Scouts Challenge Booklet ASWERS



LOGIC



Cat and Mouse

Five mice — Mindy, Marty, Muriel, Mabel, and Mike — were nibbling the cheese on the kitchen table, but Whiskers the cat chased them back into their hole. Muriel Mouse made it back third, and Mike Mouse was fourth. Mabel Mouse was after Mike, and Marty Mouse was not second. Which mouse was first, and which was last?

1st: MARTY 5th: MABEL

1. Fast Food

Sally, George, and Frank were picking up their fast-food orders a burger, a plate of fries, and a slice of pizza. "Who ordered what?" asked the man at the counter. George said, "I didn't order the pizza." The boy who ordered the fries said, "Oh, I thought you did." That was all the man at the counter needed to know. Who got each order?

Sally: *PIZZA* George: *BURGER* Frank: *FRIES*

3. Find the three-letter word

Find a familiar English three-letter word, using the following information:

- 1. RED has no common letter with it.
- 2. END has one common letter, but not in the correct place.
- 3. TIN has one common letter, in the correct place.
- 4. TIP has one common letter, not at the correct place.
- 5. AIR has one common letter, not at the correct place.

PAN

4. The three little pigs

The three little pigs, as you know, built houses — one of straw, one of sticks, and one of bricks. By reading the six clues, figure out which pig built each house, the size of each house, and the town in which each house was located. Use a chart to keep track of your information and your logic.

	TOWN	SIZE	MATERIAL
Patricia Pig	PLEASANTVILLE	М	BRICK
Penny Pig	RIVERVIEW	S	STRAW
Peter Pig	HILLSDALE	L	STICKS

- 1. Penny Pig did not build a brick house.
- 2. The straw house was not medium sized.
- 3. Peter's house was made of sticks, and it was neither medium nor small.
- 4. Patricia Pig built her house in Pleasantville.
- 5. The house in Hillsdale was large.
- 6. One house was in a town called Riverview

5. Trip to the Zoo

Dan, Jen, Keith, and Mia are having an argument about which animals to visit first at the zoo — the deer, the lions, the leopards or the giraffes. Each kid wants to see his or her favourite animal first. Dan is allergic to cats, so he doesn't like animals that are in the cat family. Jen's favourite animal doesn't have horns. Keith doesn't care for animals that have spots. Mia disagrees with both Dan and Keith. Which is each kid's favourite animal?

	deer	lion	leopard	giraffe
Dan				*
Jen			*	
Keith		*		
Mia	*			

The tip is to think outside of the box!

Here is an example:

Question: A girl who was just learning to drive went down a oneway street in the wrong direction, but didn't break the law. How come?

Answer: She was walking.

See if you can let your brain switch directions to answer these questions:

6. How can you throw a ball as hard as you can and have it come back to you, even if it doesn't hit anything, there is nothing attached to it, and no one else catches or throws it?

THROW IT IN THE AIR

7. Two students are sitting on opposite sides of the same desk. There is nothing in between them but the desk. Why can't they see each other?

FACING AWAY FROM EACH OTHER

8. There are only two T's in Timothy Tuttle. True or false?

TRUE 'T' CAPITAL T'S

9. One day, two mothers and two daughters went shopping for shoes. Their shopping spree was successful — each bought a pair of shoes, and all together, they had three pairs. How is this possible?

GRANDMOTHER, MOTHER, DAUGHTER

10. How much dirt is in a round hole that is 9 feet deep with a diameter of 3 feet?

NO DIRT – IT'S A HOLE!

11. How many are going to St Ives?

This is a very old rhyming riddle. See if you can answer it by reading and thinking very carefully.

As I was going to Saint Ives, I crossed the path of seven wives. Every wife had seven sacks, Every sack had seven cats, Every cat had seven kittens, Kittens, cats, sacks, wives, How many were going to Saint Ives?

ONE – EVERYONE ELSE WAS GOING THE OTHER WAY

12. He's my son!

A boy and his father are injured in a car accident. Both are taken to a hospital. The father dies at arrival, but the boy lives and is taken to surgery. A grey-haired, bespectacled surgeon looks at the boy and says, "I cannot operate on this boy -- he's my son."

