

Parenting Tip of the Month

April



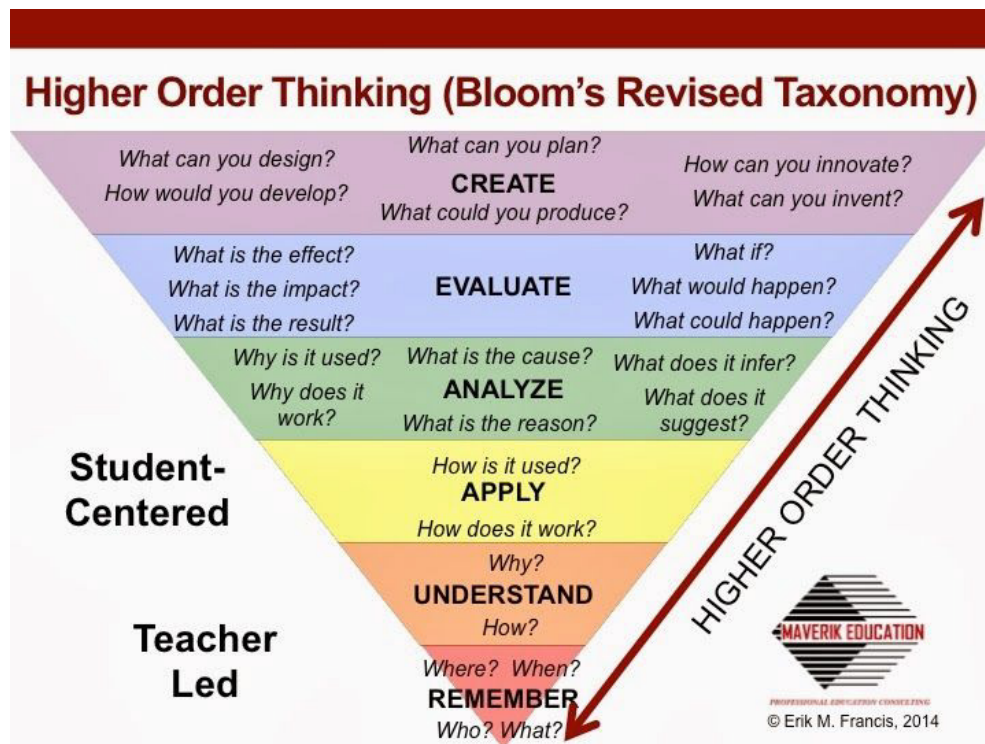
Lower Elementary Teachers

Why Use Higher Order Thinking Skills Everyday?

Research tells us that Higher Order Thinking Skills help to “build life long interaction and communication skills” and help students to “master the habits of mind (critical, creative and self-regulated), needed to function as productive members of society.”

ALL students require questioning skills that range from low to higher order. Students who experience learning difficulties, as well as students with language and other related learning difficulties do not learn to think and question automatically. They need to be taught HOW to engage in higher order questioning and comprehension skills to make sense of oral and written language. Often only higher achieving students are taught how to use higher order thinking and questioning techniques.

The way parents and teachers ask questions, whether about what is being read in novels, nonfiction, or about the actions observed in their daily world, creates deeper understanding and advances cognitive and emotional processing in all children. All children need to learn and assimilate these skills into their everyday lives.



Use the questions on this Bloom's Taxonomy graphic and the next few pages to help your family work on these skills at home. Be CREATIVE and have fun!

hots!



Question Stems for Higher Order Thinking Skills



♥ positively learning

knowledge

Where is the...?



Can you recall...?



Why did the...?



List the three...



Name the...



Label the...



What is the definition of...?



When did...?



comprehension

How would you compare...?



How would you contrast...?



Which facts showed...?



State _____ in your own words.



What is the main idea of...?



How would you summarize...?



How would you rephrase...?



What might happen if...?



application

How would you use...?



How would you solve ____ using what you learned?



What would result if...?



Who do you think...?



What if you changed...?



How would you show...?



How does this relate to...?



This reminds me of...



analysis

How is ___ related to ___?



Why do you think...?



What conclusions can you draw...?



What can you infer...?



Why did...changes occur?



What is the theme of...?



How is this similar to...?



What was the problem with...?



synthesis

How many ways can you...?



Would it be better if...?



How would you have dealt with...?



What way would you design...?



How would you improve...?



Suppose you could...What would you do?



Can you create a new...?



How can you imagine...?



evaluate

Do you agree with...?



How would you feel if...?



What choice would you have made...?



What would you recommend...?



What is your opinion of...?



Is there another solution?



Which is more important...?



What are the pros/cons of...?



Material of the Month

April



Lower Elementary Teachers

Montessori Astronomy: Space and our Solar System

Using Montessori inspired materials can assist you in turning astronomy into an adventure that both challenges and educates children. In this lesson, you will give your kids an experience which requires many of their senses and will pique their interest in space, our solar system, and all the fun things racing around up there.

The Big Bang

As logic would have it, we begin this lesson at the beginning, the formation of the universe. As of now, the best, most accepted theory of creation is the big bang, a phrase first coined by Albert Einstein in his theory of relativity. When tackling this lesson, starting with books is the best way to introduce the topic. The books are just a few of the many which we have found educational and entertaining for our little ones.



Having a conversation, using bright visual pictures, serves to stimulate the imagination and creates a relaxed environment for the kids. They will ask you a thousand questions before you even turn the first page. Reassure them that all those questions and more will be addressed at some point in the lesson.

It all began 14.5 billion years ago.

