Bringing colour to your lives

Volume No. 13
From the Editor's desk...
Dear colleagues and families,
The Holiday special issue of Scribbles has always been popular and most people look forward to it.
Hope this issue engages you in solving puzzles that are challenging, and the young ones enjoy doing their activities. This time there's plenty of variety.
Look out for the contests for different groups in the last few pages.
Please be careful of over exposure to the heat.
Stay Positive. Stay Healthy.
Llaveda Jagan

## Cat Puzzle

Help the cat reach its owner.


- The severed head of a sea slug can grow a whole new body.
- Many feet bones don't harden until you're an adult.
- The moon has moonquakes.
- Goosebumps are meant to ward off predators.


## Missing Patterns

Look at each pattern. Finish the pattern by drawing the missing shapes.


Activity 3
(Age: 3-5)

These sneaky snakes are hiding their patterns until you colour them in!

$$
\mathrm{A}=\square \quad \mathrm{B}=\square \quad \mathrm{C}=\square
$$



Cut out the numbers and glue them onto the number bonds to make each number bond true.


Can you help the prince reach Rapunzel? Draw a path from the prince to the princess by counting from 1 to 20.


Help the children get out of the maze.



## Symmetry drawing

Activity 8
(Age: 5-7)

Use the grid to draw a mirror image of the owl on the blank side of the axis.

| Left |
| :--- |

Calculate the answer.



Activity 10
(Age: 8-10)
Find and circle the words in the word search puzzle and number the pictures.


Hidden Pictures


Can you find these hidden pictures?


Activity 12
(Age: 8 -10)

## WHICH TANK FILLS UP FIRST?



Fun Facts

- Your nostrils work one at a time.
- Copper door knobs are self-disinfecting.
- Cotton candy was invented by a dentist.
- The hottest spot on the planet is in Death Valley, California.


Find the hidden words in the picture

Activity 14
(Age: 8-10)


## Spot the differences

Activity 15
(Age: 8 -10)

Spot the 6 differences between the pictures.


Fill in the boxes with the correct shapes


## The Number Game



Can you place the numbers
1 to 8 in each of the squares so
that each side adds up to the middle number?


A code is a way of writing a message in secret.
The code below is simple to crack. Each letter of the alphabet is replaced by a number. Send your message in numbers and then your friend can use the de-coder to find what it says.

## THE DE-CODER

| A | B | C | D | E | F | G | H | I | J | K | L | M |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\mathbf{1}$ | 2 | 3 | $\mathbf{4}$ | $\mathbf{5}$ | $\mathbf{6}$ | $\mathbf{7}$ | 8 | 9 | 10 | 11 | 12 | 13 |
| N | O | P | Q | R | S | T | U | V | W | X | Y | Z |
| $\mathbf{1 4}$ | 15 | 16 | 17 | 18 | 19 | $\mathbf{2 0}$ | $\mathbf{2 1}$ | $\mathbf{2 2}$ | $\mathbf{2 3}$ | $\mathbf{2 4}$ | $\mathbf{2 5}$ | $\mathbf{2 6}$ |

So, if I want to write 'hello' I would write 8 for H , 5 for $E, 12$ for $L$ and 12 for $L$ again and then 15 for O .

My code would be 85121215
Now try and work out what this says.

The code:

| 9 |  | 1 | 13 |  | 2 | 18 | 9 | 12 | 12 | 9 | 1 | 14 20 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 1 | 20 | 13 | 1 | 20 | 8 | 19 |  |  |  |  |  |  |  |



Mathematical anagrams
An anagram is a word or phrase made up of the letters of another word.

These are Mathematical anagrams
Can you work them out?



Unfortunately, a gale blew one of the fences down and Gayathri's father had to rebuild the pig pen using only 12 pieces of fencing.