How is this possible?

THE SURGEON WAS THE MOTHER

13. Mary's Father

Marys father has 4 children; three are named Nana, Nene, and Nini. So what is is the 4th childs name?

MARY

14. What are they?

The more you of them you take, the more you leave behind.

FOOTSTEPS

15. Hahaha hehehe!

Where do fish keep their money? – MONEY BANKS

Letter and Word Games



16. In Common

What is the one thing shared by all three items in the same group?

Α	В
a cow	a banana
a shoe	a drum
a person	a bear
С	D
a zip	a hill
a shark	a person
a comb	a measurement
E	F
a needle	a river
a hurricane	a person
a target	a cave
B. SKIN C.	TEETH

D: FOOT E: EYE F: MOUTH

What do all of these have in common? PARTS OF THE BODY

17. Next.....?

Each letter below stands for the name of something. What should the last three letters be?

MVEMJS???

U FOR URANUS, N FOR NEPTUNE, AND P FOR PLUTO

18. Animals in hiding

There is an animal hiding in each sentence below. Can you find the animals? When you find them underline or highlight. Example: There's a bee in "I'll be eleven next month." Hint: You'll have to look in three words to find some of the animals.

- 1. We can *GO AT* six o'clock.
- 2. It's nice to *DO* Good deeds.
- 3. Take soa*P AND A* towel.
- 4. MOST RICH people wear fancy clothes.
- 5. You can keep the watc*H OR SE*II it.
- 6. USE A Ladder.
- 7. It will *BE A R*ainy day.
- 8. I CAME Late.
- 9. Tell me *iF I SHould* start now.
- 10. WiLL A MAp help you?

19. Colourful language

The first word in each expression below is a colour. The second word, when unscrambled, completes a common term associated with the colour.

For example, WHITE + ESLA = WHITE SALE.

1.	BLUE + DOBOL	BLUE BLOOD
2.	ORANGE + WOBL	ORANGE BOWL
3.	BLACK + TREAMK	BLACK MARKET
4.	GRAY + TAMTER	GREY MATTER
5.	PURPLE + THREA	PURPLE HEART
6.	WHITE + DEDGIWN	WHITE WEDDING
7.	RED + TARCEP	RED CARPET
8.	YELLOW +REFEV	YELLOW FEVER
9.	GREEN + RNGIFE	GREEN FINGER
10.	BROWN + DBAER	BROWN BREAD

20. Just in Time

What occurs once in every minute, twice in every moment, yet never in a thousand years? - THE LETTER M

21. Crack the code

After school on Monday, Jody found this note in code taped to her locker.

Yg ctg jcxkpi c uwtrtkug rctva hqt Ou. Dtqyp.

At first, she couldn't figure it out. Then someone whispered in her ear, "M stands for K and W stands for U." Just those two clues helped Jody crack the code. Can you crack the code, too? How?

ABCDEFGHIJKLMNOPQRSTUVWXYZ

K U

The message says: *"WE ARE HAVING A SURPRISE PARTY FOR MS. BROWN."*

M STANDS FOR K TELLS YOU THAT THE ALPHABET HAS SHIFTED TWO LETTERS.

22. I AM _____

Figure out the six-letter word that completes the title of this puzzle. You'll find all six letters by solving the sentences below.

- 1. This letter is in *cable* and *babe* but not in *tread*.
- 2. This letter is in *irony* and *train* but not in *nimble*.
- 3. This letter is in avocado and vacant but not in visit.
- 4. This letter is in *chair* and *rail* but not in *camera*.
- 5. This letter is in *night* and *thinker* but not in *thick*.
- 6. This letter is in xylophone and yellow but not in allowance.

