MONTESSORI
KINDERGARTEN OF BUCHAREST

Gh. Pop de Basesti 15
2nd District, **Bucharest**
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MKB Classroom Newsletter

Welcome

We would like to welcome our new students:
Maria
Vlad
Ioan

It is a pleasure to have you with us!

Another Welcome

Victor's baby-brother was born on July 9th. Welcome to this world, Robert, and see you soon at MKB!

Topics

Last Months' Highlights

Awe and science

Children and trees

Hands on plaster

Concentration and cucumbers

- We had a lot of science experiments. We saw how a volcano 'works', how the whirls of a tornado look like and so many other interesting things. Dear parents, please read the article at the end of the newsletter because we might like to make many other experiments at home too.
- We studied animals from the sea and you can see in the dinning room the results of our Thursday project : do you like our fishes, octopuses, starfishes and shells ? We made them with Elena's help.
- We studied the trees, with their leaves, flowers, fruits and bark. We found out that if we cut a tree we can find out how old that tree is by the circles it has traced inside. We waited a lot for the linden next to our school to bloom. Every day we opened the window we have in our big bedroom to see if the linden had flowers... Finally, after a long, long time of waiting.... one day we started shouting joyfully in the bedroom: flowers, flowers, flowers... first we saw them, then we smelled them. Such a smell : if we make linden tea we can sleep better.
- We went back to the church yard to see the tree we planted in April and to taste fruits. We enjoyed being around flowers and having so much space to run around...
- We experienced how blind people can read and write: we had some papers written in Braille alphabet that we could touch with our eyes closed. Did you know that dots are letters for blind?
- What else? We don't have enough room here to tell you all that we did: playing with musical instruments, working with sand to make art projects, making boats out of origami paper and hats out of newspaper, peeling cucumbers, making hand prints on plaster and many mooore!

Our 'First of June' Party

We welcomed the Funny Story Tellers

They told us "The Grasshopper and the Ant" Did you know how lazy the Grasshopper was? And he didn't even know the right answers to the Ant's riddles. Fortunately the kids helped him!

Thank you!

The cake made by Victor's mom was not only colourful, but also delicious. Miam!
And... do you know Sweet Dinu? His parents brought sweet juices. Again Miam!

We managed to be there all together!

All in all, the party was our chance to mingle and chat with everybody - children, parents, educators – to taste some delicious cookies and some sweet news about holidays, about baby-brothers and baby-sisters waiting to be born, and about how children pretend at home to be Mariana when they play.

POEMS & SONGS

5 little kittens
have lost their mittens
and they began to cry:
o, mother dear,
do you not hear
that we have lost our mittens

You lost your mittens
you naughty kittens
then you should have no pie
miau, miau
then you should have no pie

5 little kittens
have found their mittens
and they began to sigh:
o, mother dear,
see hear see hear
that we have found our mittens

You found your mittens
then you're good kittens
then come and have some pie
miau, miau,
then come and have some pie

Aricioaica-n umbra serii
isi grijeste aricioii
si ii spala de cu zor
pe botic si ochisori.

Doar pe spate, doar pe spate
sa-i grijeasca ea nu poate.
Aricioii asadar
stau cu spatele murdar.

Si se spala abia cand ploua
la o luna ba chiar doua.
Bucurati-va ma pici
ca nu sunteti pui de-arici.

ARTICLE OF THE MONTH

Where Did it Come From? Introducing Students to Material Science, By Priscilla Spears

Source: PSM / Volume 10, Number 1 - Fall, 1997

What do we ask from the Earth? From where do we obtain the objects and substances we use in our everyday life?" If you asked your students this question, they would probably answer, "A store." Further discussion would take the origins back to a wholesale distributor, a factory, and finally to raw materials. Few of us know the raw materials for the products we consume, yet to have a sustainable ecosystem (that is, for long-term survival of our species and others), we need to know the demands we make on the Earth's resources.

The first step in learning what we ask of the Earth is to learn from what materials our everyday objects are made. The study of materials is an important part of technology, as well as science. Materials science integrates very nicely with the Ages of Man and studies of chemistry, physics, structures and strength of building materials, ecology and practical consumer skills.

