of true seals. Its long, tapered body is covered with thin, short, coarse hair. This animal can turn its hind flippers forward to move about on land.
sea lion

B. This large marine mammal lives in the open water at the edge of the Arctic ice pack. It lacks external ears, has long tusks and thick, nearly hairless, skin, except for long bristles on the cheek pads. It has reversible hind flippers for moving over ice.
walrus

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DESCRIBING VEHICLES—SELECT

DIRECTIONS: Each exercise contains the names of three vehicles followed by descriptions of two of the words. Choose the word that fits each description and write it in the blank.

F-6 WORD CHOICES: bicycle, moped, motorcycle

A. This two-wheeled vehicle can be pedaled or driven by a small engine. Its top speed is about 30 miles per hour.
moped

B. This two-wheeled vehicle is powered by a gasoline engine that can propel it at speeds up to 100 miles per hour. Because it is often driven at high speeds, it is a very dangerous vehicle, and accidents on it often result in injuries or death.
motorcycle

F-7 WORD CHOICES: backhoe, bulldozer, crane

A. This very large vehicle moves short distances on rolling tracks. A motor-driven cable runs over the end of a long, necklike boom. A hook at the end of the cable is used to lift heavy objects.
crane

B. This large vehicle has a large, movable scoop shovel on the back that is used to dig ditches and trenches.
backhoe

F-8 WORD CHOICES: all-terrain vehicle, motocross bicycle, snowmobile

A. This vehicle has large, fat tires that allow it to move over almost any land or marshy area.
all-terrain vehicle

B. This two-wheeled vehicle is small and tough. It is built to fly over dirt jumps and race around tracks. It has special tires and a rugged frame.
motocross bicycle

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DESCRIBING GEOGRAPHIC TERMS—SELECT

DIRECTIONS: Each exercise contains the names of three landforms or bodies of water, followed by descriptions of two of the words. Choose the word that fits each description and write it in the blank.

F-9 WORD CHOICES: canal, channel, stream

A. A natural, narrow waterway connecting two bodies of water.
channel

B. A manmade, narrow waterway connecting two bodies of water.
canal

F-10 WORD CHOICES: basin, canyon, mesa

A. A flat-topped hill with steep sides, common in deserts.
mesa

B. A broad flat area surrounded by hills or mountains.
basin

F-11 WORD CHOICES: island, isthmus, peninsula

A. A narrow strip of land connecting two larger land areas.
isthmus

B. Land surrounded by water on three sides.
peninsula

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DESCRIBING OCCUPATIONS—SELECT

DIRECTIONS: Each exercise contains the names of three occupations, followed by descriptions of two of the jobs. Choose the word that fits each description and write it in the blank.

F-12 WORD CHOICES: dental hygienist, dental assistant, dentist

A. This person gives dental examinations and cleans patients' teeth but does not fill or cap teeth.
dental hygienist

B. This person prepares a patient to see the dentist. He or she hands instruments and materials to the dentist during dental procedures, takes X-rays, takes impressions of the teeth, and performs other dental tasks.
dental assistant

F-13 WORD CHOICES: inhalation therapist, nurse, physical therapist

A. This person helps hospitalized patients regain their ability to breathe.
inhalation therapist

B. This person helps injured people learn to walk and/or use their arms and hands again.
physical therapist

F-14 WORD CHOICES: computer engineer, data clerk, programmer

A. This person is responsible for entering the correct information into a computer.
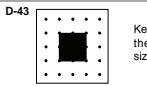_data clerk_

B. This person is responsible for designing and building computers.
computer engineer

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DESCRIBING COMPUTER DEVICES—SELECT

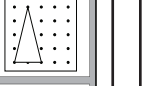**DIRECTIONS:** Each exercise contains three computer terms, followed by descriptions of two of the terms. Choose the word that fits each description and write it in the blank.

F-15 WORD CHOICES: computer processing unit, computer memory, compact disk

A. This computer component allows processed data to be stored within the computer.
computer memory

B. This computer component allows the operator to perform complex tasks such as calculations, word processing, drawing, and bookkeeping.
computer processing unit

F-16 WORD CHOICES: e-mail, Internet, modem

A. This device connects a computer to the World Wide Web.
modem

B. This system of interconnections between computers allows a computer operator to send and receive information (drawings, messages, or files) from other computer users.
Internet

F-17 WORD CHOICES: CD ROM, Random Access Memory (RAM), Read Only Memory (ROM)

A. This integrated circuit allows a computer to access (find) and use the instructions (programs) stored or fed into a computer.
Random Access Memory (RAM)

B. This computer component allows a computer to read and store (remember) the calculations, written documents, and drawings produced by the computer operator.
Read Only Memory (ROM)

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IDENTIFYING CHARACTERISTICS OF FOOD

DIRECTIONS: Read each passage about a food. Identify the characteristics of the food and write them in the blanks.

F-18

A pizza is a popular baked food that consists of a flat, round bread base covered with tomato sauce and cheese. Various other ingredients are sprinkled on top of the basic pizza.

flat, round bread base — CHARACTERISTIC
covered with tomato sauce — CHARACTERISTIC

pizza — PLACE OR THING

cover with cheese — CHARACTERISTIC
covered with a variety of other ingredients — CHARACTERISTIC

F-19

Butter is a yellow, dairy product that is made by stirring (churning) milk until the butterfat forms into lumps. The lumps are collected and molded into sticks of butter that can be sold by grocers.

yellow in color — CHARACTERISTIC
a dairy product — CHARACTERISTIC

butter — PLACE OR THING

made by stirring (churning) milk — CHARACTERISTIC
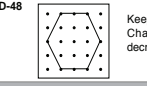_is the butterfat found in milk_ — CHARACTERISTIC

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Panel 1 (page 192)

SIMILARITIES—SELECT

DIRECTIONS: Each line contains four verbs. Read the first verb and think about what it means. One of the next three verbs means almost the same thing. Underline the one that is most like the first verb in meaning.