I AM: BRAINY

23. Hinky Pinkys?

Hink pinks are one-syllable words that rhyme; hinky pinkies are two-syllable words that rhyme; For example, what's a hinky pinky for a humorous animal with long ears? Answer: funny bunny. Try these:

1. What's a hink pink for an obese feline?

FAT CAT

2. What's a hinky pinky for an improved written communication?

BETTER LETTER

3. What's a hinky pinky for turbulent sauce?

WAVY GRAVY

4. What's a hink pink for something you see that glows?

BRIGHT LIGHT

24. Anagrams

Boggles

Change these words around to make other words

LINE	WENT	BELOW	RING	CARE	LOOTS
ABLE	TONES	RULE	DOOM	LOAF	SNAIL
DAWN	MITE	SKIN	LOOP	MANOR	LAME

E	J	0	М	
G	1	Н	К	
N	A	С	L	
Q	В	E	U	
Ζ	D	0	S	

25.

E	S	0	L
S	F	I	С
А	R	М	Р
Н	Y	Т	В
G	D	0	U

A	F	Ν	R
S	Q	1	L
Ν	A	С	Ρ
E	0	E	U
Х	Н	0	S

G	W	E	R
Y	U	I	Ρ
A	S	D	D
S	J	K	V
N	0	0	E



Maths and Number Challenge

26. How many?

Take a close look at the following figure... How many triangles can you find?



35 TRIANGLES

27. Handshakes

- a) If you have TWO people in a room and each person shakes hands with every other person exactly once, how many total handshakes happen? - 1
- b) If you have THREE people in a room and each person shakes hands with every other person exactly once, how many total handshakes happen? - 3
- C) If you have FOUR people in a room and each person shakes hands with every other person exactly once, how many total handshakes happen? - 6
- d) If you have FIVE people in a room and each person shakes hands with every other person exactly once, how many total handshakes happen? - 10

28. What comes next?

What number comes next?

1, 3, 6, 10, 15, 21, 28

ADD 2, THEN 3, THEN 4, THEN 5.....

29. Planting Trees



You just bought TEN trees... You want to plant them in FIVE rows with FOUR trees in each row. How are you going to do it?

Hint: Try different shapes



30. Number Bubble

Put the numbers in the bubbles so that each edge adds up to the same thing.

1, 2, 3, 4, 5, 6, 7, 8, 9



31. We will cross that bridge when we get to it.....

Four people have to cross a bridge... It's very dark and they only have one flashlight... They can't make it across without some light.

No more than two people can cross at a time.

Phil can cross the bridge in 1 minute. Karen can cross in 2 minutes. Stinky can cross in 5 minutes. Bubba can cross in 10 minutes.

How can they all get across in 17 minutes?

FIRST, PHIL AND KAREN GO ACROSS WITH THE FLASHLIGHT

KAREN TAKES THE FLASHLIGHT BACK ACROSS TO THE OTHERS:

STINKY AND BUBBA GO ACROSS WITH THE FLASHLIGHT: PHIL TAKES THE FLASHLIGHT BACK TO THE OTHER SIDE: KAREN AND PHIL CROSS FOR THE LAST TIME:

32. Cat down the well

A cat is at the bottom of a 20 foot well.

Each day, he climbs up 5 feet ...

And each night, he slides down 4 feet.

How many days will it take him to reach the top of the well?

16 DAYS – ON THE 16TH DAY HE REACHES THE TOP SO DOESN'T SLIP BACK DOWN

33. Numbers and words!

- a) 26 = L of the A LETTERS OF THE ALPHABET
- b) 7 = D of the W DAYS OF THE WEEK
- C) 101 = D DALMATIANS
- d) 365 = D in a Y DAYS IN A YEAR
- e) 3 = B M BLIND MICE
- f) 4 = W on a C WHEELS ON A CAR
- g) 28 = D in F DAYS IN FEBRUARY
- h) 11 = M in a F T *MEN IN A FOOTBALL TEAM*
- i) 4 & 1 = F and T FINGERS AND THUMB
- j) 6 = S on a D SIDES ON A DICE
- 34. Poor Farmer

A farmer has 17 sheep and all but 9 die. How many are left?

ANSWER - 9

Puzzling Puzzles



35. Moving Day

The Masters family is moving to a new house. They have a dog, a cat, and a pet mouse, but the animals don't get along in the car, so they can take only one at a time.

Then there are other problems. They can't leave the dog alone with the cat, because the dog chases the cat if no one is watching. And they can't leave the cat and the mouse together, because...well, you know what would happen if they did.