Fill in the puzzle so that every row across, every column down and every 3 by 3 box contains the numbers 1 to 9 .

|  |  |  |  |  |  |  |  | 2 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  |  |  |  |  |  | 9 | 4 |  |
|  |  | 3 |  |  |  |  |  | 5 |
|  | 9 | 2 | 3 |  | 5 |  | 7 | 4 |
| 8 | 4 |  |  |  |  |  |  |  |
|  | 6 | 7 |  | 9 | 8 |  |  |  |
|  |  |  | 7 |  | 6 |  |  |  |
|  |  |  | 9 |  |  |  | 2 |  |
| 4 |  | 8 | 5 |  |  | 3 | 6 |  |

## Detective Riddles

1. A detective was locked in a room that had a dirty floor, with a shovel and an open window, too high for him to climb out of. How did he escape?
2. A man killed his wife and carefully erased all the evidence - yet when he arrived at the crime scene upon the police's request, they arrested him. How did the detective know he killed his wife?
3. A man was found dead in a field of snow. The only tracks left were a set of footprints, between two parallel lines. Who should the police be looking out for?


- The English word with the most definitions is "set."
- The dot over the lower case " i " or " j " is known as a "tittle."
- Chewing gum boosts concentration.
- The unicorn is the national animal of Scotland.
- Kids ask 300 questions a day.
- The total weight of ants on earth once equalled the total weight of people
- "E" is the most common letter and appears in 11 percent of all English words

Treasure Hunt

Help the pirate find the treasure


## A Square of Digits

The nine digits may be arranged in a square in many ways, so that the numbers formed in the first row and second row will sum to the third row. We give three examples, and it will be found that the difference between the first total, 657 , and the second, 819 , is the same as the difference between the second, 819 , and the third, 981 -that is, 162.

Can you form eight such squares, everyone containing the nine digits, so that the common difference between the eight totals is throughout the same? Of course, it will not be 162 .

| 2 | 1 | 8 |
| :--- | :--- | :--- |
| 4 | 3 | 9 |
| 6 | 5 | 7 |


| 2 | 7 | 3 |
| :--- | :--- | :--- |
| 5 | 4 | 6 |
| 8 | 1 | 9 |


| 3 | 2 | 7 |
| :--- | :--- | :--- |
| 6 | 5 | 4 |
| 9 | 8 | 1 |

- The healthiest place in the world is in Panama.
- Dolphins have been trained to be used in war.
- Water makes different pouring sounds depending on its temperature.
- Koalas have fingerprints.

Here's a rhyming puzzle to put your brain to the test. Each clue has a two-word answer that rhymes; all you have to do is fill in the correct letters. Here's an example: when your head hurts, you might call it a brain pain. See how many of the following rhymes you can guess.

1. Getting a good education gives you a ...

|  |  |  |  |  |  |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |

2. Tired from cramming for tests...

|  |  |  |  |  |  |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |

3. An example would be, don't talk in class...

|  |  |  |  |  |  |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |

4. What education does that's important...

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |

5. A brain that's learned its lessons does this with no trouble...

6. Doing your homework every day makes you a...

|  |  |  |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |

## Compound words

Here's a puzzle that can test your mental agility: what third word follows each of the first two words to complete a compound word or a familiar two-word phrase? Example: if the clue words are "BRAIN" and "THUNDER," the word that completes both compound words or phrases might be "STORM": Brainstorm and Thunderstorm
Think / Army
Head / Jump
Thought / Hot-air
Intelligence / Talent
Mind / Speed
Smart / Choco-chip
Memory / River
Rational / Phone
Brain / Micro
$\qquad$
$\qquad$
$\qquad$

- Humans are just one of the estimated 8.7 million species on Earth.
- Riding a roller coaster could help you pass a kidney stone.
- Dinosaurs lived on every continent.
- Rolls-Royce makes the most expensive car in the world.


## Scrambled up

Starting with each letter to the left, see if you can unscramble the rest of the letters to fill in these five higher functions that the brain can perform and imagine what life would be like if our brains couldn't do them!

## B

$\bar{L} \bar{C} \bar{A} \bar{N} \bar{A} \bar{E}$
(To walk upright)
R $\overline{\mathbf{M}} \overline{\mathrm{E}} \overline{\mathrm{E}} \overline{\mathbf{M}} \overline{\mathrm{R}} \overline{\mathrm{E}} \overline{\mathrm{B}} \quad$ (To know where you're going)

A $\bar{Z} \overline{\mathbf{Y}} \overline{\mathbf{L}} \overline{\mathbf{A}} \overline{\mathbf{E}} \quad$ (To understand information)
I $\overline{\mathbf{E}} \overline{\mathbf{I}} \overline{\mathbf{G}} \overline{\mathbf{N}} \overline{\mathrm{M}} \overline{\mathbf{A}}$
(To foresee what might happen)
N $\overline{\mathrm{E}} \overline{\mathrm{I}} \overline{\mathrm{O}} \overline{\mathrm{T}}$
(To observe the things around you)

