COLLECTING MY SCHOOL FAMILY DATA

Performance Standard 11A.A

Students will apply the process for guided inquiry through an introductory activity to record and store data, then analyze and display their results accordingly:
- *Knowledge*: Ask questions and recording known information.
- *Application*: Collect, analyzing and displaying results with charts or pictures.
- *Communication*: Make and explain inferences about data.
  Note to teacher: This activity introduces the scientific processes associated with data collection, analysis and display as noted within performance descriptors for standard 11A. This skill is used repeatedly within several of the sample science classroom assessments for stage A.

Procedures

1. ***In order to know and apply the concepts, principles, and processes of scientific inquiry (11A),*** students should experience sufficient learning opportunities to develop the following:
   - Collect data through a guided inquiry process by asking questions and recording known information,
   - Display and analyze results.
   - Make inferences and communicate inferences from their data.
2. Have students review and discuss the task sheet and how the rubric will be used to evaluate their work.
3. Begin the guided inquiry process by encouraging students to ask questions about families: Do they all have brown hair? Do they all have the same number of boys and girls? etc. Explain to students that the class is going to make a "school family" composite. Students will do this by finding out information about their classmates and school staff members then adding together (i.e., aggregating) all students' information to describe the "school family."
4. Provide each student a copy of the "My School Family" data task sheet. Ask each student to collect two sets of data. (Both will include hair color, eye color, gender, and number of pets.) The first set of data is taken within the classroom with the students filling out their own information. The second data set is collected by the students interviewing the building's teachers and staff members. Students may choose the person they want to interview, or the teacher may assign the teacher/staff to be interviewed by each student. Discuss the data as it is collected.
5. Ask each student to draw two pictures. The first picture will include the his/her own data set to describe himself/herself. The second picture will include the data set collected from the teacher/staff member that they interviewed. Then ask students, (for example) "does our class family have more boys or girls? Are there more teachers/staff with blue eyes or brown eyes? How many students have pets compared to the number of pets owned by the teachers/staff? Do more boys or girls own pets? Post these pictures on a wall so that all students can see them.
6. After the class arranged their "data" pictures on the wall, have students make inferences about observations and prior knowledge. They should explain their answers. Referring to the pictures, ask questions such as:
   - Can you tell who has the most number of pets?
   - Our class family has more girls than boys. Do you think that the entire school's family has more girls, too?
   - How can we find out the total number of boys in the class family?
   - Which pictures tell us the most about a student or a teacher?
7. Through student interview or whole class discussion and review of written work, evaluate each student's work using the Science Rubric as follows and add the scores to determine the performance level:
   - *Knowledge*: The collection of data by questioning and recording information was complete and accurate.
   - *Application*: Analyzing and displaying results with charts and displays was complete and accurate
   - *Communication*: The inferences and explanations were thorough, well-reasoned and detailed.

Examples of Student Work not available

Resources
- Copies of the "My School Family Data" task sheet
- Science Rubric

Time Requirements
- Two class periods of 15 – 20 minutes of class time

NAME _____ DATE _____

MY SCHOOL FAMILY

	ME	**Miss/Mr./Mrs. _____**
Hair color		
Eye color		
Gender		
Pets		