G-73	break	**a.** crack	**b.** mend	**c.** repair
G-74	lead	**a.** attempt	**b.** direct	**c.** follow
G-75	seem	**a.** appear	**b.** have	**c.** need
G-76	begin	**a.** make	**b.** start	**c.** try
G-77	jog	**a.** hike	**b.** pace	**c.** run
G-78	manage	**a.** control	**b.** start	**c.** stop
G-79	continue	**a.** expect	**b.** prevent	**c.** proceed
G-80	desire	**a.** have	**b.** try	**c.** want
G-81	clear	**a.** plant	**b.** remove	**c.** set
G-82	care	**a.** ignore	**b.** neglect	**c.** tend
G-83	produce	**a.** break	**b.** manufacture	**c.** reduce
G-84	survive	**a.** die	**b.** perish	**c.** recover

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Panel 2 (page 193)

SIMILARITIES—SELECT

DIRECTIONS: Each line contains four adjectives. Read the first adjective and think about what it means. One of the next three adjectives means almost the same thing. Underline the one that is most like the first adjective in meaning.

G-85	active	**a.** busy	**b.** quiet	**c.** still
G-86	tired	**a.** calm	**b.** rested	**c.** weary
G-87	curious	**a.** familiar	**b.** peculiar	**c.** similar
G-88	personal	**a.** open	**b.** private	**c.** public
G-89	initial	**a.** first	**b.** last	**c.** middle
G-90	former	**a.** current	**b.** earlier	**c.** present
G-91	novel	**a.** different	**b.** familiar	**c.** old
G-92	earnest	**a.** serious	**b.** casual	**c.** careless
G-93	temporary	**a.** continuous	**b.** brief	**c.** permanent
G-94	favorable	**a.** critical	**b.** friendly	**c.** negative
G-95	clever	**a.** average	**b.** dull	**c.** sharp
G-96	mobile	**a.** fixed	**b.** movable	**c.** stationary

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Panel 3 (page 194)

SIMILARITIES—SELECT

DIRECTIONS: Each line contains four adjectives. Sometimes the same word can have several different meanings. Read the first adjective in each row and think about what it means. Underline the one that is most like the first adjective in meaning.

G-97	dull	**a.** boring	**b.** exciting	**c.** loud
G-98	dull	**a.** blunt	**b.** even	**c.** sharp
G-99	hard	**a.** difficult	**b.** simple	**c.** smooth
G-100	hard	**a.** easy	**b.** firm	**c.** loose
G-101	hard	**a.** fantastic	**b.** idealistic	**c.** realistic
G-102	clear	**a.** bright	**b.** gloomy	**c.** hazy
G-103	clear	**a.** blurred	**b.** certain	**c.** vague
G-104	clear	**a.** bare	**b.** clogged	**c.** occupied
G-105	fine	**a.** awful	**b.** excellent	**c.** poor
G-106	fine	**a.** coarse	**b.** rough	**c.** delicate
G-107	fine	**a.** broad	**b.** thin	**c.** wide
G-108	fine	**a.** clear	**b.** cloudy	**c.** gloomy

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Panel 4 (page 195)

SIMILARITIES—SELECT

DIRECTIONS: Each line contains four verbs. Sometimes the same word can have several different meanings. Read the first verb in each row and think about what it means. Underline another verb that is most like the first one in meaning.

G-109	raise	**a.** lower	**b.** lift	**c.** slide
G-110	raise	**a.** increase	**b.** reduce	**c.** use
G-111	raise	**a.** destroy	**b.** grow	**c.** maintain
G-112	cut	**a.** peel	**b.** slice	**c.** tear
G-113	cut	**a.** hire	**b.** increase	**c.** reduce
G-114	cut	**a.** comb	**b.** dry	**c.** shave
G-115	cut	**a.** concentrate	**b.** dilute	**c.** thicken
G-116	fail	**a.** cure	**b.** decline	**c.** heal
G-117	fail	**a.** flunk	**b.** pass	**c.** win
G-118	fail	**a.** dwindle	**b.** grow	**c.** supply
G-119	drop	**a.** fall	**b.** rise	**c.** soar
G-120	drop	**a.** decline	**b.** grow	**c.** hold

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Panel 5 (page 196)

SIMILARITIES—SUPPLY

DIRECTIONS: Each line contains a verb. Read the verb and think about what it means. Think of another verb (or verbs) that means almost the same. Write the verb(s) in the box.

Sample Answer

G-121	capture	*hold, grab, catch*
G-122	select	*pick, choose, decide*
G-123	ruin	*destroy, wreck, demolish, bankrupt*
G-124	require	*demand, want, crave, request*
G-125	complete	*finish, fill out*
G-126	consider	*examine, wonder, regard, contemplate*
G-127	contain	*hold, include, enclose OR control, repress*
G-128	shut	*close, seal, block*
G-129	create	*make, invent, develop, build*
G-130	proceed	*march, move, journey, pass, progress, advance*
G-131	nourish	*nurse, cherish, nurture, foster, cultivate*
G-132	strike	*hit, swat, slap, beat, poke*

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Panel 6 (page 197)

SIMILARITIES—SUPPLY

DIRECTIONS: Each line contains an adjective. Read the adjective and think about what it means. Think of another adjective (or adjectives) that means almost the same. Write the adjective(s) in the box.

Sample Answer

G-133	whole	*all, complete, total, entire*
G-134	most	*greatest, largest*
G-135	extra	*more, additional, spare*
G-136	single	*one, only, sole, unmarried*
G-137	annual	*yearly*
G-138	brilliant	*beaming, radiant OR smart, clever, sharp*
G-139	cautious	*careful, vigilant, considerate, guarded*
G-140	artificial	*man-made, false, synthetic, fake, unreal*
G-141	polite	*courteous, mannerly, civil, thoughtful*
G-142	minor	*little, petty, trivial, small, unimportant*
G-143	substantial	*material, gross OR big, weighty OR prosperous, comfortable*
G-144	handy	*convenient, nearby OR practical, useful, functional*

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Panel 7 (page 198)

SIMILARITIES—SUPPLY

DIRECTIONS: Each line contains a noun. Read the noun and think about what it means. Think of a noun (or nouns) that means almost the same. Write the noun(s) in the box.