## The Shopkeeper's Puzzle

Activity 28
(Age: No Bar)

A shopkeeper, for private marking, selects a word of ten letters (all different) such as NIGHTMARES, where each letter stands for one of the figures 1,2 , $3,4,5,6,7,8,9,0$, in their order. So NI stands for $\$ 12.00$, and $\$ 34.00$ would be GH. Assuming this little addition sum is in such a private code, can you find the man's key word? It is not difficult.

GAUNT
OILER
RGUOEI


Put the numbers 1 to 9 in the boxes below so that each side of the triangle adds up to 20 .


## Equilateral Triangle



This pattern is made up of 16 matchsticks to make 8 triangles
Can you remove four matchsticks to leave four equilateral triangles?

Now that leaves 12
matchsticks for 4 triangles three each!


## Brain Teaser

Connected Squares: This puzzle is similar to a crossword puzzle, except that each of the four-square areas reads the same horizontally and vertically.

UPPER LEFT: 1. Frozen vapour.
2. Fastidious. 3. Prefix meaning eight.
4. To carry as covering.

UPPER RIGHT: 1 . To take notice of.
2. To covet. 3. Equal. 4. A unit of force in the centimetre-gram-second system.

CENTER: 1. To observe printed matter. 2. Always. 3. Prefix meaning pertaining to air. 4. To let fall.
LOWER LEFT: 1 . We motor on it
2. A boy's name 3. An article of matter
4. Hemispherical roof

LOWER RIGHT: 1. To empty 2. A
vegetable 3. Vessels 4. A breaking out of the skin


Decipher the code to spell a statement made by George Bernard Shaw (1856-1950) on politics. George Bernard Shaw was an Irish playwright and social critic. The vowels a, e, i, o, and u have been decoded for you.

| A | B | C | D | E | F | G | H | 1 | J | K | L | M | N | 0 | P | Q | R | S | T | U | v | W | X | Y | Z |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 13 |  |  |  | 24 |  |  |  | 18 |  |  |  |  |  | 4 |  |  |  |  |  | 25 |  |  |  |  |  |

- Nutmeg can be fatally poisonous.
- The first iPhone was not made by Apple.
- Benin, a country in central Africa, is notable for having the highest birth rate of twins in the world.
- The man who wrote Dracula never visited Transylvania
- Napoleon was once attacked by thousands of rabbits.
- Sweat does not actually stink.
- Astronauts in space are exposed to the same amount of radiation as 150 to 6,000 chest $x$-rays.
- Tornadoes used to be called "twirlblasts" and "twirlwinds" in the 18th century.
- Jupiter's red spot is getting taller and smaller at the same time.


## Cryptogram

Use this code to help you answer each item:

| $\mathrm{A}=1$ | $\mathrm{~B}=2$ | $\mathrm{C}=3$ | $\mathrm{D}=4$ | $\mathrm{E}=5$ | $\mathrm{~F}=6$ | $\mathrm{G}=7$ | $\mathrm{H}=8$ | $\mathrm{I}=9$ | $\mathrm{~J}=10$ | $\mathrm{~K}=11$ | $\mathrm{~L}=12$ | $\mathrm{M}=13$ |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| $\mathrm{~N}=14$ | $\mathrm{O}=15$ | $\mathrm{P}=16$ | $\mathrm{Q}=17$ | $\mathrm{R}=18$ | $\mathrm{~S}=19$ | $\mathrm{~T}=20$ | $\mathrm{U}=21$ | $\mathrm{~V}=22$ | $\mathrm{~W}=23$ | $\mathrm{X}=24$ | $\mathrm{Y}=25$ | $\mathrm{Z}=26$ |

## The Age of Exploration

1) Before European explorers circumnavigated the globe, 9-20-1-12-25 had a monopoly on trade with Asia.
2) Exploration and trade led to the 3-15-13-13-5-18-3-9-1-12 18-5-22-15-12-21-20-9-15-14 of the 17th and 18th centuries.
3) A magnetic 3-15-13-16-1-19-19 was used to guide ships in the right direction.
4) An 1-19-20-18-15-12-1-2-5 was used to measure latitude.
5) The European trade route to Asia had gone through Constantinople, which was captured by the 20-21-18-11-19 in 1453 .
6) Europeans wanted spices for food 16-18-5-19-5-18-22-1-20-9-15-14.
7) Portuguese explorer 4-9-1-19 sailed to the southern tip of Africa.
8) Prince 8-5-14-18-25 "the Navigator" began European explorations.
9) The Americas are conventionally called the 14-5-23 23-15-18-12-4.
10) 8-21-4-19-15-14 was the first European to explore the Hudson River.

