

December 2011

Barksdale Parents,

My name is Dafne Oronoz. I am the coordinator of the After School Science Enrichment Program sponsored by Barksdale PTA. We are very excited to bring this program to you since it provides a combination of science concepts with hands-on experiments and projects conducted by Brainopolis.

In order to register your children we will need a signed waiver - emergency form (attached) and a check. You can mail the signed form along with a check to 5824 Farr Oak Dr. Plano TX 75093. Please make checks payable to "Brainopolis". Each module is \$90 for a period of 7 sessions.

To better serve your children we will take a maximum of 40 students on a "first come - first serve" system based on the receipt of your documents. That is, 20 students from 1<sup>st</sup>-3<sup>rd</sup> grade and 20 students from 4<sup>th</sup>-5<sup>th</sup> grade.

I will send the following email messages:

- Confirmation of your children's acceptance to the program and details of their schedule.
  - Notification of classes filled up and wait list for future sessions.
- Classes start on Monday Jan. 23<sup>rd</sup> (1-3<sup>rd</sup> graders) and Wednesday Jan. 11<sup>th</sup> (4<sup>th</sup> and 5<sup>th</sup> graders).

Below you will find the following:

- A- Emergency and waiver sheet
- B- Program details and Frequently asked questions (FAQ)
- C- After School Science Program calendar with the program sessions.
- D- Detailed description of each Module and its Sessions.

Please let me know if you have any questions.

Respectfully,  
Dafne Oronoz  
469-371-6193  
dafneoronoz@yahoo.com

Note: Our PTA liaison is Jennifer Carley (afterschoolprograms@barksdalepta.org)

Monday Sessions 4-5pm: Open to **1<sup>st</sup> thru 3<sup>rd</sup>** graders. \$90 for each module.

Chemistry Module – Jan. 23, 30, Feb. 6, 13, 27, Mar. 19, 26

Health Science Module – April 2, 9, 16, 30, May 7, 14, 21

Wednesday Sessions 4-5pm: Open to **4<sup>th</sup> and 5<sup>th</sup>** graders. \$90 for each module.

Chemistry Module – Jan. 11, 18, 25, Feb. 1, 8, 15, 29

Health Science Module – Mar. 21, 28, Apr. 4, 11, 18, May 2, 16

**Emergency and waiver sheet – Please fill out one sheet per student and return with payment to Dafne Oronoz, 5824 Farr Oak Drive, Plano, TX 75093. Make checks payable to Brainopolis.**

**SCIENCE ENRICHMENT PROGRAM SPONSORED BY BARKSDALE PTA**

Student's name: \_\_\_\_\_ Grade: \_\_\_\_\_ Teacher: \_\_\_\_\_  
 Where will your child go after class? Picked up at front of building  PASAR

**MODULES**

Please **circle** the modules that your child is signing up for:

For 1<sup>st</sup> – 3<sup>rd</sup> graders:

Chemical Reactions \$90		Health Science \$90	
Jan 23– Mar 26	Mon. 4-5pm	Apr 2 – May 21	Mon. 4-5pm

For 4<sup>th</sup> – 5<sup>th</sup> graders:

Chemical Reactions \$90		Health Science \$90	
Jan 11– Feb 29	Wed. 4-5pm	Mar 21– May 16	Wed. 4-5pm

**MODULE DESCRIPTION (See more detailed descriptions on final page of this packet.)**

Module	Sessions	Module Description
<b>Chemical Reactions</b>	Volcano eruption, fake mucus, quicksand, atom, foam fountain, fizzy drink, ocean waves	Uncover the secrets of chemistry. In this class we will model our own volcano and make it erupt, explode a small container, create a fountain of colorful foam, make quicksand and test it, create an atom and ocean waves. Each session includes an interactive presentation and an experiment. Kids will learn chemistry concepts such as chemical reactions, anatomy of atoms, existence of the periodic table of elements and more while they play
<b>Health Science</b>	Body systems, first aid, surgery on a Teddy Bear	Come and play doctor while you learn about the different systems in the body (integumentary, circulatory, respiratory, etc), create models to understand organs, use a stethoscope, understand CPR, apply first aid concepts to immobilize arms and legs, and dress as a surgeon to perform surgery on a Teddy Bear.

