

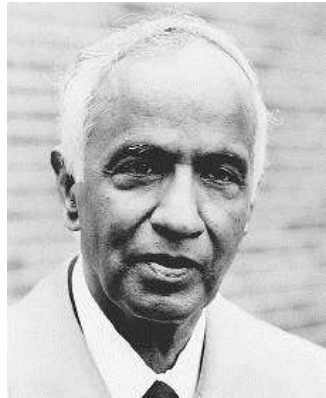
Quest



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Monthly magazine for JUNE compiled by MINI SETHI and POONAM SAINI



IDENTIFY THE SCIENTIST

- ❖ He was the Nephew of greatest scientist C.V. Raman.
- ❖ He got the Nobel Prize for Physics in 1983 “for his theoretical studied of the physical processes of importance to the structure and evolution of the stare”.
- ❖ He showed that the mass of a white dwarf could not exceed 1.44 times that of the Sun – the Chandrasekhar limit. At the University of Cambridge, he developed a theoretical model explaining the structure of white dwarf stars that took into account the relativistic variation of mass with the velocities of electrons that comprise their degenerate matter.
- ❖ He worked on a wide variety of astrophysical problems in his lifetime, contributing to the contemporary understanding of stellar structure, white dwarves, stellar dynamics, radiative transfer, the quantum theory of the hydrogen anion, hydrodynamic and hydromagnetic stability, equilibrium and the stability of ellipsoidal figures of equilibrium, general relativity, mathematical theory of black holes and theory of colliding gravitational waves.

SCIENTISTS FROM ANCIENT INDIA

Maharishi Patanjali--The Father Of Yoga



Patañjali – Modern art rendering in Patanjali Yogpeeth, Haridwar

- ❖ He is the father of yoga-- a compiler of 195 yoga sutras.
- ❖ According to the Patanjali's treatise **Yoga sūtras**-- Yoga can be Physical as well as Mental; such that Physical Yoga is called **Hathyoga**, and Mental Yoga is called **Rajayoga**.
- ❖ Maharishi Patanjali referred **AUM** as the symbol of God himself as a Cosmic Sound.
- ❖ Other than Yoga Sutra, Patanjali also authored a book on medicines called **Patanjalatantra** and an ancient treatise on Sanskrit grammar called **Mahābhāṣya**..



WASTE MANAGEMENT



Vermicomposting

The Worms do the Work for you!

WHY?

Aerators

Worms add Oxygen for all the beneficial micro-organisms.

Turners

Like Tiny Plows, worms work throughout the material

Mixers

Worms move all kinds of organisms and nutrients throughout the compost pile adding many small aggregates.



Screeners

Worms eat the bedding materials and the feed and turn it into a rich soil product.

Pathogen Controllers

Worms ingest and render useless, the "bad guys".

Accelerators

Worms can eat 1/2 to all their weight per day. A 5'x8' large scale Flow-through system can process 100 lbs of food scraps per day and will produce 78-80 lbs of castings per day.

Growers Prefer Worm Castings Over Compost

Because research shows
Worm Castings Produce Superior Results

Higher

Concentrations of micro-organisms
Percentage of available nutrients.
Aggregate formation.
Capacity to hold water.

Faster

Growth Rates

Greater

Diversity of micro-organisms
Plant Heights
Leaf Area
Root Weights
Germination Rates



More

Fruit on Plants
Nutrient availability over time.

Larger

Fruit

Better

Disease Control

Exclusively

Enzymes & Plant Growth Regulators Only Found in Worm Work Soil.

Sweeter

Tasting Fruit & Vegetables



HOW TO MAKE COMPOST AT HOME



IMPORTANT DAYS IN THE MONTH OF JUNE



Play your part, be water smart!

Wise Water Use



Water your yard and outdoor plants early or late in the day to reduce evaporation



Take shorter showers - five minutes or less is best.



Get an Energy Star labeled washing machine. Wash only full loads.



Put faucet aerators on sink faucets.



Install new toilets that use less than 1.6 gallons per flush.



Use plants that require less water.



Turn off the water while soaping hands and brushing teeth.



Turn off sink faucet while scrubbing dishes and pots.



Use low flow showerhead.

Use a shut-off nozzle on your hose.



Mulch around plants to hold water in the soil.



Use a broom, not a hose, to clean driveways and walkways.

Save it, or do without it!



10 Things KIDS Can Do

To Help the
Environment



- 1.** Bike or walk
whenever possible



2.

