Teachers should provide children frequent, hands-on opportunities to answer questions by using the scientific method. The scientific method teaches children first to make a guess or predict what might happen based on what they do know, then to perform an experiment following an ordered set of steps, and, finally, to talk about what happened and how it relates to the world they know. The most successful learning opportunities are related to a current class topic in which children have already acquired some basic concepts.

Goal: Practice complex verbal reasoning
- Children provide explanations, “How does that work?” “What is happening?”
- Children make predictions, “What do you think will happen?”
- Children make interpretations and judgments, “What do you think of this?” “Why did it happen?”
- Children relate and compare experiences with remote events to increase understanding, (e.g. “That’s like I saw during the storm,” “My mommy sometimes uses this when she cleans our house.”)

When: At least one time per week either in a small group or as a choice during free play

How: Through facilitating discussions during science experiments and hands-on demonstrations

Strategies:
- Ask open-ended questions
- Comment on problems and problem solving opportunities
- Describe actions as performed
- Add written language and numeracy to activity to more easily make comparisons
- Tie experience to remote events and experiences

Charting is helpful to track individual children’s predictions, outcomes, and responses. Charts provide children a visual reference to compare results, teach the significance of print, and encourage pre-reading skills when icons are used. An experiment as simple as children predicting which of three types of apples they think they will like best, tasting the three types of apples, and comparing the charted responses can be very fun and successful. The typical language children use during this type of experience is not only more complex, but significantly lengthened in average number of sentences. A teacher’s job as a language facilitator is not to do all the questioning or directing, but to encourage discussions and sharing of ideas.