**WAIVER**

I acknowledge and understand that the participating groups and instructors shall not be liable nor do they assume responsibility for injury or accident which may occur to the child during class; and I thereby release and hold harmless the participating group, sponsors, instructor, helpers and all other persons and entities associated directly or indirectly from injury, damage or loss. I have read and agree to the terms, cost, conditions, and refund policies stated herein.

Please grant us permission to take pictures of your child performing science projects in class.

I GRANT permission

I understand that if my child is being disrespectful to the instructor, helpers or other children in class, participation to current or future modules will be denied/revoked.

**EMERGENCY INFORMATION**

Parent/Guardian's signature \_\_\_\_\_ Date \_\_\_/\_\_\_/\_\_\_

Print name of parent/guardian: \_\_\_\_\_

Cell ☎# (\_\_\_\_) \_\_\_\_\_ - \_\_\_\_\_ or (\_\_\_\_) \_\_\_\_\_ - \_\_\_\_\_

Home ☎# (\_\_\_\_) \_\_\_\_\_ - \_\_\_\_\_

e-mail address: \_\_\_\_\_

Allergies/special information: \_\_\_\_\_

**NOTE: Please make check payable to Brainopolis. Mail check and waiver to 5824 Farr Oak Dr. Plano TX 75093. Questions? Please contact Dafne Oronoz at [dafneoronz@yahoo.com](mailto:dafneoronz@yahoo.com)**

## ***Attachment B- Program details and FAQ***

### **1. What is the purpose of the program?**

Cool Science 4-U is a program for cool kids from 6 to 10 years old who are interested in experiencing the fun side of science. Each session starts with a cartoon character that has a problem or a mystery to resolve. The story is followed by a hands-on experiment that resolves the situation. Each story also contains geography or history facts that help children to get a clear picture that science is around us and can help us to resolve real problems.

### **2. Who conducts the program?**

This program has been designed by a Group of Computer Engineers with Master degrees and years of experience in training, development and implementation of projects in large commercial and government entities such as IBM, Chrysler, The Navy, The Army, etc. The sessions are conducted by an engineer with 20+ years of experience in training and 2 years of children's education.

### **3. What kind of materials are used in class?**

All the materials we use in our sessions are safe for kids. We do not use fire in any of our experiments. Most of the materials we use in our experiments are ingredients that you can usually find in your very own home. Many of them are recyclable since one of our goals is to motivate kids to reuse, reduce and recycle and promote the responsibility of conserving our planet.

**4. What is the duration of each session?** Each session is 1 hour long.

**5. Where do I drop off and pick up my precious child?** PASAR kids will be escorted into the Art Room. Non PASAR kids should be dropped off and picked up at the main entrance of the school.

**6. What if I drop off my child after 4pm?** There will be a poster at the entrance of the school with Brainopolis phone number. Call us and we will come to the rescue.

**7. What if I am stuck in traffic and cannot pick up my child at 5pm?** We will wait for you until 5:05pm. However if you continue to be late, we will have to reconsider the attendance of your future scientist.

**8. Should future scientists bring a snack?** We recommend that kids eat before the session since it is only 1hr long. That way they can focus on the session and build an appetite for dinner at home.

**9. How should future scientists dress and what should they bring to class?** Please dress for a mess. Kids should bring their brain. We will provide all the materials.

**10. Is there homework in the program?** No, students will complete an experiment or project per class that will not require extra homework.

**11. Will this program help my child to do science fair projects?** No, the program is focused on different science topics that may inspire kids to do additional experiments as a science project. However the program does not include any help specific to the development of science fair projects.

**12. Will there be make up classes?** Make up classes will be held due to inclement weather or any other unexpected emergency that requires the school to be closed. Make up classes will not be held due to students' illness or other commitments.

**13. Can I pay with cash or credit card?** We only accept check payments at this point.

**14. Where will the class take place?** At the Art room of the school.

**15. What if my child is in PASAR?** Students will be escorted from PASAR into the art room when it is time for their science class and then brought back to PASAR at the end of the class.