## Answer me if you can!

1. I am a word of five letters. Take away my first and I am the name of what adorns the estate of many of the nobility of England. Take away my first and second, and I am the name of a place where all the world was once congregated, according to the Bible. Take away my last, and I am the name of a beautiful mineral. Take away my two last, and I am the name of a fashionable place of resort. I am small in stature, but capable of doing a great deal of mischief, as I once did in London in the year 1666.
2. Why is an inn like a burial ground?
3. If a fender costs six hundred dollars, what will a ton of coal come to?
4. What word is it that to which if you add a syllable, it will make it shorter.

## Missing Numbers

Activity 35
(Age: No Bar)

Insert the missing number in each set.

| 9 | 90 |
| :--- | :--- |
| 8 | 72 |
| 7 | 56 |
| 6 | 42 |
| 5 |  |



| 9 | 8 |
| :--- | :--- |
| 8 | 6 |
| 7 | 4 |
| 6 | 2 |
| 5 |  |

## Star Sudoku

Fill the grid so that every framed triangle, every horizontal and every tilted row contains the digits 1 to 9 , whereby the middle rows expand over the empty hexagon in the middle and the short rows on the edge are completed with the outer corners of the triangles.


Find the words given from the grid below.

C LTJNARDQQULCSLRPKITSFLZU
J I I I BE T NEMELECDQYSVVWAWZX H W K T N W Z T S X D L HA HADOALEUGRW Z G P R M G N U R D Y M A L A S M L T U K M R G P H J U A Z U L G T R Z B Y E I Q F FEDRCCEP O B D M U R S W C O E G W Z B F P H Z L C Z H V G N V R K T S E P O H OK W T D X Y D P P W Q E E U EMEPHVTRAGVAAOZDXIMWPFMXL S Q H K E B O N G P M J Q E R L X W F P D T I P X N G M R R Y K L E O E Y B O B S REAXCYCER U K N G M S E S H M I R M R L O Q D X L V G A X Z B U V Y O S U U O Z I E P I C H L O R I N E L X M L V C S M J Y L D L T R D J D V H R X S M D D U G S D B U E J T B FE U E E O U M B T I W Q D I C A U X Y S T I H K R U X T S P M C G C T L C S V L J PSVDEPOCSORCIMXTZEFXSBROU U M D C R C O P P E R V K O J E R L R A Q Z I O T L T F H N P M I HVHNEHNBEETIKDYKM
 A AK J Q BYDKRSJJHSFPRBUCAGLN

ACID<br>BURNER<br>COPPER<br>EXPERIMENT<br>HYDROMETER<br>POTASSIUM<br>SOLUTION

BUNSEN
CHLORINE
ELEMENT
GOGGLES
MICROSCOPE
SLIDE
THERMOMETER

## Lions and Crowns

The young lady in the illustration is confronted with a little cutting-out difficulty in which the reader may be glad to assist her. She wishes, for some reason, to cut that square piece of valuable material into four parts, all of exactly the same size and shape, but it is important that every piece shall contain a lion and a crown. As she insists that the cuts can only be made along the lines dividing the squares, she is considerably perplexed to find out how it is to be done. Can you show her the way? There is only one possible method of cutting the stuff.


Some planets like Saturn and Jupiter can produce diamond rain.

- You can sneeze faster than a cheetah can run.
- Pluto technically isn't even a year old.
- Newborns don't have kneecaps.

The illustration shows the plan of a prison of nine cells all communicating with one another by doorways. The eight prisoners have their numbers on their backs, and any one of them is allowed to exercise himself in whichever cell may happen to be vacant, subject to the rule that at no time shall two prisoners be in the same cell.

