

Unit 4 Guiding Math and Science Experiences

Content Area: **21st Century Life & Careers**
Course(s): **Preschool Child Development Advanced**
Time Period: **Semester 1**
Length: **3 Weeks**
Status: **Published**

Unit Introduction

After completion of this unit, students will be able to explain the term science and the reasons why young children should be exposed to various science experiments. Students will be able to outline procedures for planning science activities, list various science activities and explain the teachers role in guiding the children during these experiences. Students will also be able list the objectives for early math experiences and design math activities that will stress specific math concepts.

Standards

Essential Questions

1. What is meant by the term science?
2. Why do children need to study science?
3. What is role of the teacher during science activities?
4. What are some methods for developing children's understanding of their senses?
5. What are the names and ways of teaching science concepts?
6. What are two basic assessments used to determine math skills in children?
7. How can you use three-dimensional objects to promote math experiences?

Content / Skills

Content

1. Definition of science, observing, measuring, comparing, classifying, predicting, and discovering
2. Science processing skills

3. Planning science activities
4. Role of the teacher during science activities
5. Developing a child's understanding of senses
6. Using color to teach science concepts
7. Using water to teach science concepts
8. Using foods to teach science concepts
9. Using the child's body to teach science concepts
10. Using magnets to teach science concepts
11. Goals of early math experiences
12. Assessing math abilities of young children by observation and specific task assessments
13. Math equipment
14. Counting, shape, classification, space, time, volume and size concepts

Skills

1. Students will discuss experiments and activities they have enjoyed in science
2. Students will explain why observation is important to an effective science program.
3. Students will create a collection of materials that can be used for a science table.
4. Students will be able to prepare and teach science experiments to the Little Vikings.
5. Students will be able to brainstorm a list of science supplies needed for the school year.
6. Students will design an activity to help children build visual, sensual, and auditory observation skills.
7. Students will create a list of themes and foods that can be coordinated with themes.
8. Students will make a collection of different magnets that can be used in our classroom.
9. Students will design math experiences that stress specific math concepts.
10. Students will be able to identify math experiences that promote the development of key math concepts.