**16. Does my kid need to be cool to attend "Cool Science 4-U"?** Yes, this is a class for cool kids and since all kids are cool, they are welcome to participate. ☺

**Attachment C- 2012 Barksdale PTA After School Science Program calendar**



**January 2012**

Mo	Tu	We	Th	Fr
2	3	4	5	6
9	10	11	12	13
16	17	18	19	20
23	24	25	26	27
30	31			




**February 2012**

Mo	Tu	We	Th	Fr
		1	2	3
6	7	8	9	10
13	14	15	16	17
20	21	22	23	24
27	28	29		

**March 2012**

Mo	Tu	We	Th	Fr
			1	2
5	6	7	8	9
 12	13	 14	15	16
19	20	21	22	23
26	27	28	29	30

**April 2012**

Mo	Tu	We	Th	Fr
2	3	4	5	6
9	10	11	12	13
16	17	18	19	20
23	24	25	26	27
30				

**May 2012**

Mo	Tu	We	Th	Fr
	1	2	3	4
7	8	9	10	11
14	15	16	17	18
21	22	23	24	25
28	29	30	31	1

 Testing     Early release     Holiday     Open house

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## AFTER SCHOOL SCIENCE PROGRAM

### Program Modules

Brainopolis intends to conduct 2 independent modules with no prerequisites:

Module	Session	Description
<b>Chemical Reactions</b>	1- Volcano Eruption	Kids learn about lava and magma. The largest volcano on Earth and the one in the solar system. A chemical reaction is made to simulate a volcano
	2- Fake mucus	Kids learn about the importance of mucus in our respiratory system, and facts about it. Then they combine ingredients to create a solution that looks like mucus.
	3- Quicksand	Kids learn about quicksand, what it is, where you can find it and fallacies about it. Then they combine ingredients to create a substance that looks like quicksand.
	4- Fountain of foam	Kids learn about foam, what it is, where you can find it and its different states. Then they combine ingredients to create a hypothermic chemical reaction.
	5- Make a lava Lamp	Kids learn about chemical reactions, different types or chemicals, and different reactions. Then they combine ingredients to make a lava lamp on a small bottle.
	6- Frizzy drink	Kids learn about the properties of acids, the different types and effects to different materials such as metal, wood, paper, etc. Then they combine ingredients to create their own version of Sprite.
	7- Ocean Waves	Kids learn facts about the ocean, its waves, and the force of nature. Then they combine ingredients to create their own model of ocean waves on a small bottle.
<b>Health Science</b>	1 – Our bone system	In this session we learn about bones and how we go from approximately 300 bones when we are babies to 200 when we are adults. We talk about the main bones in our bodies, then we identify the bones on a 3 feet skeleton. Kids pretend they went camping and accidentally broke a bone, so they have to immobilize each other “broken” bones until they can go to a hospital.
	2 - Respiratory system	In this session we learn the parts of the respiratory system and their function. We also talk about some common illnesses such as asthma and emphysema. Then we hear each others lungs with a stethoscope.
	3 - Circulatory system	In this session we learn about the circulatory system, its parts, the difference between arteries, veins and capillaries. The main artery in our body. What red and white cells do. Common illness that affect our circulatory system. Then kids will apply first aid to cure each others “accidental cut” and practice the basics of CPR on mannequins.
	4 – Digestive System	In this session we learn the parts of the digestive system, what they do, why it is important to eat healthy. We explain that the small intestine can be 4 times larger than the large intestine, but it is called large because it is wide. Then kids learn the Heimlich maneuver to help someone choking. Kids do a little model of the digestive system.
	5- Joints and Muscles	In this session we learn that muscles allow our bodies to move and joints connect bones. We identify the main muscles of the body. Then kids learn basic first aid for injured muscles.
	6 - Our skin (Integumentary System)	In this session we learn the parts of the integumentary system that include skin, hair and nails. We explain how this system helps the human body, the layers of the skin, common problems of the skin and how they can be prevented.
	7- Optical Illusions	In this session kids will compete against “Braniac” a cartoon character who challenges kids with optical illusions and mind exercises. This competition includes the learning of the sections of the brain and their functions.