Science: It's not just for Cheetahs
By Lindsey Berke

We've all seen that even the youngest children can be powerful thinkers and theory-makers; we also know that their natural and spontaneous curiosity must be met with a curriculum that allows them to explore and investigate through play. Science is an amazing subject, and a magical one to our preschoolers, that needs to be integrated into the school setting right from the start. The good news is that it may be easier to do than you think. In fact, we are teaching science all the time, even if we do not realize it.

Many parents and teachers shy away from the idea of a formal teaching of science for a number of reasons, not the least of which is that they are afraid they might not be able to answer the children's questions. The best response to a question you cannot answer (especially at the preschool age) is "I don't know, but let's find out." If that answer doesn't satisfy, you can always try, "I don't know the answer, but let's look it up," or "I'll get back to you tomorrow."

Another reason educators hesitate to incorporate science in their curriculum is that it may seem like too much trouble to get all the materials. However, science can be very inexpensive and is all around us (see examples below). Often, it can be found right in our garbage cans and recycling bins.

Some of us worry that science will be boring and we will not be able to keep the students' attentions, which could be the direct result from some labs and lectures we ourselves experienced in school. This could not be further from the truth. Children love science and are always making comparisons, deducting/guessing, and asking about cause and effect. Science in the preschool setting needs to be **exciting**, **child directed**, and a **self-esteem builder**. There are no right or wrong answers (if you mix red and blue together and get black, that's okay). The teachers and co-opers simply need to provide the materials and keep the environment safe.

To illustrate, I recently stopped children on the playground from throwing mulch down the slide. If I had been thinking scientifically, I should have asked questions about what they were doing. They were directing an activity and I should have taken the opportunity to make the environment safe (no children at the bottom of the slide, gentle hands, etc.) to continue the experiment. This would be a perfect time to learn about friction, speed, and gravity. For some more ways to turn a sometimes-frustrating experience into a lesson, consider the following:

- Art: mix colors, explore textures, and feel new materials
- Dramatic play: play doctor, astronaut, firefighter, baker, housekeeper
- Blocks: test gravity (it's no fun to build a structure if you can't knock it down); explore physics; use ramps to talk about speed and velocity

- Music: discuss sound waves, make your own instruments, listen for echoes, play with movement and streamers
- Outdoor play: fly kites, blow bubbles and talk about air pressure, go on a scavenger hunt, talk about the sun, trees, and animals around us
- Manipulatives: string beads, stack Legos, explore how things fit together, how magnets work, try measuring and comparing sizes
- Quiet corner: look at plants and nature books, listen to music, experiment with flashlights, shadows, and mirrors
- Sensory table: explore how water, sand, or pompoms behave in funnels

We all see examples of science in the classroom, now we need to recognize it and take the opportunity to continue the learning process. We need to ask the “what if” questions, think outside our normal routine (within the bounds of safety), and be willing to get a little messy… all in the name of science.