Sample Answer

G-145	instructor	*teacher, tutor, coach, educator*
G-146	opportunity	*chance, opening, occasion*
G-147	explanation	*description, answer, reason*
G-148	power	*skill, capacity OR might, force, vigor OR energy, electricity*
G-149	delight	*joy, pleasure, happiness, amusement*
G-150	achievement	*feat, deed, exploit, accomplishment*
G-151	boundary	*edge, perimeter, bounds, limits, confines*
G-152	career	*profession, calling, trade, vocation, craft*
G-153	section	*part, division, parcel, piece, portion, segment, zone, region*
G-154	announcement	*declaration, proclamation, statement*
G-155	device	*appliance, instrument, tool, utensil, machine*
G-156	supplement	*addition, complement, additive, appendix*

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Panel 8 (page 199)

HOW ALIKE?—SELECT

DIRECTIONS: Each line contains two words related to social studies. Think about the ways the two words are alike. Underline the sentence(s) that is true of both words.

G-157	postage stamps coins	**a.** Both can be collected as a hobby. **b.** Both are produced by the government. **c.** Both have a monetary value printed on them.
G-158	king president	**a.** Both are elected. **b.** Both are national leaders. **c.** Both participate in national ceremonies.
G-159	goods services	**a.** Both are objects. **b.** Both can be purchased. **c.** Both require workers.
G-160	globe map	**a.** Both are drawings of all or part of the earth. **b.** Both are flat. **c.** Both can be used to estimate distances between places.
G-161	lake ocean	**a.** Both are bodies of water. **b.** Both can be located on maps. **c.** Both contain drinkable water.
G-162	checks money	**a.** Both can be obtained at a bank. **b.** Both can be used to buy things. **c.** Both need to be endorsed.

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Panel 9 (page 200)

HOW ALIKE?—SELECT

DIRECTIONS: Each line contains two words related to communication. Think about the ways the two words are alike. Underline the sentence(s) that is true of both words.

G-163	magazine newspaper	**a.** Both are usually published daily. **b.** Both have editors. **c.** Both can have reporters.
G-164	radio telephone	**a.** Both deliver sounds. **b.** Both can be dialed or tuned. **c.** Both broadcast programs.
G-165	fax letter	**a.** Both are delivered by the postal service. **b.** Both require special sending and receiving equipment. **c.** Both convey information.
G-166	debate political speech	**a.** Both present opposing points of view. **b.** Both involve speaking. **c.** Both concern the speakers' opinions.
G-167	television news historical documentary	**a.** Both are based on fact. **b.** Both discuss current issues. **c.** Both are informative.
G-168	conversation lecture	**a.** Both convey information. **b.** Both involve speaking. **c.** Both are spoken by teachers or visiting experts.

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Panel 1 — DESCRIBING LOCATIONS

BUILDING THINKING SKILLS — BOOK TWO — VERBAL SEQUENCES

DESCRIBING LOCATIONS

DIRECTIONS: Locate the parts of Midville described in the exercises. Read the instructions for each exercise and mark the map accordingly.

H-35 Print a "P" where Second Avenue and C Street cross.

H-36 Print a "Q" where Third Avenue and A Street cross.

H-37 Print an "R" where First Avenue and D Street cross.

H-38 Which letter (P, Q, or R) is closest to West Park? Answer: **R**

H-39 Which letter is in the northern part of Midville? Answer: **R**

H-40 Which street or avenue is closest to East Park? Answer: **Fourth Avenue**

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Panel 2 — DESCRIBING LOCATIONS

BUILDING THINKING SKILLS — BOOK TWO — VERBAL SEQUENCES

DESCRIBING LOCATIONS

DIRECTIONS: Locate the parts of Midville described in the exercises. Read the instructions for each exercise and answer the questions.

H-41 You are facing West Park. Third Avenue is one block behind you. C Street is one block to your right. You are located where **B** Street meets **Second** Avenue.
What street or avenue is one block to your left? Answer: **A Street**
How far are you from North Park? Answer: **2** blocks.

H-42 You have moved and are now facing south. C Street is one block behind you. Third Avenue is now two blocks to your left. You are now located where **B** Street meets **First** Avenue.
What street or avenue is one block ahead of you? Answer: **A Street**
How far are you from East Park? Answer: **3** blocks.

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Panel 3 — DESCRIBING DIRECTIONS

BUILDING THINKING SKILLS — BOOK TWO — VERBAL SEQUENCES

DESCRIBING DIRECTIONS

DIRECTIONS: Locate the parts of Midville described in the exercises. Read the instructions for each exercise and answer the questions.

EXAMPLE: If you start at Third Avenue and D Street and travel three blocks south, you will be at the corner of Third Avenue and A Street. (Follow the arrows from Start to Finish.)

H-43 If you start at Fourth Avenue and C Street and travel three blocks west, where will you be?
Answer: Where **C** Street meets **First** Avenue.

H-44 If you start at Second Avenue and D Street and travel in a straight line to Fourth Avenue and D Street, how far have you traveled?
Answer: **2** blocks.
In what direction did you travel? Answer: **east**

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Panel 4 — DESCRIBING DIRECTIONS

BUILDING THINKING SKILLS — BOOK TWO — VERBAL SEQUENCES

DESCRIBING DIRECTIONS

DIRECTIONS: Locate the parts of Midville described in the exercises. Read the instructions for each exercise and answer the questions.

H-45 Describe the path shown by the arrows between points X and Y.
Go **3** blocks to the **north** and **1** blocks to the **east**.

H-46 Draw and describe another path having one turn which will go from point X to point Y.
Go **1** blocks to the **east** and **3** blocks to the **north**.
How many total blocks are traveled in each path? Answer: Each path is **4** blocks long.

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Panel 5 — DESCRIBING DIRECTIONS

BUILDING THINKING SKILLS — BOOK TWO — VERBAL SEQUENCES

DESCRIBING DIRECTIONS

DIRECTIONS: Locate the parts of Midville described in the exercises. Read the instructions for each exercise and answer the questions.

H-47 Describe the path shown by the arrows between points P and Q.
Go **3** blocks to the **south** and **1** blocks to the **east**.

H-48 Draw and describe another path having one turn which will go from point P to point Q.
Go **1** blocks to the **east** and **3** blocks to the **south**.
How many total blocks are traveled in each path?
Answer: Each path is **4** blocks long.