The merry monarch in whose dominions the prison was situated offered them special comforts one Christmas Eve if, without breaking that rule, they could so place themselves that their numbers should form a magic square. Now, prisoner No. 7 happened to know a good deal about magic squares, so he worked out a scheme and naturally selected the method that was most expeditious-that is, one involving the fewest possible moves from cell to cell. But one man was a surly, obstinate fellow, and he refused to move out of his cell or take any part in the proceedings. But No. 7 was quite equal to the emergency, and found that he could still do what was required in the fewest possible moves without troubling the brute to leave his cell. The puzzle is to show how he did it and, incidentally, to discover which prisoner was so stupidly obstinate. Can you find the fellow?


## The Wizards' Cats

A wizard placed ten cats inside a magic circle as shown in our illustration, and hypnotised them so that they should remain stationary during his pleasure. He then proposed to draw three circles inside the large one, so that no cat could approach another cat without crossing a magic circle. Try to draw the three circles so that every cat has its own enclosure and cannot reach another cat without crossing a line.


- Cheetahs don't roar.
- France has a dozen time zones.

Fun Facts

- Your liver can regrow itself in three weeks.
- In Germany, people help toads cross the road.


## Card Puzzle

Activity 41
(Age: No Bar)

Which playing card completes the sequence?


## Visual Sequence

a. Which option below continues the above sequence?



b. What comes next?




B


C


D


E


F

## Missing Number

## Activity 43 <br> (Age: No Bar)

In this Math Puzzle, your challenge is to find the relationship among the given numbers around the Rectangle and then find the value of the missing number which replaces the question mark. Can you take this challenge?


- Humans aren't the only species to adopt.
- A 70-year-old woman once completed seven marathons in seven days, across all seven continents.
- Desert ants have an internal pedometer that helps them keep track of their travels and find their way back home.
- Crows hold grudges.

Decipher the meaning of the words and pictures in each square.

| Darennalitu reisulatily | $\underset{\mathrm{mis}}{\mathrm{STOOD}}$ |  | history history history | milition |
| :---: | :---: | :---: | :---: | :---: |
| miniluteate | chair | in vaders | S |  |
| VIINON | WALKEkg | ST@RM | SEOT |  |
| $\stackrel{\text { PROM }}{\underset{\sim}{\omega}}$ | gLETS | тыwalucue | Я000 |  |
| $a_{4} x_{8}$ | $3.14159$ |  | RNKE | BUSIII |

## Double Back / Country Road

## Activity 45

 (Age: No Bar)Draw a single closed loop of horizontal and vertical segments passing through adjacent squares in the grid. Each thickly outlined region must be visited exactly twice. For any two adjacent squares not in the same region, at least one must be passed through by the loop. In other words, two adjacent unused squares cannot straddle a region boundary. A number in a cell of a region tells how many cells in that region are passed through by the loop. Ignore the shading of regions and the letters in some squares for purposes of solving.


Missing Letter
a. Which letter is missing from the wheel?

b. What goes in the empty circle?
(1)


## Hit your Logic

## Activity 47

(Age: No Bar)
a. If two painters can complete two rooms in two hours, how many painters would it take to do 18 rooms in 6 hours?
b. Seenu caught a prize fish last weekend. He was going to measure it but realised that his ruler was not long enough. He was able to measure the head and discovered that it was 9 cm long, he then measured the tail and found that it was the length of the head plus half the length of the body. If the body was the length of the head plus the tail, what is the total length of the fish?
c. Subbu, Srini and Sridar are all apple farmers who pool their crop each year to make cider. For this year's harvest, Srini supplied three times as many apples as Sridar, and Subbu supplied twice as many apples as Srini. If the total number of apples supplied is 900 tonnes, how many did each of them contribute?

## Spot Differences <br> Activity 48 (Age: No Bar)

Spot the 4 differences.


a. Draw the face in the empty box which continues this pattern.

b. Which number goes in the empty shape?


## Logical reasoning

In this Brain Bending Logical Reasoning Puzzle, there are some logical equations. Your challenge in this puzzle is to decode the logical reasoning behind these equations and then solve for the missing number which will replace the question mark?

## Can you Solve this?



Number quiz
A. Which number continues this sequence?

B. Which number is missing?


- Guinea pigs were once sacrificed wearing earrings and necklaces and wrapped like sushi.
Fun Facts
- The Twitter bird's official name Is Larry T Bird.
- The longest book title contains 1,809 words.