That's right, the Universe is that old! And it's divided into countless galaxies. Within our galaxy, the Milky Way, there are many stars or suns and solar systems. A solar system is a sun with a collection of planets and natural satellites, like moons and asteroids.

Stargazing

You could mention a few of our neighboring solar systems, like Proxima Centauri, before moving on to our own solar system. Having this lesson at night with a telescope would be a real sensorial treat. Show them the difference between stars and planets (stars twinkle, planets don't), have a star chart in order to find the planets like Mars or Venus.

If you go out of the city, you have the best chance to see the most stars

And at the right time of the year, depending on where on the planet you are, you may even find the Milky Way. This is a great time to talk about some of the objects astronomers are studying, like constellations, when they look through their telescopes.

What is a nebula?

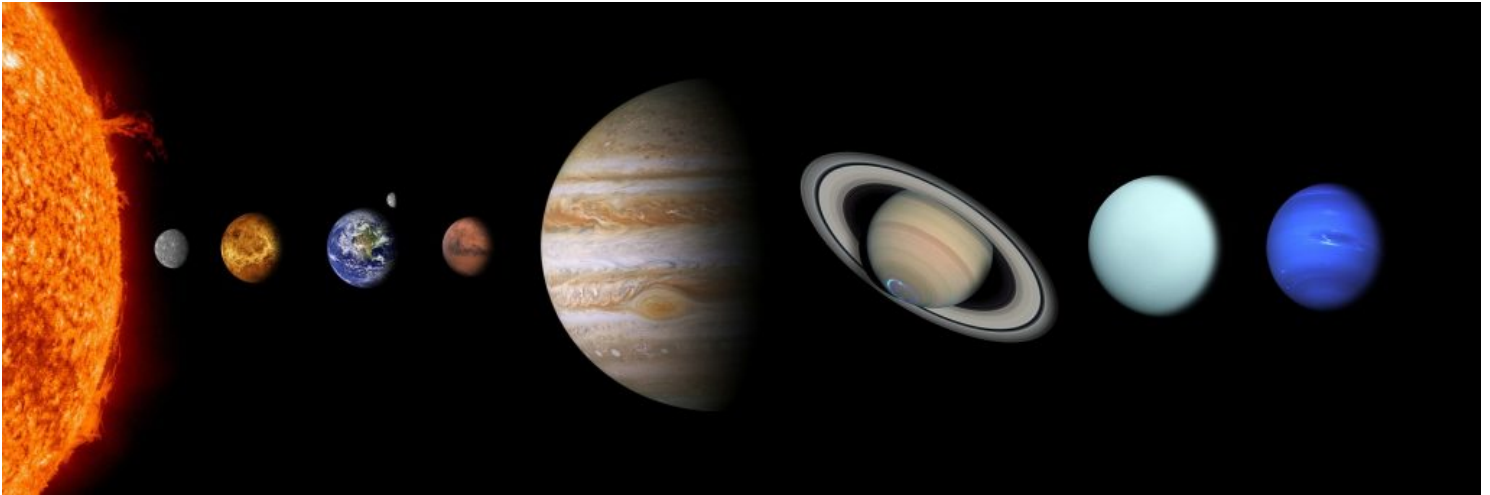
A nebula is a big cloud of dust and gas floating around interstellar space. According to NASA, these clouds are both the remnants of dead stars and the nursery for new ones. When a star dies, it's called a Supernova. The remaining gases and dust from that star create a nebula. Other nebulae (more than one nebula), usually made of helium and hydrogen, have dense clouds clumping together. These clumps create more and more gravity which eventually implodes on itself, getting very hot and giving birth to a new star.

What are comets?

Comets are truly amazing celestial objects, the most famous being Halley's comet, which returns every 75 years or so. Also, known as dirty snowballs, comets are leftover debris from stars which had formed billions of years ago. They start out as giant clumps of rock and metal covered by ice. The gravitational forces of the planets pull them around the solar system. When they get close to the sun which they are orbiting, a tail forms due to the melting ice. That tail is what makes them so visible by telescopes and fascinates astronomers so much.

The order of the planets

There are several techniques to learning the order of the planets ranging from songs to mnemonics. If you scour the internet you're sure to find something interesting for your child.



Learning the names of the planets using the 3-part cards

Now we want to reinforce the names of the planets. Here is where we can have fun with learning the names with just the set of cards, with the felt pieces or even with other figures which you may have found in online stores. There are a ton of beautiful pieces to compliment this activity. By the end of this activity, be sure to mention the fact that we used to have 9 planets in our solar system. But scientists eventually removed Pluto from the list as it was just too small to be considered a planet. Now it is simply referred to as a dwarf planet. But it still orbits the sun like the other planets and is even smaller than our moon.

Now it's time for the moon!



Don't relax yet! We still have a lot of learning to do! Now that the kids have a good grasp of the vastness of our universe, galaxy and solar system, let's narrow the lesson down a bit. The moon is something in space which the kids can actually see and study, which makes this lesson all the more interesting and motivational to them.

What is the moon? The moon is just a big rock which, like the Earth, was left over from the debris which formed our solar system at its birth. Technically it's considered a natural satellite and is the 5th biggest moon in our solar system. Being so large, about one quarter the size of the Earth, it has a big effect on us and may even be the reason why life is possible on this planet. Since the moon revolves around the Earth and rotates very slowly around its own axis, the same side always seems visible to us.

However, the moon goes through many phases during its 28-day cycle based on the position it holds in its orbit of the earth and its relationship to the sun. The bright side is lit by the sun and the dark is the shadow of the Earth. At times it shines brightly in its entirety and others only a small sliver appears.