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Panel 6 — DESCRIBING DIRECTIONS

BUILDING THINKING SKILLS — BOOK TWO — VERBAL SEQUENCES

DESCRIBING DIRECTIONS

DIRECTIONS: Locate the parts of Midville described in the exercises. Read the instructions for each exercise and answer the questions.

H-49 Use a dotted line (.....) to draw a path from point R to point S that is four blocks long and has two turns. Describe the path.
Go **1** blocks to the **east** and **2** blocks to the **south** and **1** blocks to the **east**.

H-50 Use a dashed line (---) to draw another path from point R to point S that is four blocks long and has two turns. Describe the path.
Go **1** blocks to the **south** and **2** blocks to the **east** and **1** blocks to the **south**.

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Panel 7 — TIME SEQUENCE—SELECT

BUILDING THINKING SKILLS — BOOK TWO — VERBAL SEQUENCES

TIME SEQUENCE—SELECT

DIRECTIONS: The first two words in each group suggest an order of occurrence. On the blank, write the word from the column on the right that will continue the time sequence.

H-51 leave, travel, **arrive**   — arrive / depart / drive

H-52 earn, save, **spend**   — gain / receive / spend

H-53 plan, build, **occupy**   — construct / design / occupy

H-54 cause, event, **result**   — chance / reason / result

H-55 early, prompt, **late**   — late / now / soon

H-56 measure, mark, **cut**   — cut / line / rule

H-57 sleep, waken, **rise**   — rise / slumber / stir

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Panel 8 — TIME SEQUENCE—RANK

BUILDING THINKING SKILLS — BOOK TWO — VERBAL SEQUENCES

TIME SEQUENCE—RANK

DIRECTIONS: On the lines below, rewrite each group of words in order of occurrence from earliest to latest.

H-58 clean, cook, eat
cook, **eat**, **clean**

H-59 dial, hang up, talk
dial, **talk**, **hang up**

H-60 buy, shop, use
shop, **buy**, **use**

H-61 attack, battle, defeat
attack, **battle**, **defeat**

H-62 lesson, performance, practice
lesson, **practice**, **performance**

H-63 continue, finish, start
start, **continue**, **finish**

H-64 dry, rinse, wash
wash, **rinse**, **dry**

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Panel 9 — TIME SEQUENCE—SUPPLY

BUILDING THINKING SKILLS — BOOK TWO — VERBAL SEQUENCES

TIME SEQUENCE—SUPPLY

DIRECTIONS: The words or phrases in each group suggest an order of occurrence. Think of a word that will continue the time sequence and write it in the blank. You may need to use a dictionary.

H-65 born, live, **die**

H-66 plow, plant, **harvest**

H-67 begin, continue, **end**

H-68 past, present, **future**

H-69 dawn, morning, **noon**

H-70 hurt, treat, **heal**

H-71 inhale, hold breath, **exhale**

H-72 read catalog, select product, **buy**

H-73 enroll, attend, **graduate**

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Panel 1 (p. 257)

DEDUCTIVE REASONING—INSTRUCTIONS

A Mind Benders® problem asks you to match items with their characteristics. Making a matrix helps you work the problem. Here is a Mind Bender® involving three people and their pets.

EXAMPLE

Michael, Sarah, and Tina own a cat, a goldfish, and a parakeet. From the clues below, match the pet owner's names with the pets.

a. Tina is allergic to animal fur.

b. Michael's pet does not use kitty litter or live in a cage.

STEP 1 From the clue "Tina is allergic to animal fur," you can figure out that Tina does not own the cat. Find the row marked T for Tina and write "NO" in the column marked *C* for cat.

	C	G	P
M			
S			
T	NO		

STEP 2 The second clue, "Michael's pet does not use kitty litter or live in a cage," tells you that Michael does not own a cat or a bird. Find the row marked *M* for Michael and write "NO" in both the *C* column for cat and the *P* column for parakeet.

	C	G	P
M	NO		NO
S			
T	NO		

STEP 3 You know that each person owns a pet. Since neither Michael nor Tina owns the cat, Sarah must be the cat owner. Write "YES" in the *S* row for Sarah and the *C* column for cat.

	C	G	P
M	NO		NO
S	YES		
T	NO		

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Panel 2 (p. 258)

DEDUCTIVE REASONING—INSTRUCTIONS

STEP 4 Since Sarah owns the cat, Sarah does not own the goldfish or the parakeet. Write "NO" in the *S* row in both the *G* column for goldfish and the *P* column for parakeet.

	C	G	P
M	NO		NO
S	YES	NO	NO
T	NO		

STEP 5 By the same kind of reasoning, you see that the only vacancy in the *M* row is in the *G* column (for goldfish). From this, you figure out (deduce) that Michael is the goldfish owner. Write a "YES" in this position.

	C	G	P
M	NO	YES	NO
S	YES	NO	NO
T	NO		

STEP 6 Since Michael owns the goldfish, then neither Sarah nor owns the goldfish. You have already figured out (deduced) that Sarah doesn't own the goldfish. Now you know that Tina doesn't either. Mark "NO" in the *T* row and the *G* column.

	C	G	P
M	NO	YES	NO
S	YES	NO	NO
T	NO	NO	

STEP 7 The only vacancy remaining on the chart is in the T row and the P column. You now know that Tina is the parakeet owner. You are now ready to fill in the answers:

Sarah is the cat owner.
Michael is the goldfish owner.
Tina is the parakeet owner.

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Panel 3 (p. 259)

DEDUCTIVE REASONING

H-137 In looking up her family tree, Mrs. Bradford found that members of her family had been born in Bourne, Dartmouth, and Salem. Her ancestors' names were Abraham, James, and Nathaniel. From the clues below, match the names with the places of birth.

a. Nathaniel was older than James.

b. Abraham's mother and father came from Europe and settled in Salem just before he was born.

c. The youngest Bradford was born in Dartmouth.

	Abraham	James	Nathaniel
Bourne	NO	NO	YES
Dartmouth	NO	YES	NO
Salem	YES	NO	NO

Abraham was born in _Salem._

James was born in _Dartmouth._

Nathaniel was born in _Bourne._

H-138 Onju, Pedro, and Richard are all in different grades at school. The children are either in the third, fourth, or fifth grade. From the clues below, match the children with their grade.

a. Pedro and Onju are not in the third grade.

b. Onju is in a higher grade than Pedro.