Recycle

- 3.** Turn off lights
when not
in use



**4. Don't
Litter**

- 5.** Take a shower
instead of a bath to

conserve water

- 6.** Plant a tree



- 7.** Create a wildlife habitat
by building a
birdhouse for
your yard



- 8.** Turn off
electronics
when not in use

- 9.** Turn the
water off
while you
brush your



- 10.** Ride the school bus to school





DO YOU KNOW

There are red bananas that taste sweet, creamy, and a little bit like raspberries.



There's a plant that grows in the shape of tiny bunnies making peace signs. *Monilaria obconica* is a flowering succulent, but its sprouts resemble little rabbit ears before they start growing longer and larger, which makes it look like a family of green bunnies posing for a photo.



did you know?
did you know? garden.com

There's a garden in England dedicated entirely to flora which are deadly and/or narcotic, featuring over 100 killers such as hemlock, strychnine and nightshade.



The Japanese Lantern plant, also known as the Chinese lantern or winter cherry, is a popular symbol of 'life within death.' It blooms in the winter, but when it dries up in the spring, the 'skin' crumbles away, revealing the red fruit that lives inside its 'skeleton.' The seeds are also used as offerings to guide the souls of the dead.



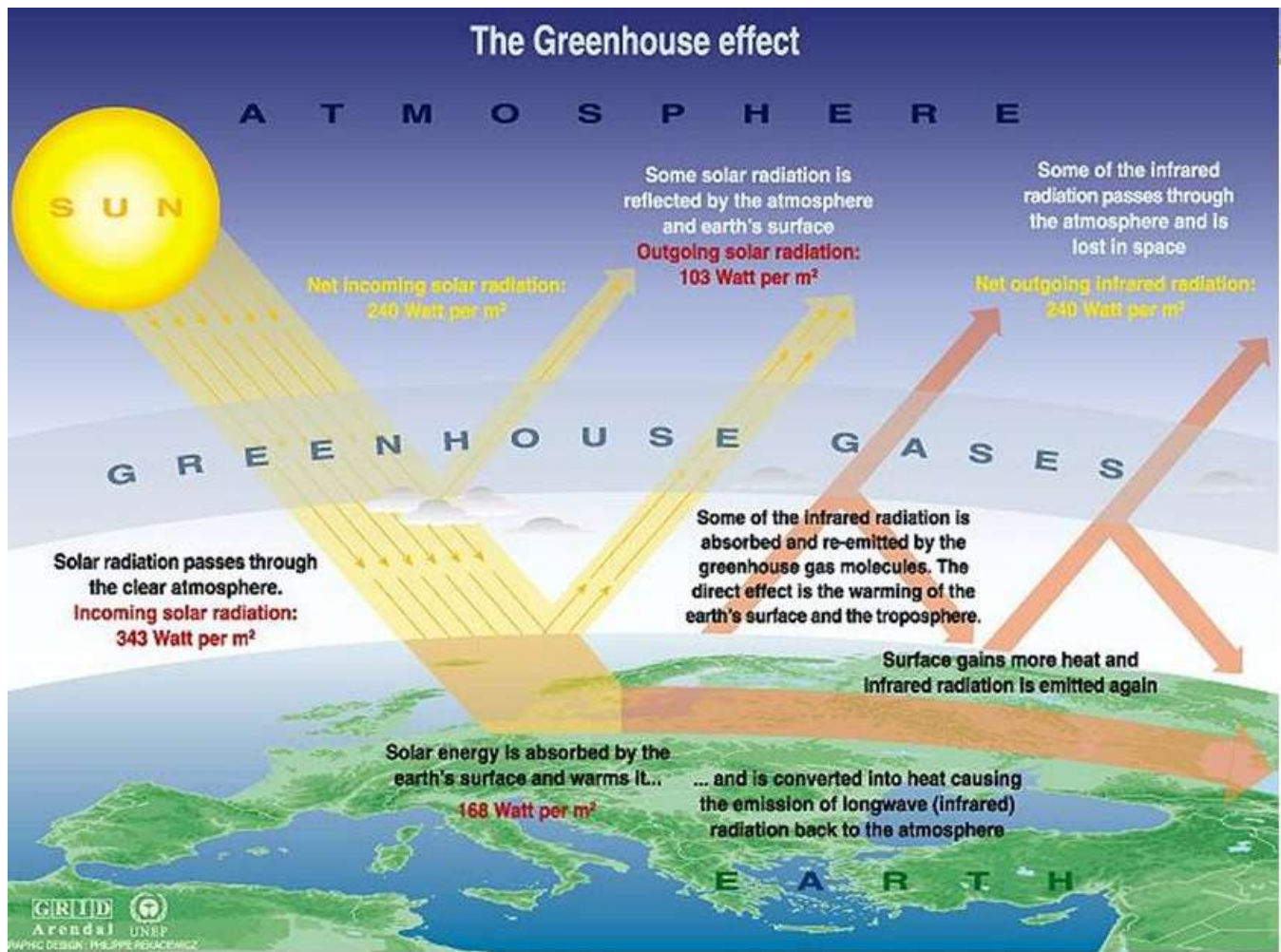
Plants know when they're being eaten. There are certain plants that emit toxins as a defense mechanism in response to the sounds of caterpillars chewing - even when the sound is played as a recording. Researchers hope this discovery can someday help reduce the use of man-made pesticides.



