

After completing the reading assignments for Lesson 1, you will have learned a lot about lesson planning. Use the Basic Science Lesson Plan components outlined on pages 108-110—topic/concept, objective, materials, advanced preparation, procedure, evaluation and extension—to write a science lesson plan appropriate for use in an early childhood classroom. (You do not have to include the “Goal” component in your lesson plan.)

After creating the lesson plan, list at least two extension activities. Your extension activities should include activities that involve different multiple intelligences other than that addressed in the lesson plan activity. Do not use the same multiple intelligence for both activities. Put the name of the corresponding intelligences in parenthesis at the beginning of the activity so it is clear which of the multiple intelligences you are involving. Refer to page 31 in your textbook to find the list of Gardner’s multiple intelligences.

Lesson Title: “Having a Ball with Buoyancy!”

Concept: This lesson uses sensory and inquiry-based activities to introduce students to key terms: weight, float, sink, volume and buoyancy.

Objective/ Standard: STANDARD SKP1 Students will describe objects in terms of the materials they are made of and their physical properties.

Materials: vocabulary words on card stock for weight, rubber duck, volume, density and buoyance, mini plastic swimming pool, water, pencil, paper, balance scale, assorted fruits and vegetables, computer, projector.

Procedure:

Initiating Activity: Teacher will show a clip on the computer with projector of someone floating in the ocean to tap into student’s prior knowledge and interest in the topic of buoyancy.

Pre-Teach Vocabulary: Teacher will use the card stock vocabulary flash cards to define the key terms: weight, float, sink, volume and buoyancy

Demonstration: Teacher will float a rubber duck in the mini pool and ask for students to comment on its movement, weight, and other observations.

Independent Practice: Teacher will distribute handouts and ask students to weigh the objects (fruits and veggies) in the basket with the scale and then record their predictions on the chart if they infer that the object will sink or float.

Experiment: Students will watch as the teacher's attempts to float the items in the basket into the mini pool. Students record their findings on the chart handout.

Class Discussion: Teacher will call on students to share their answers aloud and ask students to reveal their results from the chart.

Closure/Exit Ticket: Students will draw a picture to define what buoyancy means.

Evaluation:

Did students complete the chart and show an understanding of the key terms through the application?

Did they actively participate in the weighing activity and experiment by recording on their charts?

Based on their exit ticket pictures, did they comprehend the meaning of buoyancy?

Extension: Includes two activities that each addresses one or more different multiple intelligences then the activity in the lesson.

- Students will create a puppet show in pairs to demonstrate what buoyancy means.
- Students will formulate a buoyancy song, dance, cheer, jingle or chat to describe weight, buoyancy, or volume.

References:

Charlesworth, R. & Lind, K. K. (2010). Math and Science for Young Children (6th ed.). Belmont, CA: Wadsworth, Cengage Learning.