	3rd	4th	5th
Onju	NO	NO	YES
Pedro	NO	YES	NO
Richard	YES	NO	NO

Onju is in _5th_ grade.

Pedro is in _4th_ grade.

Richard is in _3rd_ grade.

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Panel 4 (p. 260)

DEDUCTIVE REASONING

H-139 A mouse, a rabbit, and a tiger are called Cicero, Ego, and Fred. From the clues below, match the name with the animal.

a. Ego is larger than a mouse.

b. Cicero is older than the rabbit but younger than the tiger.

c. Fred is older than Cicero.

	Mouse	Rabbit	Tiger
Cicero	YES	NO	NO
Ego	NO	YES	NO
Fred	NO	NO	YES

Cicero is the _mouse_.

Ego is the _rabbit_.

Fred is the _tiger_.

H-140 David, Hector, and Maria are on different teams. They are each either on the baseball team, the football team, or the swimming team. From the clues below, match the students with their teams.

a. Maria can't swim.

b. David is better at swimming than Hector.

c. Hector is the quarterback on his team.

	Baseball	Football	Swimming
D	NO	NO	YES
H	NO	YES	NO
M	YES	NO	NO

David is on the _swimming_ team.

Hector is on the _football_ team.

Maria is on the _baseball_ team.

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Panel 5 (p. 261)

DEDUCTIVE REASONING

H-141 Anita, Beth, and Juan are a cook, a nurse, and a typist. From the clues below, match each person with their job.

a. Juan cannot type.

b. Anita is neither the nurse nor the typist.

	Cook	Nurse	Typist
A	YES	NO	NO
B	NO	NO	YES
J	NO	YES	NO

Anita is the _cook_.

Beth is the _typist_.

Juan is the _nurse_.

H-142 Mr. Allen, Mr. Franklin, Ms. Smith, and Mrs. Townsend teach either first grade, second grade, third grade, or art. From the clues below, match each teacher with his or her class.

a. Mr. Allen does not teach reading or arithmetic.

b. Mr. Smith teaches a lower grade than Mrs. Townsend but a higher grade than Mr. Franklin.

	1st	2nd	3rd	Art
A	NO	NO	NO	YES
F	YES	NO	NO	NO
S	NO	YES	NO	NO
T	NO	NO	YES	NO

Mr. Allen is the _art_ teacher.

Mr. Franklin is the _first grade_ teacher.

Ms. Smith is the _second grade_ teacher.

Mrs. Townsend is the _third grade_ teacher.

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Panel 6 (p. 262)

DEDUCTIVE REASONING

H-143 George, Nancy, and Shannon are an astronaut, a computer programmer, and a mathematics teacher. From the clues below, match the people with their professions.

a. George is neither the astronaut nor the computer programmer.

b. Nancy is not the astronaut.

	George	Nancy	Shannon
A	NO	NO	YES
CP	NO	YES	NO
MT	YES	NO	NO

George is the _mathematics teacher_.

Nancy is the _computer programmer_.

Shannon is the _astronaut_.

H-144 Three race car drivers named Graham, Mario, and Pancho entered cars in a 24-hour race, and each won a prize. From the clues below, determine who drove each car and what prize was won by each driver.

a. The coupe won a higher prize than Mario's car.

b. Mario did not drive the Spyder.

c. A hatchback won a prize.

d. Graham's car won first prize.

e. The Spyder came in second.

	Coupe	Hatch-back	Spyder
Graham	YES	NO	NO
Mario	NO	YES	NO
Pancho	NO	NO	YES

Place	Car	Driver
First	Coupe	Graham
Second	Spyder	Pancho
Third	Hatchback	Mario

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Panel 7 (p. 263)

DEDUCTIVE REASONING

H-145 Bob, Chris, Nancy, and Pat have different colored bikes. The bikes are red, blue, green, and white. From the clues below, match the bikes with the owners.

a. Bob and Chris have ten-speed bikes.

b. Chris's friend has a blue bike.

c. Nancy has a three-speed and is a friend of the owner of the white bike.

d. Nancy sometimes rides her brother's blue ten-speed bike.

e. Pat does not like his friend's green bike.

f. The red bike has one speed.

	Bob	Chris	Nancy	Pat
Red	NO	NO	NO	YES
Blue	YES	NO	NO	NO
Green	NO	NO	YES	NO
White	NO	YES	NO	NO

	Axe	Hammer	Pliers	Saw
Bill	YES	NO	NO	NO
Jane	NO	NO	YES	NO
Kim	NO	YES	NO	NO
Tom	NO	NO	NO	YES

Diagram for problem **H-146** below.

H-146 Bill, Jane, Kim, and Tom brought an axe, a hammer, a pair of pliers, and a saw to build a project at school. From the clues below, match the students with the tools. (Use the diagram above on the right.)

a. Neither Bill nor the girl with the pliers brought the hammer.

b. Jane couldn't find a cutting tool.

c. Kim brought her mom's hammer.

d. Bill lost his axe after the project started.

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Panel 8 (p. 264)

DEDUCTIVE REASONING

H-147 In science class, students learn the eating habits of several types of animals. Some animals eat meat and others eat plants. Some animals eat both plants and animals. Some animals eat plankton. For her science project, Marisa picked four animals of different sizes and studied their eating habits. From the clues below, match the eating habits with the sizes of the four animals. The animal sizes can be described as small, medium, large, and very large.

a. The large animal is neither a meat eater nor a plankton eater.

b. The medium-sized animal is larger than the plankton eater.

c. The meat eater is larger than the plant eater.

d. The plant eater is larger than the meat and plant eater.

	Meat	Plant	Meat & Plant	Plankton
Small	NO	NO	NO	YES
Medium	NO	NO	YES	NO
Large	NO	YES	NO	NO
Very Large	YES	NO	NO	NO

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Panel 9 (p. 265)

FOLLOWING YES–NO RULES—A

DIRECTIONS: Darken the correct circles along the path from START to FINISH by following the YES-NO rule.