How can the Masters family get all three of their pets to their new house?

THEY TAKE THE CAT TO THE NEW HOUSE, LEAVING THE DOG AND THE MOUSE AT THE OLD HOUSE. THEY RETURN TO THE OLD HOUSE AND TAKE THE MOUSE TO THE NEW HOUSE. THEY TAKE THE CAT BACK TO THE OLD HOUSE, LEAVE IT THERE, AND TAKE THE DOG TO THE NEW HOUSE. THEN THEY RETURN TO THE OLD HOUSE FOR THE CAT.

36. A Penny Piece

Divide the circle into sections by drawing three straight lines so that there is only one penny in each section.



37. Exactly Two

Place 12 pennies on the grid, one to a square, so that each of the six horizontals, each of the six verticals, and each of the two diagonals contains exactly two pennies.



POSSIBLE ANSWERS:

0					0
		0	0		
	0			0	
	0			0	
		0	0		
0					0

	0			0	
0					0
		0	0		
		0	0		
0					0
	0			0	

		0	0		
	0			0	
0					0
0					0
	0			0	
		0	0		

38. Three moves

There are 10 letters in the triangle. Change the triangle so that it points down. Move one letter at a time. You have only three moves.



MOVE G SO THAT IT IS NEXT TO B. MOVE J SO THAT IT IS NEXT TO C. SWITCH A FROM THE TOP TO THE BOTTOM OF THE TRIANGLE TO MAKE THE POINT.

39. Rearrange the squares

Can you rearrange these squares so that each row and each column has exactly one of each colour and exactly one of each shape? (For example, you cannot have two red squares in a row... and you cannot have two triangles in a column.)



40. Matchstick Puzzles



a) Remove two matchstick to leave two squares



b) Move two matchsticks to make seven squares



c) Move three matchsticks to make three equal squares



41. Turn the fish

Move three matchsticks to make The fish swim in the opposite direction







42. DINGBATS

1 Horse Box	2 Note Book	
3 High Jump JUMP	4 Big bad wolf	
JUMP	BAD wolf	
5 Ants in your pants	6 look both ways	
	LUUK	
	KOOL	
7 welcome back	Raining cats and dogs	
emoclew		
	10 3 cheers Cheers	
	Cheers	
Fairy tale	Cheers	
11 see saw	12 One in a million	
C	Mill1on	



43. AMAZING MAZES













44. Sudoku

5	6	4	1	3	2
2	3	1	4	6	5
1	2	6	3	5	4
4	5	3	6	2	1
6	1	5	2	4	3
3	4	2	5	1	6

f	d	е	С	b	а
С	а	b	f	е	d
b	f	а	е	d	С
е	С	d	b	а	f
а	е	f	d	С	b
d	b	С	а	f	е

3	1	2	5	4	6
6	4	5	2	1	3
5	3	4	1	6	2
2	6	1	4	3	5
1	5	6	3	2	4
4	2	3	6	5	1

2	3	1	6	5	4
5	6	4	3	2	1
4	5	3	2	1	6
1	2	6	5	4	3
6	1	5	4	3	2
3	4	2	1	6	5

45. What is it?



Look at these close ups and decide what it is part of:



cup of coffee



piano keys



hot air balloon



rubber on pencil



light bulb



bicycle wheel



drill bits



butterfly wings





skin

fly



fork



hairbrush



cheese grater



tortoise shell



£2 coin



48. Team Challenge

These tasks will be done practically

- a) Build a Bridge with the materials provided, you must build a bridge strong enough to support a weight
- b) Get Arty with the materials provided you must create a sculpture
- c) Egg Drop you must create an egg package that would prevent the egg from breaking when dropped from a great height!
- d) Bottle neck A logic problem: there is a coin in a corked bottle, you cannot smash the bottle or pull the cork out. How can you remove the coin? – Answer: PUSH THE CORK IN
- e) Radioactive waste without touching it you must lift and move the bucket with the string provided
- f) Blindfold Obstacle course
- g) Call your partner listening skills Blindfolded direction task
- h) Get Knotted a physical and teamwork challenge: tie as many knots in a rope as you can in a certain time period then pass it to another team to undo!