Which of the smaller grids goes in the middle?




## $\cdots$

Activity 1


Activity 2


Activity 4
$10,8,6,9,5,7$

Activity 5


Activity 6


Activity 9

## Activity 10

| r | k | e | b |  |  |  |  |  |  |  |  | c a | a |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\mathrm{p}$ | u | c | c | d | f | f | g | g e | e s | s v | m | m $]$ | J y |  | k |
| o | b | o | f | r |  | 1 |  |  | c a | a m | $s$ | x | x b | b | k |
| $\mathbf{p}$ | y | 1 | x | h | 0 | t | d | d 0 |  |  | m | n | v m |  |  |
| c | k | a | c | z | r | r s |  |  |  |  | c i | i x | x w |  | z |
| o | v | m | m | e | z | 2 |  |  |  |  | o 1 | 10 | d |  | f |
| r | b | f | 1 | i | e | d |  |  |  |  |  |  |  |  | a |
| n | m | h | a | m | b | u |  |  |  |  |  | S | r |  |  |
| n | i | u | $t$ | c | y | y a | x | x |  | $n$ t | th | I | r d |  |  |
| c | 0 | t | $t$ | 0 |  |  |  |  |  |  |  |  | ju |  |  |
| $t$ | a | c | 0 | r | z | u |  | 1 | 1 | 1 x | x | k |  |  |  |
| 0 | n | i | 0 | n | r | 1 | n | 1 g | g | S c | c e | o | m |  |  |
| r | m | b | s | a | n | d | w | W | i c | c h | h | f | f k |  | a |
| r | v | m | u |  |  |  |  | n | j a | a 1 | 1 | f |  |  |  |
| d | 0 | n |  |  |  |  |  |  | f w | w g | g f | $f$ b | b |  |  |

## Activity 11



## Activity 12

Tank \#8 will fill up first. The water will travel from 1 to 2 to 7 to 8 . Other paths are blocked off.

## Activity 13

8 Animals. Elephant, Dolphin (trunk), Ant (Trunk), Horse, Dog,

Cat, Mouse, Seahorse (tail).


Activity 14


Activity 15


## Activity 16



Activity 17

| 1 | 8 | 3 |
| :---: | :---: | :---: |
| 5 | 12 | 7 |
| 6 | 4 | 2 |


| 8 | 4 | 1 |
| :---: | :---: | :---: |
| 3 | 13 | 7 |
| 2 | 6 | 5 |


| 7 | 3 | 4 |
| :---: | :---: | :---: |
| 6 | 14 | 2 |
| 1 | 5 | 8 |


| 6 | 1 | 8 |
| :--- | :--- | :--- |
| 2 | 15 | 4 |
| 7 | 5 | 3 |

Activity 18

| 1 |  | A | M |  | $B$ | R | 1 | L | L | 1 | A | N | T |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 9 |  | 1 | 13 |  | 2 | 18 | 9 | 12 | 12 | 9 | 1 | 14 | 20 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| A | T | M | A | T | H | S |  |  |  |  |  |  |  |
| 1 | 20 | 13 | 1 | 20 | 8 | 19 |  |  |  |  |  |  |  |

I am brilliant at Maths

Activity 19


Activity 20


Activity 21

| 6 | 8 | 4 | 1 | 5 | 9 | 7 | 3 | 2 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 7 | 5 | 1 | 8 | 3 | 2 | 9 | 4 | 6 |
| 9 | 2 | 3 | 6 | 7 | 4 | 1 | 8 | 5 |
| 1 | 9 | 2 | 3 | 6 | 5 | 8 | 7 | 4 |
| 8 | 4 | 5 | 2 | 1 | 7 | 6 | 9 | 3 |
| 3 | 6 | 7 | 4 | 9 | 8 | 2 | 5 | 1 |
| 2 | 3 | 9 | 7 | 4 | 6 | 5 | 1 | 8 |
| 5 | 1 | 6 | 9 | 8 | 3 | 4 | 2 | 7 |
| 4 | 7 | 8 | 5 | 2 | 1 | 3 | 6 | 9 |

Activity 22

1. He climbed on top of the mound of dirt and made an escape
2. They did not tell him the location of the crime scene, he knew where it was as he had killed his wife.
3.A man in a wheelchair