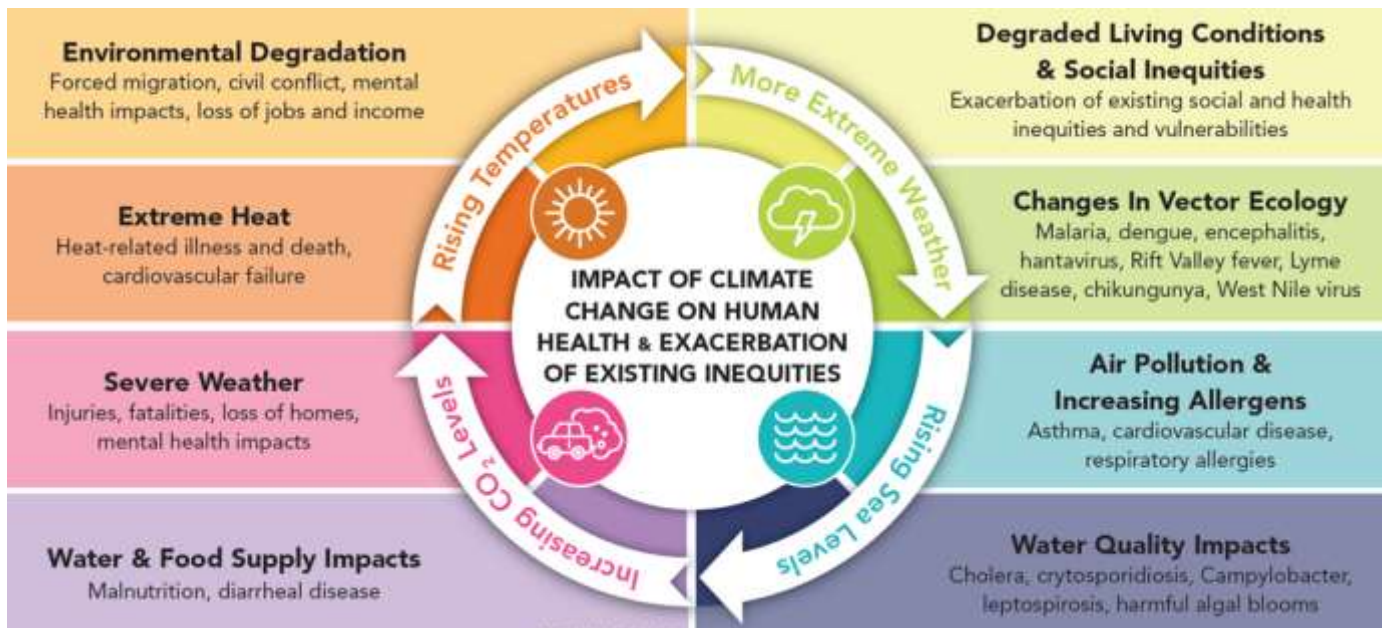
Glass Gem is a unique strain of corn with kernels that look like pieces of rainbow-colored glass.



The Greenhouse effect



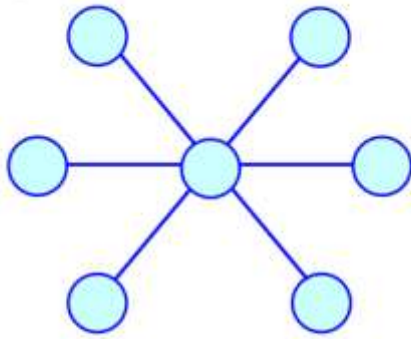
Impact of Climate Change on Human Health



THINK AND FIND OUT



Seven up!



Put the numbers

1, 2, 3, 4, 5, 6 and 7

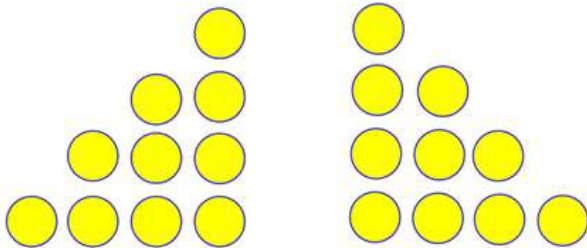
in the circles so that each straight line of three numbers adds up to the same total.