The first lesson of materials science is learning to distinguish natural materials from those that have been processed (chemically altered) in some way. Obviously the youngest learners are not ready to talk about chemical changes, but they can imagine the life lived by hunter-gather cultures. A visit to a museum display that shows the objects used by ancient Native Americans, for instance, reveals that they used materials from their nearby ecosystems. They made most objects by simply shaping natural materials such as plant fibers, wood, stone, and animal hides. People turn natural materials into processed materials by doing something to them, other than shaping them. This gives the materials different properties. Heating clay to make pottery and soaking hides with plants to tan leather are examples of ways pre-industrial cultures processed materials.

As you introduce this to students […], start by having them sort objects into the two categories, natural and processed materials. Introduce the lesson with a story about how ancient peoples used natural materials and how they gradually learned to process the materials to give them different properties. Ceramics were some of the first pre-historic processed materials, followed by metals. […]

Natural materials for a sorting activity include stone, wood, cotton, bone, antler, and bamboo. The samples should not be dyed nor the wood finished. You may wish to include raw hide leather, but be cautious, since some raw hide has arsenic added as a preservative. Pet products made of raw hide are safe. The processed materials include glass and other ceramics, metal, plastic, tanned leather and dyed synthetic fabric. Supply a reed basket for the natural materials and a plastic or metal container for the processed materials. […]

When students have a firm grasp of natural and processed materials, it is time to focus on kinds of processed materials and their properties. Processed materials fall into several main categories, ceramics (which includes glass), metals, plastics, paper products and fibers, and other synthetic substances. We need the latter miscellaneous category because our highly technological society produces so many kinds and combinations of materials. First, focus on ceramics, metals, and plastics. The youngest students start by sorting objects made of these into the appropriate categories. Then they can begin to study the properties of each type.

The properties of the material determine what can be made from it. When children have learned a material's properties, ask them why we use it for some objects and not others. [...]

Heat conductivity is an easy property to sense. Have the child place one hand on a sheet of plastic such as Styrofoam and the other on a metal baking sheet. Explain that the material that feels colder is conducting the heat away from that hand more quickly. [...]

The children can use a magnet to find whether it attracts the material. From this, they categorize materials as magnetic or non-magnetic.

Investigating the optical properties of materials prepares a student for the study of physics. Materials can be divided into three categories, opaque (transmits no light), translucent (transmits light, but not images), and transparent (transmits light and images). [...] Finally there are those fascinating materials that absorb light energy and release it later, the phosphorescent or "glow-in-the-dark" materials. [...]

Mechanical properties describe how a material changes when it is pushed or pulled. These include whether the material is ductile (bends before it breaks) or brittle (breaks and does not bend) and whether the material is elastic (returns to its original shape).

Return to the original question of where we obtain the objects we use in everyday life. Try to trace an object all the way back to the raw materials from which it is made. Does the manufacture of the object require materials that are not in the final product? [...] These are hard questions that you probably will not answer fully, but the "journey" is the important part.

Source: PSM / Volume 10, Number 1 - Fall, 1997

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Although you might find it too early to explain such matters to your children, you would be surprised how interested they are in discovering and understanding their environment. Don't be afraid to use the correct scientific words for what you explain. You will find below three of the experiments we made in class that had great success.

1. Mini Ocean: Fill a clear plastic liter bottle 3/4 full with water. Add blue food coloring then add cooking oil. Leave about 1 inch at the top of the bottle. Show preschool children how the oil and water do not mix. Tilting the bottle back and forth causes a wave effect.

2. Volcano: Place an empty baby food jar on a tray. Surround the jar with playdough. Form the dough to look like a mountain. Put a drop of red food coloring and a tablespoon of baking soda in the jar. Then add some vinegar to it to make it erupt.

3. Ice Follies: Freeze water in three separate containers. Pop out ice blocks in a tub. Have the children touch the frozen water. What will make the ice melt? Does the ice melt when we touch it with our warm hands? Pour some salt over one, sugar over another, and sand over the third. Which block will melt faster?

You can try them at home, too. Good luck!