

PHYSICAL & DIGITAL VERSIONS

ESCAPE GUIDELINES

1. Each member of the group must participate.
2. Do not work in pairs or groups.
3. Be cooperative and take turns on solving the problems.
4. Don't ask for hints or resources until you have tried solving the problem on your own.
5. You may use the two hints provided.
6. Do not work on the problems until you are working on the escape.

ESCAPE THE ZOO

You and your friends went on a visit to the city zoo. You've explored all the different exhibits, viewed all of the animals, and even saw a newly discovered reptile! However, when the zoo closed, you were accidentally locked in the zoo, and all of the animals have escaped! You need to escape the zoo, but you'll need to find the key to the main gate to escape. Fortunately, this is a geometry zoo and if you solve a series of geometry problems and riddles you'll be able to find the hidden key. You will work with your group to solve the problems and unlock the boxes that will give you the access to the key that will unlock the zoo.

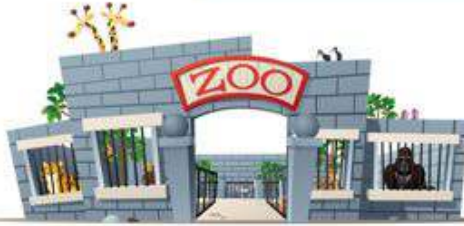
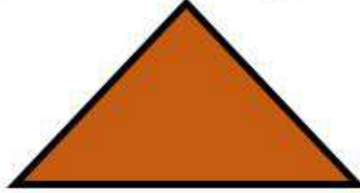
- Clue 1-Complete each of the five geometry task cards. The numbers to the correct answers are the colors for the five color lock. You will need to use the color decoder to find the colors. Place the colors in the order as the number on the cards. This will take you one step closer to the key to escape.
- Clue 2-To complete the 3-by-3 puzzle, you should reconstruct the squares so that all of the images match on every interior side. Remember, you are making a square. Once you complete the puzzle, use the four corner images and the decoder wheel to crack the code! This will lead you to the room where the key is held.
- Clue 3-Match the description of each shape with the corresponding picture example on the right column. Draw a straight line from the left dot to the right dot. The letters that you do not cross out with your lines are the code for your 5-letter lock. Place the letters in alphabetical order. This will lead you to the safe where the key is kept.
- Clue 4-Determine how many sets of parallel lines, perpendicular lines, right angles, acute angles, and obtuse angles are in each shape. When you finish, add the numbers together to discover the next combination. However, since this is a 3-digit lock don't use the odd number.