Counter reflection

Sometimes the easiest things are the most annoying - when you can't do them! Have a go at this:

change

into



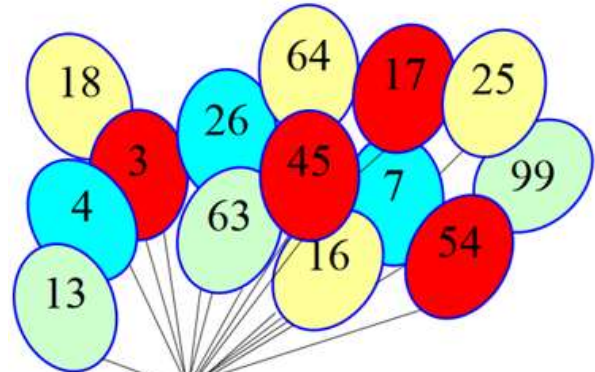
Sounds easy - eh!
But there is a snag!

You can only move three counters!!



Balloon bursting

If a number in one of the balloons is included in the answers to the four problems below then that balloon will fly away.

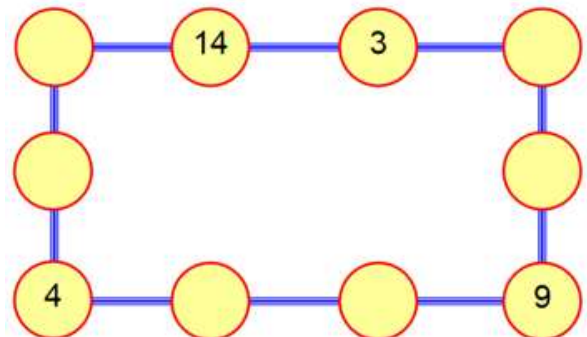


1. Balloons with a multiple of 9
2. Square number balloons
3. Prime number balloons

WHICH BALLOON IS LEFT?

Add up to 20

Using any whole numbers as many times as you like make each line of the rectangle add up to 20.



Can you find more than one way to do this?

Can you make up your own puzzle like this?

Digit detector

You have got to be a detective to solve the problem below.

What is the least number of calculations you need to do to be absolutely certain of how much Norman Number is worth?

You must do them in the order shown.

How many am I?

1. I am a three digit number.
2. I am an odd number.
3. I am divisible by 5.
4. Each of my digits is different.
5. My digits add up to 8.
6. The tens digit is smaller than the hundreds digit.
7. I am less than 300.
8. I have only one even digit.



Ten tents

A little bit of logical thinking needed for this one, I think!

Each letter is worth a number of points. The points are added up to make the total for the word.

Try to work out the number of points for each letter and then find the value of the last word.

$$\text{TEE} = 4$$

$$\text{TEN} = 6$$

$$\text{NEST} = 10$$

$$\text{TENTS} = ?$$

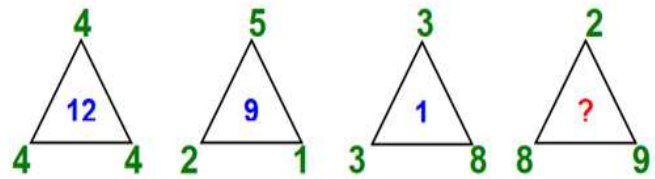


Clue: think about the double E !!

How many points would TENTS get?



Triangular terror!

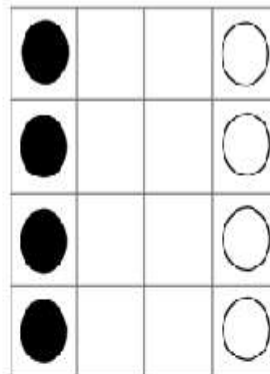


Now all you have to do is work out what number should go in the fourth triangle.

To give you a clue, you have to do something (or some things) to the three numbers round the outside of the triangle to get the number in the middle.

You then have to use the same rule for all the triangles.

Good luck - it's easy if you see what needs doing, but impossible if you don't!!



There are four black counters and four white counters.

The black and white counters can only move diagonally, any number of spaces. (Just like a bishop in chess.)

What is the least number of moves needed to get the black counters where the white ones are and the white counters where the black ones are?

Rule:

There is no jumping or landing on top of each other!

Idea:

You could try this with 8 girls and boys in the playground!