Activity 23


## Activity 24

In every one of the following eight sums all the nine digits are used once, and the difference between the successive totals is, throughout, 9:

243341154317216215318235
675586782628738748654746 918927936945954963972981

Activity 25

1. SMART
2. BRAIN
3. SCHOOL
4. TRAINS
5. PASSES

6 PRUDENT

Activity 26
Tank
Start
Balloon
Agent
Reader
Cookie
Bank
Number
Wave
Activity 27
BALANCE
REMEMBER
ANALYZE
IMAGINE
NOTICE
Activity 28
The only word (not a jumble of letters) that will fit the conditions is REGULATION. Used in the way explained, the actual sum was:

36,407
+98,521
134,928
Ans: 134,928

Activity 29


Activity 30


Activity 31

|  | N |  | W |  |  |  | E | E |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| N | 1 | C | E |  |  |  | N | V |  |  |
| 0 | C | T | A |  |  | E | V | E |  |  |
| W | E | A | R |  | A | D | Y | N |  |  |
|  |  |  | E | V | E | R |  |  |  |  |
|  |  |  | A | E | R | 0 |  |  |  |  |
| R | 0 | A | D | R | 0 | P | 0 | U |  |  |
| 0 | T | T | 0 |  |  | 0 | K | R |  | A |
| A | T | 0 |  |  |  | U | R | N |  | S |
| D | 0 | M | E |  |  |  | A | S |  |  |

## Activity 32

"Democracy is a device that ensures we shall be governed no better than we deserve."

Activity 33

1. Italy
2. Commercial Revolution
3. Compass
4. Astrolabe
5. Turks
6. Preservation
7. Diaz
8. Henry
9. New World
10.Hudson

Activity 34

1. spark; 2. both are a resting place for the traveler; 3. ashes; 4. short.

Activity 35

| 9 | $x 10$ | 90 |
| :---: | :---: | :---: |
| 8 | $x 9$ | 72 |
| 7 | $x 8$ | 56 |
| 6 | $x 7$ | 42 |
| 5 | $x 6$ | 30 |


| 9 | $x 1$ | 9 | 9 | -1 | 8 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 8 | $x 2$ | 16 | 8 | -2 | 6 |
| 7 | $x 3$ | 21 | 7 | -3 | 4 |
| 6 | $x 4$ | 24 | 6 | -4 | 2 |
| 5 | $x 5$ | 25 | 5 | -5 | 0 |

Activity 36


Activity 37


## Activity 38

Here is the solution. It will be seen that each of the four pieces (after making the cuts along the thick lines) is of exactly the same size and shape, and that each piece contains a lion and a crown. Two of the pieces are shaded so as to make the solution quite clear to the eye.


Activity 39
There are eight ways of forming the magic square-all merely different aspects of one fundamental arrangement. Thus, if you give our first square a quarter turn you will get the second square; and as the four sides may be in turn brought to the top, there are four aspects. These four in turn reflected in a mirror produce the remaining four aspects. Now, of these eight arrangements only four can possibly be reached under the conditions, and only two of these four can be reached in the fewest possible moves, which is nineteen. These
two arrangements are shown. Move the men in the following order: 5 , $3,2,5,7,6,4,1,5,7,6,4,1,6$, $4,8,3,2,7$, and you get the first square. Move them thus: $4,1,2,4$, 1, 6, 7, 1, 5, 8, 1, 5, 6, 7, 5, 6, 4, 2, 7 , and you have the arrangement in the second square. In the first case every man has moved, but in the second case the man numbered 3 has never left his cell. Therefore No. 3 must be the obstinate prisoner, and the second square must be the required arrangement


Activity 40


## Activity 41

Ace (of any suit)
Taking the vertical, horizontal and 2 diagonal lines through the centre of the square, the sum of the values at the ends of the lines equal 12 the value of the centre card.

Activity 42
a. D

Each time two symbols touch they disappear at the next stage and are replaced by two new symbols.
b. C

The top arm moves 45deg clockwise at each stage and the bottom arm moves 90 deg clockwise.

