

## Step 1: 15 Minute Discussion

### The Soccer Ball Concept Cartoon Discussion

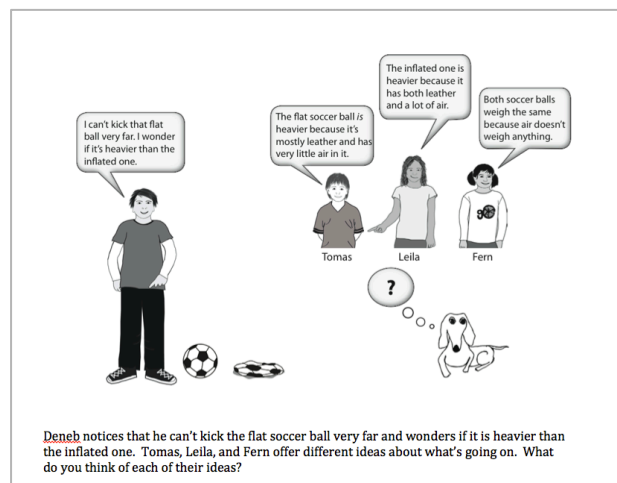
(Recording a class discussion before you begin the 5<sup>th</sup> Grade Talk Science Program)

Time: 30 minutes with introduction and written reflection

The Pathway Study begins with a short 15-minute all-class discussion. This discussion is about a concept cartoon in which Deneb wonders if a deflated soccer ball is heavier than an inflated ball.

**Rationale:** The purpose of this first discussion is to provide baseline data about your current class discussions. At the end of your pathway study, you'll lead the same discussion again to see what changes have occurred as a result of your professional learning. This pre/post discussion is one of several self-assessments provided as part of the Talk Science Program.

**Background:** Concept Cartoons are used throughout the Inquiry Curriculum (Gr. 3-5) to assess students' science ideas and discussion skills.



#### How to conduct and audio record the discussion:

Conduct the concept cartoon discussion as you would normally lead a whole group discussion. The discussion itself should take about 10-15 minutes. Allow 25-30 minutes with introduction and time for students to write. In this cartoon, the characters consider which is heavier – an inflated or deflated soccer ball. Each has a conjecture and a reason for his or her belief. Darwin (the dog) is pondering each student's idea.

#### Before the discussion:

1. Have an audio recorder on hand to use during the discussion.
2. Turn on the recorder to make sure it is working. If not, check the batteries, the most likely cause of a problem. If necessary, switch to fresh batteries.
3. Make sure you have a copy of the cartoon for each student.
4. Have one copy of the *Goals and Talk Moves Tool* and the *Reflection Tool*. You'll use these two tools throughout your program to keep track of your own progress and that of your students.

#### During the discussion:

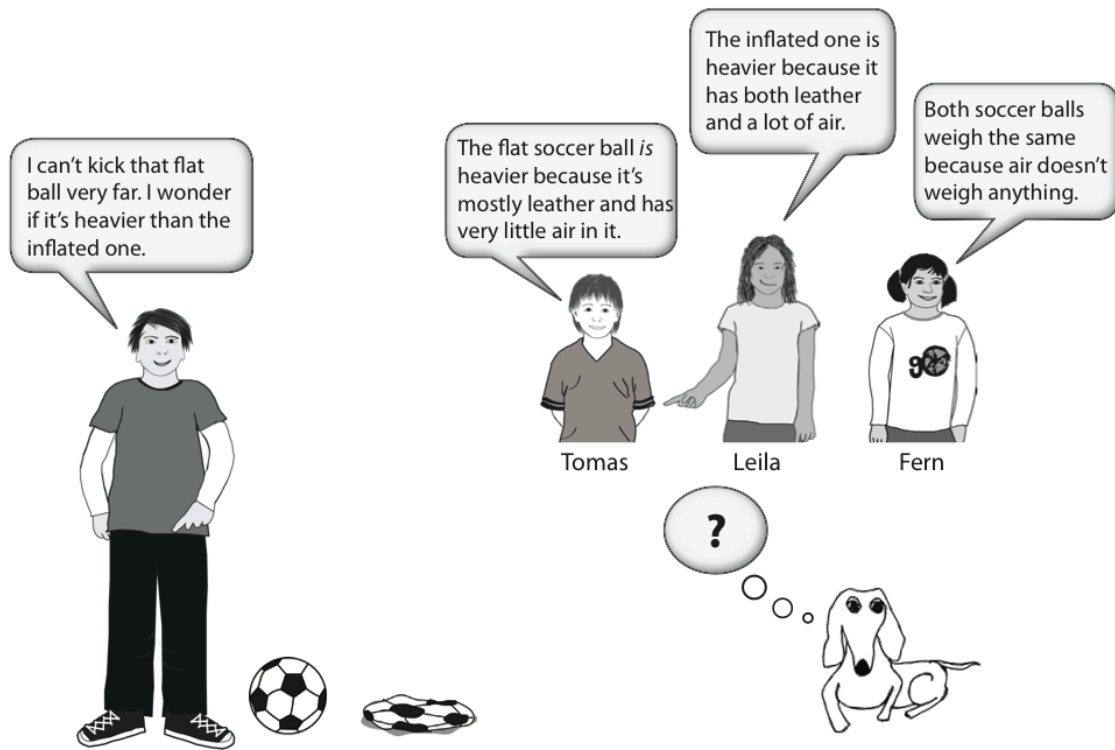
1. Have the children sit in a circle. (This configuration will produce better audio.)
2. Give each student a copy of the cartoon and explain that together they'll be discussing Deneb's dilemma.
3. Put the audio tape recorder in the center of the circle and press the RECORD button to begin the recording.
4. **Important:** At the beginning of the recording, **record your class identifying information**, for example: "This is Ms. \_\_\_\_\_'s fifth grade class recording on January 18, 2011 with 25 students discussing *The Soccer Ball Cartoon*."

5. Engage in the discussion with your students. Encourage students to speak loud enough for all to hear.
6. When the discussion is finished, press **STOP** on the recorder and then turn off the recorder.

Following the discussion:

1. Ask students to write a brief reflection on the back of the cartoon saying what they thought before the discussion and what they think now. As students write, reflect on the discussion yourself using: the *Goals and Talk Moves Tool* and the *Reflection Tool*.
2. Collect students' reflections and save with your own reflection. Save the audio file to a computer file. We return to these baseline data at the end of the program. File them in a folder or notebook devoted to your program.

Congratulations! You've completed the first Step in the Pathway.



Deneb notices that he can't kick the flat soccer ball very far and wonders if it is heavier than the inflated one. Tomas, Leila, and Fern offer different ideas about what's going on. What do you think of each of their ideas?