



LESSON: People at Work

Title: People at Work
Author: Sandy Mills-Alford

Submitted: April 1, 2008
School/Org: AliveTek, Inc.

Lesson Overview:

This set of activities will allow students to discover the many different types of NASA careers based on a photographic project called *NASA People at Work*. During this lesson, the students will be asked to observe, infer, predict, and classify. The PowerPoint presentation that is included with this lesson is an abbreviated version of the original from the People at Work website: <http://nasapeople.nasa.gov/npaw/>.

Suggested Classroom Time: 60 -120 minutes

Grade Levels: 6-10

KLASS Module: 3-Career Exploration

Topic/Console: NASA Jobs

Materials Needed:

Activity	Documents	Other Materials
1	Background information: RDG_RoundupNPAW.pdf	
1	PRES_People-at-Work.ppt	Demonstration computer if used as an instructor-led presentation and Microsoft PowerPoint
2	PRES_People-at-Work-act-cards.ppt	Printed slides to be distributed as activity cards
3	ACT_People-at-Work.doc	Writing tools

National Standards/Objectives:

Discipline	Standard	Objective
Science	F. Science as Personal and Social Perspectives	Students learn about populations, resources, and environments.
Science	E. Science and Technology	Students develop understandings about science and technology.
Technology	Social, ethical, and human issues	Students develop positive attitudes toward technology uses that support lifelong learning, collaboration, personal pursuits, and productivity.

Desired Results:

Students will be able to answer essential questions

- What is it like to work for NASA? What are the social and emotional aspects of working in the space industry?
- Can I predict which types of jobs would be a good fit for me one day based on the information we discussed today?

Students will know

- There are many different types of NASA jobs, and each job is performed by a unique human being.
- There are social and emotional characteristics that are as unique as the individuals who perform the jobs at NASA.
- Scientists often go through the steps of observing, inferring, predicting, and classifying when they are designing new systems or fixing problems.

Students will be able to

- Document observations from photographs.
- Infer, predict, and classify elements based on photos and narratives of various people at work.

Learning Plan/Activities:**1. Introducing Lesson.**

Script: “Today we are going to dive deeper into the world of work at NASA by viewing many photos and reading several narratives that illustrate what it is like to work at NASA. While many people think of NASA as a large government organization, it is comprised of individuals like you and me. As we go through this activity and view all of these cool photos, I’d like you to practice your scientific skills. We are going to review the process for observing, inferring, predicting, and classifying information like NASA scientists. So let’s get started!”

2. Presenting Photos and Discussing Observation and Inference.

The classroom activity should begin with the class viewing the *NASA People at Work Project* presentation (PRES_People-at-Work.ppt). The full presentation follows a sequence of a photo followed by the photo paired with a narrative about that photo. To get the class started, you could work through a couple of these photo sets. Show the photo. Ask the students what they can observe from the photo. Let them share their observations. Remind them to focus on what they see, and not what they think they see. Have them list their observations and share them. Then have them infer what they think is going on in the photo based on their observations and interpretations of the photo. Next, show the narrative slide. Repeat this process until they understand the difference between observation and inference.

3. Reviewing Prediction.

The next set of photo slides should be introduced, while adding the concept of prediction. Before showing the second slide (narrative) of a photo set, ask them to predict. Ask, “Can you predict:

- The setting for this photo?”
- If the person or team is enjoying their jobs at the moment the photo was taken?”
- What will happen next?”

4. Ending with Classification.

Introduce the *People at Work* activity (ACT_People-at-Work.doc). This is a simple worksheet for the students to use to document their observations, inferences, and predictions. After printing the slides from *NASA People at Work Project* presentation (PRES_People-at-Work-act-cards.ppt), pass out the photo slides, keeping the narrative slides back. Ask the students to complete the worksheet either as individuals or as small groups for 1 or many slide photos. When finished, allow them to find what they believe to be the matching narrative slide, based on their observations. Have them tape or staple the matched slides together and share their findings.

Assessment Evidence:

Performance Tasks

1. Collect and evaluate the *People at Work* activity (ACT_People-at-Work.doc), and provide feedback on the quality and accuracy of students' written observations, inferences, and predictions. Assign grades as appropriate.
2. Some of the photos may be hard to match, so encourage teamwork and group discussions. Also provide feedback on how well they worked together to solve the puzzle.

Other Evidence

1. Engage the students in discussions regarding the social and emotional aspects of what they saw in the photos. Ask them how these types of factors can be measured in scientific exercises. Challenge them by asking how such "qualitative" data could be collected and measured.
2. Test the students on how well they can write observations, inferences, and predictions by providing a similar activity where their work is collected and evaluated as a formal sample.

Extensions and Going Further Resources:

- Document the specific job titles that are mentioned in the narratives of the slides, and assign individuals or small groups the task of further researching job descriptions, requirements, salary ranges, and benefits. Have them report back to the larger group with an audio/visual presentation, or ask them to role play their position during a class game of "Who Am I?"
- Have the students perform Internet searches at <http://www.nasa.gov> to see if they can find any more background information on any of the people or technologies highlighted in this photo presentation to further support their predictions.
- Be sure to check for student opportunities, additional educational resources and more at: <http://www.nasa.gov/education>