## Activity 43

The Answer is 34.
If $A, B$ are outside numbers and $C$ is inside Rectangle number along each edge of Rectangle, then below is the relationship between these numbers.

$$
\left(A^{*} B\right)+A+B=C
$$

## Activity 44

Split personality, Misunderstood, Somewhere over the rainbow, History repeats itself, One in a million, l'll be there in a minute, High chair, Space invaders, Slow down, Stand in the corner, Double vision, Walking in the ice, Eye of the storm, X marks the spot, Once upon a time, Broken promise, Shrinking violets, Upside down pineapple cake, Back door, Get a word in edgewise, Cross country, Apple pie, Six feet underground, Half baked, Unfinished business

Activity 45
Start from the first letter alphabetically that is part of the loop and travel clockwise around the loop until you return to the original letter. Enter the letters you encounter in order. Not all letters may be used.


## Answer:

BFICD

## Activity 46

a. E.

Starting with Y, letter values decrease by $2,3,4,5$ and 6 .
b. 4 .

In each row the first and third numbers when read as a
2-digit number give the reverse alphabetical value of the centre letter

Activity 47
a. 6 Painters.
b. 72 cms
c. Srini $=270$.

Subbu $=540$.
Sridar $=90$.

Activity 48


Activity 49
a. Working in columns, as you move down, one feature is removed with each
 step, and the smile alternates with the frown.
b. 7

Each row contains each digit $0-9$ inclusive, sometimes as part of a two-digit number, sometimes alone.

## Activity 50

6
Square the number and then write only the units place at right side of equation.

## Activity 51

a. 66 .

Working from left to right, double the previous number and subtract 2.
b. 19 .

Starting top left and moving clockwise around each square, numbers in corresponding segments advance by $2,3,4$ and 5.

## Activity 52

## B

Staring top left and working to the right in each row, the top and third dot remain stationary, with the dot in between moving to and fro along its line 3 spaces at a time. The lowest dot moves to and fro 1 space at a time and the dot above it 2 spaces. The whole grid rotates 90deg clockwise at each step.



Colour using poster colours only (Age 11-16).
Contest open only for children of employees.
Entries to reach location HR on or before 20 June 2022.


Calligraphy is a visual art related to writing. It is the design and execution of lettering with a pen, ink brush, or other writing instrument.

Write the following paragraphs from "My experiments with truth" in the most artistic way you can. Contest open to spouses of employees only. Contestants are allowed to use only Ink or gel pens; however, paper could be of their own choice. Send your entries to the location HR on or before 20 June 2022.
"Much as I wish that I had not to write this chapter, I know that I shall have to swallow many such bitter draughts in the course of this narrative. And I cannot do otherwise if I claim to be a worshipper of Truth. It is my painful duty to have to record here my marriage at the age of thirteen. As I see the youngsters of the same age about me who are under my care and think of my own marriage, I am inclined to pity myself and to congratulate them on having escaped my lot. I can see no moral argument in support of such a preposterously early marriage.

Let the reader make no mistake. I was married, not betrothed. For in Kathiawad there are two distinct rites, betrothal, and marriage. Betrothal is a preliminary promise on the part of the parents of the boy and the girl to join them in marriage, and it is not inviolable. The death of the boy entails no widowhood on the girl. It is an agreement purely between the parents, and the children have no concern with it. Often, they are not even informed of it. It appears that I was betrothed thrice, though without my knowledge. I was told that two girls chosen for me had died in turn, and therefore I infer that I was betrothed three times. I have a faint recollection, however, that the third betrothal took place in my seventh year. But I do not recollect having been informed about it. In the present chapter, I am talking about my marriage, of which I have the clearest recollection."

Ealligraphy

## Film your thoughts

Shoot a documentary on 'WATER'. For example: conservation or future or present. Contest open only for employees.

## Rules:

- The documentary must be original.
- Documentary should be in English or have no dialogues at all.
- Each film must be no longer than 3 minutes. Opening and/or closing credits are not required.
- All entries which exceeds the time limit will be rejected.
- Ensure that all content in your documentary (including footage, music, images, props, etc) are original.
- Send in your entries in MP4 format to scribbles@sanmargroup.com, on or before 20 June 2022.


Designed by
Kalamkriya
9, Cathedral Road,
Chennai 600 086. Ph: + 91442812 8051/ 52
For Internal Circulation Only.
Editorial team:
Sarada Jagan, Ramadevi Ravi, SS Rameshwari, Leena Bose.