RULE BOX

YES—color is the same   NO—color is not the same

EXAMPLE

H-148

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Panel 1 (top-left)

GRAPHIC ORGANIZER—TIME LINE

DIRECTIONS: Using the list on the left, mark each president's term of office in its correct chronological order on the time line at the right. Remember to count the spaces.

H-185   A PRESIDENTIAL TIME LINE

Enter these presidents on the time line at the right.

Bush, George H. W.—1989-93
Carter, Jimmy —1977-81
Clinton, Bill —1993-2001
Eisenhower, Dwight —1953-61
Ford, Gerald —1974-77
Obama, Barack —2009-
Johnson, Lyndon —1963-69
Kennedy, John —1961-63
Nixon, Richard —1969-74
Reagan, Ronald —1981-89
Bush, George W.—2001-2008
Truman, Harry —1945-53

Time line:
1950 — Truman, Harry
— Eisenhower, Dwight
1960 — Kennedy, John
— Johnson, Lyndon
1970 — Nixon, Richard
— Ford, Gerald
— Carter, Jimmy
1980 — Reagan, Ronald
— Bush, George H. W.
1990 — Clinton, Bill
2000 — Bush, George W.
— Obama, Barack

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Panel 2 (top-middle)

GRAPHIC ORGANIZER—TIME LINE

DIRECTIONS: Using the list on the left, mark each war in its correct chronological order on the time line at the right. Remember to count the spaces.

H-186   A TIME LINE OF TWENTIETH CENTURY WARS

Enter these wars on the time line at the right.

Korean War — 1950-53
Persian Gulf War — Jan./Feb. 1991
Vietnam War — 1955-75
World War One — 1914-18
World War Two — 1939-45

Time line:
1900
1920 — World War One 1914-1918
1940 — World War Two 1939-1945
— Korean War —1950-53
1960 — Vietnam War 1955-1975
1980
— Persian Gulf War Jan/Feb 1991
2000

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Panel 3 (top-right)

PARTS OF A WHOLE—SELECT

DIRECTIONS: On each line are four words from language arts lessons. Read the words and decide which word represents a whole thing and which words are parts of the whole thing. On the lines below each group, write the word that represents the whole thing, then list the words that are parts.

EXAMPLE: closing, greeting, letter, signature
The words represent parts of a letter that you might write to a friend. The WHOLE is the letter and the PARTS are the greeting, the closing, and the signature.

WHOLE _letter_ PARTS _greeting_ , _closing_ , _signature_

I-1   book, chapter, index, table of contents
WHOLE _book_ PARTS _chapter_ , _index_ , _table of contents_

I-2   comics, editorial, newspaper, sports
WHOLE _newspaper_ PARTS _comics_ , _editorial_ , _sports_

I-3   books, card file, library, shelves
WHOLE _library_ PARTS _books_ , _card file_ , _shelves_

I-4   argument, debate, rebuttal, statement of proposition
WHOLE _debate_ PARTS _argument_ , _rebuttal_ , _statement of proposition_

I-5   advertisements, articles, magazine, photographs
WHOLE _magazine_ PARTS _advertisements_ , _articles_ , _photographs_

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Panel 4 (middle-left)

PARTS OF A WHOLE—SELECT

DIRECTIONS: On each line are four words from social studies lessons. Read the words and decide which word represents a whole thing and which words are parts of the whole thing. On the lines below each group, write the word that represents the whole thing, then list the words that are its parts.

I-6   alleys, block, buildings, streets
WHOLE _block_ PARTS _alleys_ , _buildings_ , _streets_

I-7   churches, homes, neighborhood, schools
WHOLE _neighborhood_ PARTS _churches_ , _homes_ , _schools_

I-8   city, downtown, neighborhood, suburb
WHOLE _city_ PARTS _downtown_ , _neighborhood_ , _suburb_

I-9   cities, county, rural areas, towns
WHOLE _county_ PARTS _cities_ , _rural areas_ , _towns_

I-10   cities, counties, state, townships
WHOLE _state_ PARTS _cities_ , _counties_ , _townships_

I-11   forests, mountains, nation, rivers
WHOLE _nation_ PARTS _forests_ , _mountains_ , _rivers_

I-12   continents, atmosphere, Earth, oceans
WHOLE _Earth_ PARTS _continents_ , _atmosphere_ , _oceans_

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Panel 5 (middle-middle)

PARTS OF A WHOLE—SELECT

DIRECTIONS: On each line are four words from science lessons. Read the words and decide which word represents a whole thing and which words are parts of the whole thing. On the lines below each group first write the word that represents the whole thing, then list the words that are parts of the whole thing.

I-13   leaves, plant, root, stem
WHOLE _plant_ PARTS _leaves_ , _root_ , _stem_

I-14   backbone, brain, heart, mammal
WHOLE _mammal_ PARTS _backbone_ , _brain_ , _heart_

I-15   blossom, bulb, stem, tulip
WHOLE _tulip_ PARTS _bulb_ , _stem_ , _blossom_

I-16   fruit, pulp, seeds, skin
WHOLE _fruit_ PARTS _pulp_ , _seeds_ , _skin_

I-17   antennae, insect, jointed legs, segmented abdomen
WHOLE _insect_ PARTS _antennae_ , _jointed legs_ , _segmented abdomen_

I-18   backbone, fish, gills, scales
WHOLE _fish_ PARTS _backbone_ , _gills_ , _scales_

I-19   beak, bird, feathers, wings
WHOLE _bird_ PARTS _beak_ , _feathers_ , _wings_

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Panel 6 (middle-right)

CLASS AND MEMBERS—SELECT

DIRECTIONS: On each line are four words from language arts lessons. Read the words and decide which word represents the class to which the other words belong. On the lines below each group, write the word that represents the class, then list the words that are members of that class.

