



HAT PUZZLE

Three men out on a safari in a jungle are captured by dacoits. The dacoits give the men a single chance to escape. The captives are lined up in order of height, and are tied to stakes. The man in the rear can see the backs of his two friends, the man in the middle can see the back of the man in front, and the man in front cannot see anyone. The men are shown five hats – three are black and two are white.



The men are then blindfolded and a hat is placed on each man's head. The two hats left over are hidden. The blindfolds are then removed and the men are told that if one of them can correctly guess what colour hat he is wearing they can all leave unharmed.

The man in the rear who can see both of his friends' hats but not his own says, "I don't know". The middle man who can see the hat of the man in front, but not his own says, "I don't know". The front man who cannot see anybody's hat says, "I know!"

What colour hat was he wearing?

Answer:

There are three prizes of Rs. 500/- each for three correct entries. In case there are a large number of correct entries, the prize winner will be selected through a draw of lots. The decision of the Editor, *Science Reporter*, will be final.

Send your entries to

Puzzle Corner
Science Reporter
 National Institute of Science Communication And
 Information Resources, CSIR, Dr. K.S. Krishnan Marg
 New Delhi-110012

Last date for the entries to reach us: 05-01-2013



Your Name :

Address :

.....

.....Pin Code :

Age :E-mail :Sex :

Occupation : Student Housewife Teacher Professional Retired Other

Educational Level: Primary Secondary Graduate Postgraduate

*Please fill up the questionnaire at the back

*Please note: Now you can even send your answers on a photocopy of this page.

LET THE FLOWERS BLOOM

Complete the sepals of the flowers with the type of reaction for which clues are given inside the flower. The starting alphabets are already given.

1. Removal of oxygen or gain of hydrogen
R

2. Slow decomposition of large organic molecules into simpler ones in presence of enzymes
F

3. Reaction of following type are called.....
Acid+Base → Salt+Water
N

4. When a more active element displaces a less active element in a compound, such reactions are called
D

5. Reaction in which a single chemical compound splits up into two or more substances
D

Contributed by Mr Hemen Hazarika, Vill. Nalisha, PO Jagara, Dist. Nalbari, Assam-781310; Email: hemenhaz@yahoo.co.in

ORE PUZZLE

With the help of given clues, names of mineral ores are to be filled in the grid. Next, pick up letters from the dark boxes and arrange them to form a word that indicates a bluish, grey or black mineral ore of Lead Sulphide.

Clues Down:

1. A bright red mineral of Mercuric Sulphide
2. Hydrated form of Calcium Sulphate
3. Ferric Oxide ore

Clues Across:

4. Mineral form of Uranium Oxide
5. Clay-like mineral containing Alumina
6. Mineral of Calcium Magnesium Carbonate

Contributed by Mr Raashid Jamal, Nana Saheb ka Bara, holpur (Rajasthan)-328001

SOLUTIONS TO PUZZLES PUBLISHED IN THE OCTOBER 2012 ISSUE

PRIZE PUZZLE:

ELEVATOR PUZZLE

1. The man is too short to reach the number 10 button.
2. An alternative solution: The elevator only runs to the 7th floor. The riddle did not state that he takes the elevator from the 10th floor in the morning, just that he takes the elevator to the ground floor. He walks to the 7th floor each morning to take the elevator to the ground floor also.

ROCKET PROPELLANTS SEARCH

Hydrazine, Cordite, Kerosene, UDMH, Pentaborane, Perchloric Acid, Methyl Alcohol, Turpentine, LIH, Beryllium, Aniline, Aerosene, Nitric Acid, Fluorine, Ammonia, Diethyl Amine, Ethyl Alcohol, Nitro Methane, MMH, Melange

CHICKEN AND EGG PROBLEM

The farmer needs 3 hens to produce 12 eggs in 6 days

THE WINNERS OF THE PRIZE PUZZLE BASED ON THE DRAW OF LOTS FROM AMONG THE CORRECT ENTRIES ARE:

- **Nezrin R**, 'Subah', No. 132-B, Kannimel Nagar, Kilikolloor, Kollam-691004
- **Apoorv Alawada**, KR 15, Civil Line, Near PWD House, Lal Kothi, Near Nehru Park, Kota (Raj)-324001
- **Pritish R. Moon**, 6A, Rathi Layout, Rashpabhasha Road, Wardha, Maharashtra-442001

CONGRATULATIONS