Solutions & Winners

Kids' 'X' Word Solution

¹ c	2 R	3 I	4 C	K	⁵ E	^б Т	X
⁷ L	Α	N	D	X	8 C	R	90
10 _I	D	Е	X	11 _C	0	I	N
12 P	I	X	13 L	G	N	Α	Е
14 S	I	15 L	Ι	С	0	N	X
X	X	16 N	Ε	Т	М	G	17 A
18 D	19 U	0	X	X	20 Y	L	F
²¹ s	Р	I	N	Е	X	22 E	Т

Kids Challenge!

Did you find the word? It is "DIMENSION".

There was a mistake in one of the clues. Instead of 3rd, 4th and 5th – the clues were given as 2nd, 3rd and 4th.

Smart kids:

- 1. Sravya Ainapurapu, St. Louis.
- 2. Sruthi Ainapurapu, St. Louis.

Kids' 'X'word Winners:

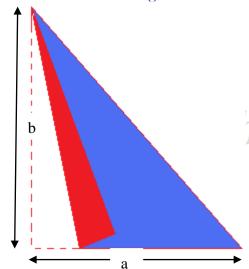
1. D. Aditya, Lucknow.

Salutation to your solution! - Answers

1. Water @ 20⁰F.

Water @ 20⁰F is below freezing temperature and becomes Ice. Rest of the substances are in liquid state only.

2. Base – 2 x folded length: Base.



Let us assume the base and height of the right angled triangle shape are 'a' and 'b' respectively.

The base of the folded triangle be 'c'.

The area of actual triangle = $\frac{1}{2}$ ab.

Area of folded triangle = $\frac{1}{2}$ bc

Area of blue colored part = Total area -2x area of folded portion.

Which is $\frac{1}{2}$ ab $-2 \times \frac{1}{2}$ bc = $\frac{1}{2}$ b(a - 2c).

So the ratio of blue colored area to the

actual shape = $\frac{1}{2}$ b(a - 2c) : $\frac{1}{2}$ ab

$$= a - 2c : a$$

The ratio is base -2x folded length: Base.

- 3. The dancer is standing 2 meters from the dresser mirror. The other mirror used to check the flowers in her hair. So the image of the flowers appear 3 meters from the dresser mirror. So the image is formed 3 meters behind the dresser mirror.
- 4. There are 16 characters to use. There are 3 non-repeating character combinations to form the key. First position can be filled in 16 different ways. Second position can be filled in 15 ways (As one character is been used already). Third position can be filled in 14 ways. So the robber has a chance of guessing the right combination in 1 in $(16 \times 15 \times 14) = 1$ in 3360.

Sanghamitra Solutions - Winners July 2011 Issue

Salutation to your solution! - Winners:

1. T. Anoop, East Godavari, India. 2. Vaasanti Maghapu, California.

Question Gallery! - We ourselves disclosing answers!!

- 1. The **Reindeer lake** (not raindeer, we apologize for the mistake) is a glacier lake located in western Canada.
- 2. Bill Clinton wrote the book 'Between hope and history'.
- 3. When an object is placed in between two mirrors placed parallel facing each other, infinite number of images are formed.
- 4. Thyroid gland controls how quickly the body uses energy, makes proteins and controls how sensitive the body should be to other hormones. Over active thyroid gland (hyperthyroidism) and an underactive thyroid gland (hypothyroidism) causes lots of problems. This gland is located on the front part of the neck below the thyroid cartilage. This gland produces harmones, which regulates body metabolism.
- 5. The capital of Mexico is Mexico city.
- 6. The human body on an average consists of 5 liters of blood.
- 7. One mile is equal to 5280ft. One feet is equal to 12 inches. So one mile is equal to 63360 inches.
- 8. An element having 17 electrons is Chlorine with symbol Cl.
- 9. Charaka was one of the principal contributors to the ancient art and science of Ayurveda, a system of medicine and life style developed in ancient India.
- 10. Epiglottis is flap of cartilage located in the throat behind the tongue and in front of the larynx. The Epiglottis is usually upright at rest allowing air to pass into larynx and lungs. When a person swallows, the Epiglottis folds backward to cover the entrance of the larynx so food and liquid do not enter the windpipe and lungs. After swallowing the Epiglottis returns to its original upright position.

Question Gallery! - Winners: 1. Vaasanti Maghapu, California.

Amaze your friend using a small trick!

Step 1: Ask him to select a three digit number.

Step 2: Tell him to multiply by 13.

Step 3: Ask him to multiply the product by 7.

Step 4: Now ask him to tell the final product.

Now you can tell him the chosen number quickly. How? See the solution below.

For easy multiplication follow the steps. Start from right. First write 3, next add 9+3 to get 12 and write 2 to the left of 3 and 1 is carry forward. Now add 1+9 to get 10, plus carry forward to get 3. Next add 1+1 to get 2, plus carry forward to get 3. Next add 1+1 to get 2. Finally write 1 to the left of 2. So the result is 123123. You need not do the whole multiplication. Find the right most 3 digits. That amazes your friend. Have fun!

or right most 3 digits. For example, if your friend says 11193.

*

You need to multiply the answer by 11 to get a 6 digit number and tell the left most 3 digits