I-20   drama, fiction, novel, short story
CLASS _fiction_ MEMBERS _drama_ , _novel_ , _short story_

I-21   autobiographies, diaries, journals, personal histories
CLASS _personal histories_ MEMBERS _diaries_ , _journals_ , _autobiographies_

I-22   a, an, articles, the
CLASS _articles_ MEMBERS _a_ , _an_ , _the_

I-23   exclamations, questions, sentences, statements
CLASS _sentences_ MEMBERS _exclamations_ , _questions_ , _statements_

I-24   figures of speech, metaphors, personification, similes
CLASS _figures of speech_ MEMBERS _metaphors_ , _personification_ , _similes_

I-25   adjectives, adverbs, nouns, parts of speech
CLASS _parts of speech_ MEMBERS _adjectives_ , _adverbs_ , _nouns_

I-26   almanac, atlas, dictionary, reference book
CLASS _reference book_ MEMBERS _almanac_ , _atlas_ , _dictionary_

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Panel 7 (bottom-left)

CLASS AND MEMBERS—SELECT

DIRECTIONS: On each line are four words from social studies lessons. Read the words and decide which word represents the class to which the other words belong. On the lines below each group, write the word that represents the class, then list the words that are members of that class.

I-27   appliances, clothing, food, goods
CLASS _goods_ MEMBERS _appliances_ , _clothing_ , _food_

I-28   kings, leaders, presidents, prime ministers
CLASS _leaders_ MEMBERS _kings_ , _presidents_ , _prime ministers_

I-29   city, federal, government, state
CLASS _government_ MEMBERS _city_ , _federal_ , _state_

I-30   economics, geography, history, social sciences
CLASS _social sciences_ MEMBERS _economics_ , _geography_ , _history_

I-31   elementary, high, middle, school
CLASS _school_ MEMBERS _elementary_ , _middle_ , _high_

I-32   cleaning, repairing, protecting, service
CLASS _service_ MEMBERS _cleaning_ , _repairing_ , _protecting_

I-33   democracy, government, monarchy, republic
CLASS _government_ MEMBERS _democracy_ , _monarchy_ , _republic_

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Panel 8 (bottom-middle)

CLASS AND MEMBERS—SELECT

DIRECTIONS: On each line are four words from science lessons. Read the words and decide which word represents the class to which the other words belong. On the lines below each group, write the word that represents the class, then list the words that are members of that class.

I-34   corn, grain, oats, wheat
CLASS _grain_ MEMBERS _corn_ , _oats_ , _wheat_

I-35   ape, mammal, man, whale
CLASS _mammal_ MEMBERS _ape_ , _man_ , _whale_

I-36   daisy, flower, rose, tulip
CLASS _flower_ MEMBERS _daisy_ , _rose_ , _tulip_

I-37   apple, banana, fruit, pear
CLASS _fruit_ MEMBERS _apple_ , _banana_ , _pear_

I-38   beetle, fly, grasshopper, insect
CLASS _insect_ MEMBERS _fly_ , _grasshopper_ , _beetle_

I-39   fish, guppy, perch, trout
CLASS _fish_ MEMBERS _guppy_ , _perch_ , _trout_

I-40   bird, heron, penguin, sandpiper
CLASS _bird_ MEMBERS _heron_ , _penguin_ , _sandpiper_

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Panel 9 (bottom-right)

SENTENCES CONTAINING CLASSES AND SUBCLASSES

DIRECTIONS: In each sentence there are three words that name members of a class. Underline these words. Inside each box, write the words in order from most general class to the most specific class. The general class (1) will contain the less general class (2) and the most specific class (3). Write the most general class on line (1), the less general class on line (2), and the most specific class on line (3).

EXAMPLE: The orange is a popular citrus fruit. "Fruit" is the most general class and belongs on line 1. "Citrus" is a kind of fruit and belongs on line 2. "Orange" is a kind of citrus fruit and belongs on line 3.

1 **fruit** — MOST GENERAL CLASS
2 **citrus** — LESS GENERAL CLASS
3 **orange** — MOST SPECIFIC CLASS

I-41   When asked to select a vegetable, Jan selected lima beans.

1 **vegetable** — MOST GENERAL CLASS
2 **bean** — LESS GENERAL CLASS
3 **lima** — MOST SPECIFIC CLASS

I-42   Yolanda went to the pastry shop to buy a cherry pie.

1 **pastry** — MOST GENERAL CLASS
2 **pie** — LESS GENERAL CLASS
3 **cherry pie** — MOST SPECIFIC CLASS

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Panel 1 (page 350)

ANALOGIES—SELECT TWO

DIRECTIONS: In this exercise, two members of an analogy are supplied. Select two words from the choice box that will complete the analogy. These analogies are of three types—"used to," "association," and "synonyms." Words in the choice box may be used more than once.

CHOICE BOX

hear, read, see, talk

J-73	books :	read	::	audio tape :	hear
J-74	discuss :	talk	::	listen :	hear
J-75	examine :	see	::	study :	read
J-76	inspect :	see	::	converse :	talk
J-77	television :	see	::	stereo :	hear
J-78	blind :	see	::	deaf :	hear
J-79	actors :	talk	::	editors :	read
J-80	sounds :	hear	::	sights :	see
J-81	observe :	see	::	chatter :	talk
J-82	telescope :	see	::	telephone :	hear OR talk
J-83	microphone :	talk	::	microscope :	see

Panel 2 (page 351)

ANALOGIES—SELECT TWO

DIRECTIONS: In this exercise, two members of an analogy are supplied. Select two words from the choice box that will complete the analogy. These analogies are of three types—"action," "kind of," and "part of." Words in the choice box may be used more than once.

CHOICE BOX

bear, bird, feathers, fish, fur, robin, scales, tuna

J-84	fur :	bear	:: scales :	fish OR tuna	
J-85	eagle : feather ::	bear OR tuna :	fur OR scales		
J-86	bear : mammal ::	robin OR tuna :	bird OR fish		
J-87	scales OR tuna : fish ::	feathers OR robin : bird			
J-88	robin OR bird : flies ::	tuna OR fish : swims			
J-89	lungs : bear OR bird OR robin ::	gills : fish OR tuna			
J-90	bear : growls ::	robin OR : sings			
J-91	wing : bird OR robin :: fin :	fish OR tuna			
J-92	hair : bear :: feather :	bird OR robin			
J-93	scales : fish OR tuna :: feathers :	bird OR robin			
J-94	tuna : fish :: robin :	bird			

Panel 3 (page 352)

ANALOGIES—EXPLAIN

DIRECTIONS: Read these analogies and decide how the words in each pair are related. On the line below each analogy, explain the relationship between the words in each pair.