GEOMETRY HIERARCHY

CLUE 1

Classify the triangle

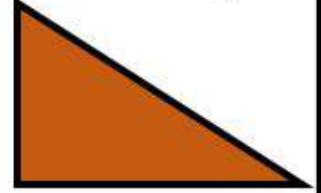
1. right
2. acute
3. obtuse



1

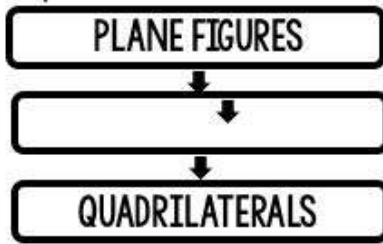
Classify the triangle

4. right
5. acute
6. obtuse



2

complete the hierarchy

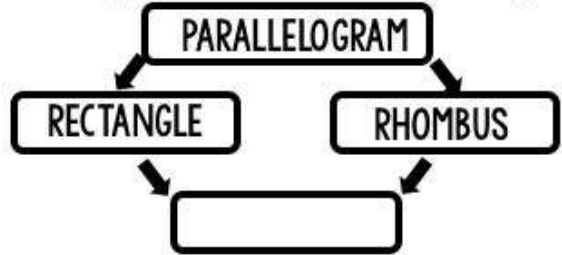


7. trapezoid
8. polygon
9. solid figure



3

complete the hierarchy

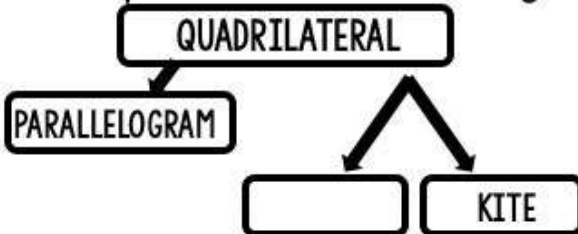


1. quadrilateral
2. trapezoid
3. square



4

complete the hierarchy



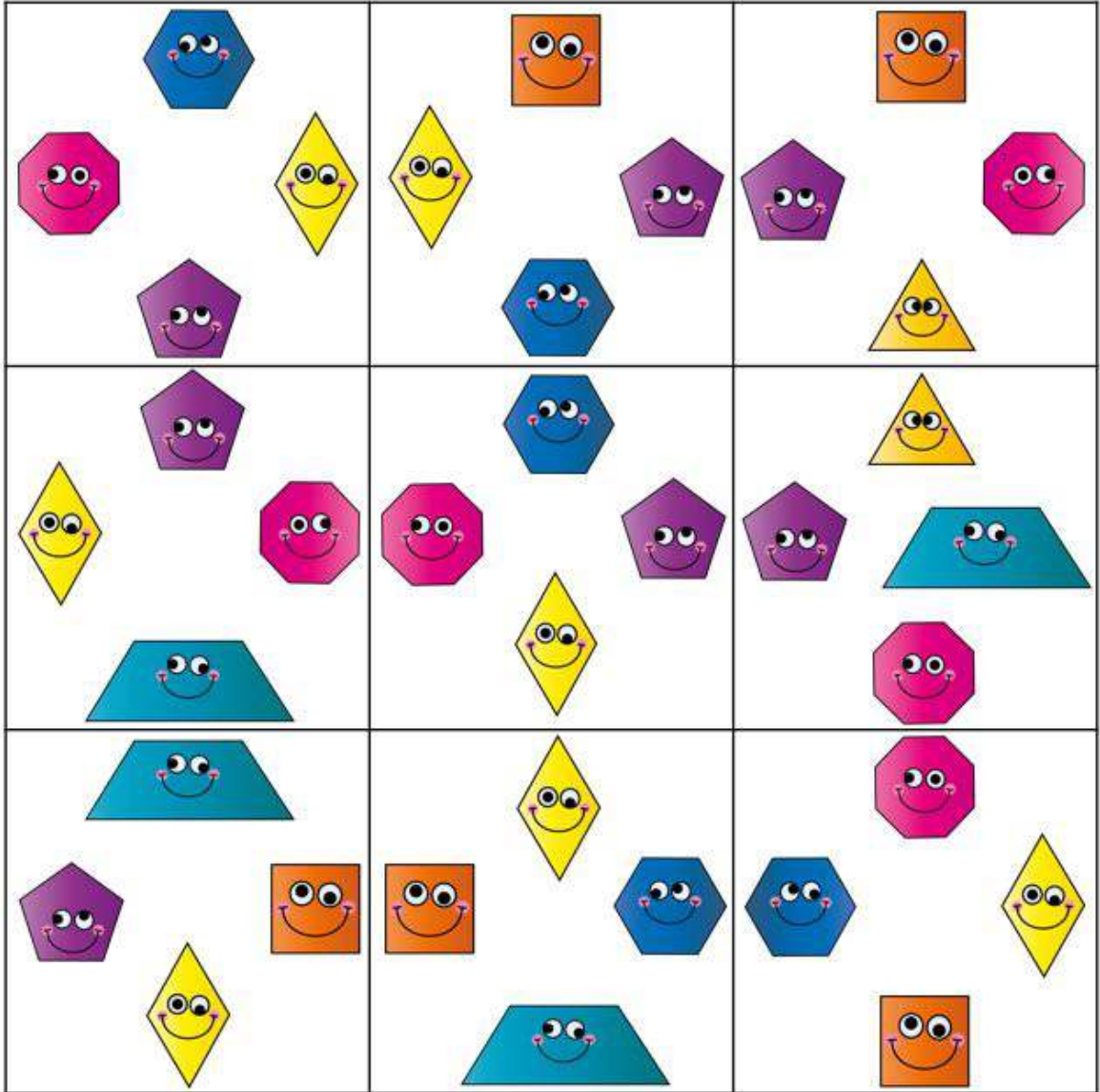
7. trapezoid
8. square
9. pentagon



5

MAGIC SQUARES

CLUE 2



MATCHING ACTIVITY

CLUE 3

QUADRILATERAL WITH 4 EQUAL SIDES AND 90 DEGREE ANGLES ●

POLYGON WITH 5 SIDES ●

QUADRILATERAL WITH AT LEAST ONE SET OF PARALLEL SIDES ●

POLYGON WITH 6 SIDES (LOOK AT THE FACE) ●

RECTANGLE ●

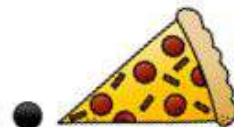
POLYGON WITH 8 SIDES ●

QUADRILATERAL WITH 4 EQUAL SIDES, BUT DOES NOT REQUIRE RIGHT ANGLES ●

PLANE SHAPE WITH CURVED SIDES ●

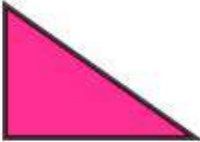
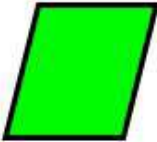

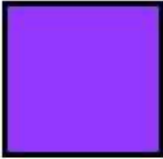
POLYGON WITH 3 SIDES ●

a
c
d
e
f
g
h
k
s
w
p
j
u
m
k
r
t



CATEGORIZING SHAPES

CLUE 4

				
sets of parallel lines				
sets of perpendicular lines				
number of right angles				
number of acute angles				
number of obtuse angles				
Total				

Add the numbers in each column to find your next combination.

WHEELS TO PROVIDE LOCK FLEXIBILITY

CLUE 3

