



Backyard Science



Science and Young Children

❑ Observing

Children use their whole bodies and all their senses to look closely at objects, people and other living things, and changes in the world around them.

❑ Classifying

Children look for ways to organize the knowledge they already have and fit new discoveries into categories they have already established.

❑ Experimenting

Watch and document the things you know children are fascinated with:

- What are they curious about as they play indoors and outdoors?
- What sorts of problems do they encounter in play?

❑ Drawing conclusions

- Children begin to make statements about why something happens.
- Accept that children will form new knowledge in their own ways as they form theories about how the world works.

❑ Communicating ideas

Record children's ideas when appropriate:

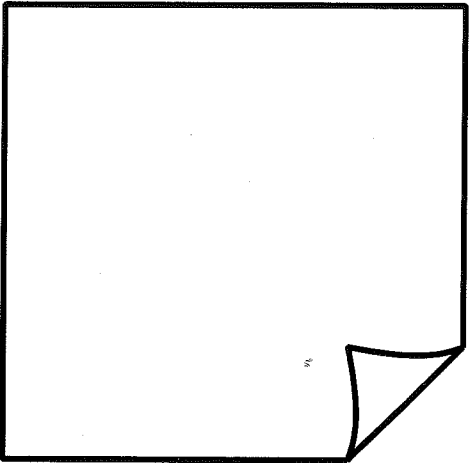
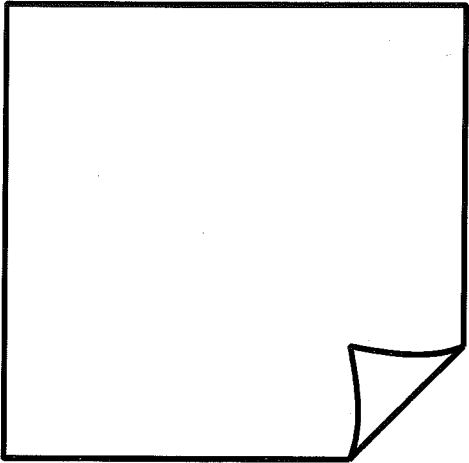
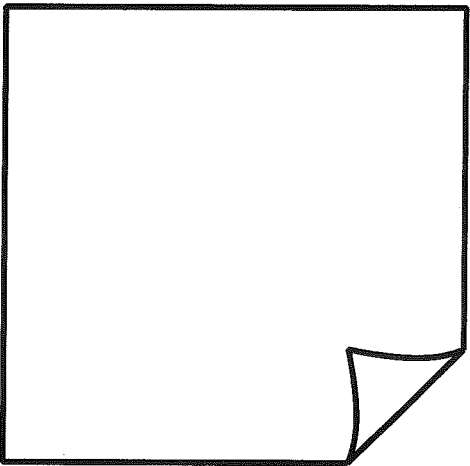
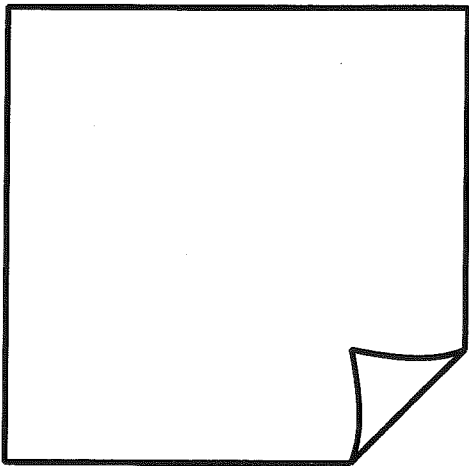
- Write down children's observations and predictions.
- Take photos over time, make classroom books, display photos around the room.

Strategies to Support Our Young Scientists

Adults determine on an individual basis when to

- Play alongside children.
- Take directions from children.
- State a problem in a different way so children can continue to explore solutions.
- Use language that supports children's scientific thinking.
- Introduce a new tool or idea that might help children move forward with their idea.

Things I Want to Remember From the Video



Science Scenarios: What Would You Do?

1. Dion and Emmy are working with Hot Wheel Tracks. They have connected the track sections to make a “road.” They have taped one end of the road to the low block shelf, creating a ramp, and have been racing their cars down the ramp. Emmy has the idea to make a bridge to the other shelf. They then tape the other end of the road to another shelf. It looks something like the diagram below. The problem is, they want to send their cars over the bridge and the cars keep getting stuck in the middle.



- What component of science is this?
 - Keeping *science* in mind, what will you do?
 - How can you help Dion and Emmy solve the problem by coming up with their own solutions?
2. In the morning, it is raining out. BJ is anxious that they won't be able to play outside. As he looks out the window, he glances up and says, “Please come out, Mr. Sun.” Later in the day, when he wakes up from his nap, he notices that the rain has stopped. He says, “Chrystal — I asked Mr. Sun to come — and he heard me!”
 - What component of science is this?
 - Keeping science in mind, what will you say to him?

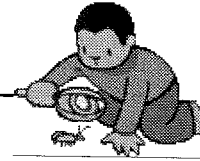
3. Damonte is pretending to be a bear. He puts a large piece of fabric over part of the table and crawls underneath. When he gets underneath, the fabric slides off. He repeats the process several times and each time, the fabric slides off before he can go to sleep in his “cave.”

- What component of science is this?
- Keeping *science* in mind, what will you do?

4. Kaylee takes the tub of Legos off the shelf. She notices that the animal figures are all mixed up with the Legos. She gets really frustrated and begins to cry, saying, “These aren’t right!”

- What component of science is this?
- Keeping *science* in mind, what will you do?

My Science Journal



Items to add to my setting from outside	
Creatures to discover outdoors	
Habitats to discover	
Changes in nature to notice with my children	
Weather changes to notice with my children	
Ideas for bringing nature indoors	

Implementation Plan

1. List three things you could add to your play room to support children's science learning.

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2. What strategies will you use to scaffold children's science learning?

3. How will you remember to use them?