Here is a list of the kinds of analogies you have practiced. Use the list to help explain these analogies.

ANTONYM	KIND OF	SYNONYM
ASSOCIATION	PART OF	USED TO

EXAMPLE: banana : fruit :: carrot : vegetable

A banana is a kind of fruit just as a carrot is a kind of vegetable.

J-95 bored : excited :: rested : weary

Bored and excited are opposite physical feelings, and rested and weary are opposite physical feelings.

J-96 beef : hamburger :: potatoes : French fries

A hamburger is a kind of cooked beef, just as French fries are a kind of cooked potato.

J-97 compliment : praise :: criticize : blame

The words of each pair have similar meanings dealing with judgement.

J-98 hammer : nail :: bat : ball

A hammer is used to hit a nail, just as a bat is used to hit a ball.

Panel 4 (page 353)

ANALOGIES—EXPLAIN

DIRECTIONS: Read these analogies and decide how the words in each pair are related. On the line below each analogy, explain the relationship between the words in each pair.

Here is a list of the kinds of analogies you have practiced. Use the list to help these analogies.

ANTONYM	KIND OF	SYNONYM
ASSOCIATION	PART OF	USED TO

J-99 beetle : insect :: snake : reptile

A beetle is a kind of insect, just as a snake is a kind of reptile.

J-100 teacher : instruction :: musician : entertainment

A teacher is associated with instruction, and a musician is associated with entertainment.

J-101 stare : gaze :: glance : notice

The words of each pair have similar meanings dealing with intensity of examination.

J-102 gusty : calm :: windy : still

The words of each pair have opposite meanings dealing with wind strength.

J-103 pliers : grip :: hammer : pound

Pliers are used to grip and a hammer is used to pound.

Panel 5 (page 354)

ANALOGIES—EXPLAIN

DIRECTIONS: Read these analogies and decide how the words in each pair are related. On the line below each analogy, explain the relationship between the words in each pair.

Here is a list of the kinds of analogies you have practiced. Use the list to help explain these analogies.

ANTONYM	KIND OF	SYNONYM
ASSOCIATION	PART OF	USED TO

J-104 wick : candle :: bulb : lamp

A wick is part of a candle, just as a bulb is part of a lamp.

J-105 budget : money :: schedule : time

A budget is a plan for money, just as a schedule is a plan for time.

J-106 even : smooth :: coarse : rough

The words of each pair have similar meanings dealing with texture.

J-107 hook : hang :: anchor : hold

A hook is used to hang things, and an anchor is used to hold things.

J-108 advance : retreat :: forward : backward

The words of each pair have opposite meanings dealing with direction.

Panel 6 (page 355)

ANALOGIES—EXPLAIN

DIRECTIONS: Read these analogies and decide how the words in each pair are related. On the line below each analogy, explain the relationship between the words in each pair.

Here is a list of the kinds of analogies you have practiced. Use the list to help explain these analogies.

ANTONYM	KIND OF	SYNONYM
ASSOCIATION	PART OF	USED TO

J-109 dial : radio :: switch : lamp

A dial is part of a radio, and a switch is part of a lamp.

J-110 cloth : wash :: towel : dry

A cloth is used to wash, just as a towel is used to dry.

J-111 fly : sky :: float : water

Fly is associated with sky, and float is associated with water.

J-112 ballot : vote :: check : pay

A ballot is used to vote, and a check is used to pay.

J-113 yam : potato :: lima : bean

A yam is a kind of potato, and a lima is a kind of bean.

Panel 7 (page 356)

ANTONYM OR SYNONYM ANALOGIES—SUPPLY

DIRECTIONS: Look at the first two words. Think about how they are related. The words are either similar or opposite. Next, look at the third word and produce a word from your memory that has a similar relationship.

J-114	passenger : traveler :: guest :	visitor
J-115	valley : peak :: bottom :	top
J-116	twilight : dusk :: autumn :	fall
J-117	frequently : often :: shortly :	soon
J-118	hunt : search :: locate :	find
J-119	stick : pole :: pit :	hole
J-120	close : distant :: near :	far
J-121	insect : bug :: child :	kid
J-122	quiet : loud :: silent :	noisy
J-123	shut : close :: unfasten :	open OR unlock
J-124	bright : dim :: shiny :	dull
J-125	dash : race :: stroll :	walk OR hike
J-126	sprinkle : rain :: snack :	meal

Panel 8 (page 357)

ASSOCIATION ANALOGIES—SUPPLY

DIRECTIONS: Look at the first two words. Think about how they are related. The words will be associated in some way. Next, look at the third word and produce a word from your memory that has a similar relationship.

J-127	father : son :: king :	prince
J-128	mouse : rat :: pebble :	rock OR stone
J-129	sheet : bed :: rug :	floor
J-130	path : road :: hill :	mountain
J-131	pink : red :: gray :	black
J-132	seal : pup :: lion :	cub
J-133	scared : tremble :: sad :	cry OR sob
J-134	salesperson : customer :: teacher :	student
J-135	designer : pattern :: architect :	plan OR blueprint
J-136	actor : script :: singer :	music OR score
J-137	mother : father :: aunt :	uncle
J-138	instructor : pupil :: doctor :	patient
J-139	cloudburst : rain :: blizzard :	snow

Panel 9 (page 358)

"KIND OF" ANALOGIES—SUPPLY

DIRECTIONS: Look at the first two words. Think about how they are related. The first word represents a "kind of" the second. Next, look at the third word and produce a word from your memory that has a similar relationship.

J-140	sedan : automobile :: pickup :	truck
J-141	refrigerator : appliance :: chair :	furniture
J-142	jeans : pants :: sneakers :	shoes
J-143	cherry : berry :: almond :	nut
J-144	ice : solid :: water :	liquid
J-145	hamburger : sandwich :: milk shake :	drink
J-146	bean : vegetable :: orange :	fruit
J-147	granite : rock :: iron :	metal OR ore
J-148	swan : bird :: ant :	insect
J-149	macaroon : cookie :: fudge :	candy
J-150	bunk : bed :: rocker :	chair
J-151	ten-speed : bicycle :: convertible :	car OR automobile
J-152	novel : book :: ballad :	song OR poem