



A First Look at Environmental Test Results

Overview

Participants look at environmental tests and record observations or questions on sticky notes. They group those notes by category and reflect on what they need to know in order to understand test results.

When to Use It

When a community receives the results of air, soil, water, or other environmental tests, and doesn't know where to begin.

This workshop also serves as a diagnostic tool, giving the organizer a sense of which other *Statistics for Action* activities could be useful to the group.

Facilitator Notes: What to Use

When selecting pages of test results, don't use the whole report. Choose a single page from each of the following sections, if available:

- Narrative summary of report
- Tabular summary of key data
- Maps of the site with testing locations marked
- Tables of full test results, including results both over and under the detectable limits
- Descriptions of samples from the field (temperature, pH, etc.)
- "Chain of custody" reports

Skills

- Identify broad questions about a report ("Is it safe for my child to...?")
- Identify specific questions about a report ("What is mg/Kg? What is Naphthalene?")
- Group and prioritize questions

Time: 45 Minutes

Materials & Prep

- Choose lab report pages for the activity (see *What to Use*). Post enlarged versions on the wall in the meeting room. Leave plenty of space between them. Include one large blank sheet labeled "Other Questions or Observations."
- Cut apart *Participant Instructions* slips. Tape them on or near each posted lab report page.
- Print out the *Questions & Observations* pages. Post them together in a group on the wall.
- Review relevant *SfA* materials before this meeting. Be prepared to suggest them at the end of the meeting as appropriate.
- Bring medium-size sticky notes, markers, pens.



A First Look at Environmental Test Results

Step 1: Setting the Stage (5 minutes)

Tell participants lab results can be confusing. To understand them, we need to see what we can figure out on our own, and what questions we have.

Step 2: Looking at the Reports (25 minutes)

Divide into small groups, with at least two people per group. For example, if there are 6 lab report pages posted, divide into 6 groups. Invite each group to one of the posted pages. Give each person sticky notes and a marker.

Small groups should discuss each page, then write observations and questions on the sticky notes and post them on the lab report pages. If they are slow to do this, you can “seed” the pages with notes of your own. When groups have finished one page, they can move on to another.

After 10-15 minutes, ask participants to finish up where they are and select a few sticky notes to post on the *Questions & Observations* sheets. They should talk together about the possibilities as they look for the category that best fits each note. Continue until all the sticky notes have been categorized. If the category for a particular question is not clear, a participant can post it with “Other Questions or Observations,” or break it into two or more simpler questions.



Step 3: Debriefing (10 minutes)

Ask the group:

- How was that experience?
- Did you notice anything particularly surprising or interesting?
- Did you see any patterns to the questions and observations?
- What seems most important?

As needed, share your own observations for discussion.

Tell the group

- Some questions can be answered by turning to resources or doing a little research.
- Other questions raise issues that we can explore in activities at future meetings.
- Some questions have no definite answer, because not enough is known about the situation.

You might choose a few of the questions they wrote as examples of each idea.

Step 4: Follow-Up (5 minutes)

(Note: If the group is large, you may wish to do this with a smaller group of leaders.)

Review the sticky notes and decide what the group needs most to support its overall goal. Among the options could be:

- Find a resource that defines some of the key terminology.
- Divide up definition-related questions among members of the group, and ask people to research the answers before the next meeting.
- Do a related *Statistics for Action* activity at the next meeting to help the group get a deeper understanding of the concepts involved.
- Bring an EPA or engineering expert to the next meeting, or call such an expert between group meetings and bring the answers to the next meeting.
- One or two members of the group could develop a deeper expertise/understanding about something between meetings and share with the rest of the group.

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Participant Instructions (Attach one to each page of test results.)

Look at this page carefully. What do you notice? What makes sense?
What does not make sense? What questions do you have?
Write down your observations and questions, one per sticky note.
Because we will move the notes around, include details. (So, don't write,
"What does this mean?" Instead write, "What does naphthalene mean?")

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Questions & Observations

Definitions, Terminology, and Chemical Properties

Example: What are PCBs? Are they dangerous?



Questions & Observations

The Testing Process

Example: Where did they test for PCBs?



Questions & Observations

Results as Presented in the Report

Example: What amount of PCBs did they find under the old storage tank?



Questions & Observations

Is Human Health at Risk?

Example: Could those PCBs get into my drinking water? My basement?



Questions & Observations

What Action Should Happen Now?

Example: Who will pay to clean it up?



Questions & Observations

Other Questions or Observations