Smore Science Digest

A biweekly science newsletter for kids

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smorescience.com

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First field image by JWST, deepest and sharpest to date

Trending News

Credit : NASA



After Hubble Space Telescope's three illustrious decades in space, NASA expressed its faith in the James Webb Space Telescope(JWST). The first images from JWST were unveiled on 12th July, and the high-resolution images stood up to the expectations of the astronomers. Among the images, is the deepest and sharpest image of the distant universe captured to date, showing the galaxy cluster SMAC 0723 in great detail, along with many other tiny, faint celestial structures. JWST has also unveiled previously hidden details of South Ring planetary nebulae, which are bodies of gas and dust ejected from dying stars. The images taken by JWST will mark the start of a new era in space observation.

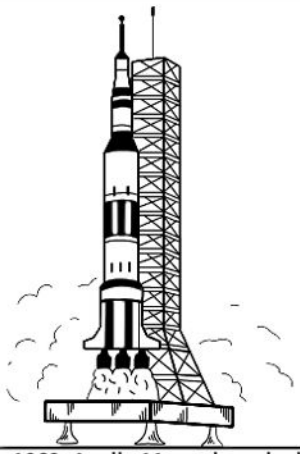
The Biweekly Bonus :

- Watching the Death of a Rare Giant Star : https://tinyurl.com/y2dakudv

- Near-Sun Comet Roasted to Death : https://tinyurl.com/5bmvwvnx

- How Electric Fish Were Able to Evolve Electric Organs : https://tinyurl.com/bdfyes5h

FYI



July 16th, 1969: Apollo 11 was launched, which was the first manned mission to the Moon

Word Scramble

Theme : Celestial Bodies

1. HEAL BLOCK _____
2. TITLE SEAL _____
3. SORT IDEA _____
4. TOAST RUNNER _____

HINT: 1) Even light cannot escape this 2) The Moon 3) Large stony masses in space 4) Collapsed Supergiant star

Would You Rather:

(A)

Be as small and unnoticeable as a fly



(B)

Be as tall and large as a skyscraper



Send us your pick and your reasoning (in 50 words or less) to info@smoremagazine.com. Your answer could be selected for publication in the next edition !!

Did You Know ?

Sweden is a country with zero garbage and waste. The appreciation the Swedish people have for nature, and the use of these wastes to generate energy and for recycling, are the primary reasons. In fact, Sweden imports waste from UK and Norway as fuel for energy generation!

Electrolysis Of Water

STEM Challenge

Materials needed:

1. Water
2. Glass
3. Salt
4. Cardstock Paper
5. 9V Battery
6. Lead Pencils (2)
7. Pencil Sharpener

Procedure:

1. Take a glass and fill half of it with water.
2. Add some salt into the water and stir it well.
3. Sharpen both ends of the pencils and keep the length of both pencils the same.
4. Cut a rectangular piece of cardstock paper such that it covers the glass completely. Pierce two holes for the pencils to pass through. The holes should be 0.5" inches apart.
5. Place the cardstock paper with pencils on the glass. Adjust the pencils in a way such that their ends are at the same level in the water.
6. Hold the battery nodes on top of the pencil leads. Wait for some seconds, and the water will begin bubbling as electricity breaks the water molecules into hydrogen and oxygen gas.

Tiny Farmers

STEM Around Us




Humans started agriculture in the Neolithic Age. However, ants were farming fungi 60 million years before we did! The striking similarities between their and our farming methods are wonderful. Ants of the Attini tribe(including leafcutter ants) learned to farm fungus as a food source. The ants foraged leaves but didn't consume it. Instead, they used it to 'feed' the fungus, which they then consumed. They isolated these food fungus from wild types, and hence it co-evolved with ants. It became an efficient food source that is found nowhere in the wild, just like many human food crops don't grow in wild anymore.






Brain Teaser



What will be the next four numbers of the series? 0,1,1,2,3,5,8,13

Workshop

An Introduction to Coding with CodeOp: HTML & CSS

Online event

For more details, visit

https://tinyurl.com/2p9h8fxt

Can You Do A Futoshiki ?

		<		
1				
		<	5	1
	<	<		2
	3	>	2	<

Answers to puzzle in next edition.

Answers for (Edition 5)

1	4	5	2	3
^			^	
3	1	2	< 4	< 5
^		^		
4	5	3	1	< 2
	v			^
5	2 >	1	3	< 4
	^			
2 <	3	< 4	5	1

Brain Teaser -

Fill Jug A (7 gallons). Pour from A into Jug B (4 gallons). Empty Jug B. Pour 3 gallons from A into B. Fill A. Pour 1 gallon into B, which has 3 gallons of water, until it's full. Now Jug A has 6 gallons of water.

How to solve a Futoshiki :

1. Fill in the 5 x 5 grid with numbers 1 to 5, such that no number is repeated twice in a row or column.

2. Place numbers according to the greater than and less than signs wherever applicable.

Word Scramble - 1. READ ONLY MEMORY 2. HARD DISK 3. PEN DRIVE 4. ALGORITHM

Credits: Smore Science, Anubhav Ghosh, John Zakour, Sara Alexander, Manisha Mondal, Akshay Ashokan
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