9/19/09

**Similar**

- Color was Green/Peach
- Round edge

**Different**

<table>
<thead>
<tr>
<th>Dry Bean</th>
<th>Soaked Bean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dry and had cracks</td>
<td>Soft/slime</td>
</tr>
<tr>
<td>No smell</td>
<td>Rotten</td>
</tr>
<tr>
<td>1 cm</td>
<td>1 1/2 cm</td>
</tr>
</tbody>
</table>
The dry bean and the soaked bean are similar because they both had green peep color. In addition, they both had round edge.

They are different because the dry bean was dry and had cracks, but the soaked bean was soft and slimy. Also, the dry bean didn't smell but the soaked bean smelled rotten.
The Dry Bean and the Soaked are slimer because they are both a oval.

They are different because the Dry Bean’s surface has cracks it is greenish, yellow, white, it smells earthy, but the Soaked Bean feels plastic, slimy and rikly it is greenish white and smells rotten where as the Dry Bean is 1 cm and the Soaked bean is 1 1/2 cm.
What properties can we observe and compare in different minerals?

- Shinney
- Streak
- Faces
- Clear
- Chipped

<table>
<thead>
<tr>
<th>Mineral B</th>
<th>Mineral E</th>
</tr>
</thead>
<tbody>
<tr>
<td>White</td>
<td>Light green</td>
</tr>
<tr>
<td>Scalloped</td>
<td>Fat</td>
</tr>
<tr>
<td>Pointed</td>
<td>Smooth</td>
</tr>
<tr>
<td>Slippery</td>
<td>Rough</td>
</tr>
</tbody>
</table>
Mineral B and Mineral E have many properties that are the same in a lot of ways. For example, Mineral B and Mineral E appear to be shiny, streaky, and clear. In addition, both minerals are a little chipped. Furthermore, each mineral texture is a little chipped.

Mineral B and Mineral E are different in a lot of ways. For example, Mineral B is white in color and Mineral E is lite green. Also, the shape of mineral B is shown but mineral E is flat. In addition, mineral B is pointed and slippery while mineral E is smooth and rough.
Third Grade, Sample A—Plant Growth and Development Unit: Julia M.

- At the beginning of this unit, students observe a dry bean, then they soak it overnight and observe it the next day. Observing the bean carefully and comparing the two observations can help students better understand the first stage of a plant’s life cycle as well as the parts of a “seed system” and the role each part plays in that system.

- Note that this science unit includes a handout for recording observations and illustrations of the dry and soaked seed. Students will learn more from making their own simple data table and drawing their illustrations on facing pages so they easily can see the similarities and differences they have recorded. Have students fill out a box and T-chart on a separate sheet of paper, then have them turn to the next blank left-hand page and glue in that sheet. They then can write their comparison on the facing page as they look at their box and T-chart.

- Julia has made accurate notes in her box and T-chart, then uses those notes to write an accurate comparison on the facing page. A scientist might wonder if Julia observed any cracks in the soaked bean. A scientist also would be interested in the increased size of the soaked bean. To help students include details in their entries, you can model how to check off each note as they include it in their writing. (In this case, it is possible that Julia just ran out of time to finish her entry. See the note in the previous sample about monitoring unfinished entries.)

Third Grade, Sample B—Plant Growth and Development Unit: Ginny

- Ginny has moved away from the Compare and Contrast writing frame and is combining several characteristics in complex sentences rather than listing them, row by row and going back and forth across the columns of the T-chart. In this way, she has included one characteristic that is slimer [similar], then contrasted the characteristics of the surface, color, odor, and length. Ginny should receive positive feedback about the accuracy of her comparison and the independence of her writing.

- At first, her paragraph about the differences does not seem to be organized because it is not clear that “has cracks” is a characteristic of the seed’s surface, which she contrasts with the soaked bean’s surface characteristics: “plasticy [plasticky] slimy and rikly [wrinkly].” Aside from that slight lack of clarity, her contrasts are strong.

- She misuses whereas to introduce another difference, but she should receive positive feedback for making a strong contrast. Then she can learn where to place the word in the last sentence. You can help students learn the effective use of but and whereas by making a T-chart that has but and whereas written just above the center vertical line of the chart. Whenever you are discussing contrasts, talk about that “but line” so that students are aware of the thinking and the language of making contrasts: “The dry bean is 1 cm, but/whereas the soaked bean is 1.5 cm.”
Third Grade, Sample C—Rocks and Minerals Unit: Cece

- During this unit, students make comparisons of two or three pairs of minerals. This helps them develop their ability to identify minerals.

- In Cece’s T-chart and comparison, she has created an organizer and written two paragraphs that are organized, detailed, accurate, and clear. The only small issue is her language in this sentence: “For example Mineal B and Mineral E apperene [appearance] is shinny [shiny], streeche [streaky], fases [faces].” She is copying words from the box rather than writing a sentence: “appearance is shiny and streaky, and they both have faces.” Moving from the listing format to the sentence format is a skill that Cece will develop quite quickly given how well she has organized her box and T-chart and written her comparison.

- Note that in her last sentence in the entry, she has combined two differences: “In addition Mineral B is pointed and sliperey while Mineral E is smooth and rough.” This is an important step in moving away from the writing frame.

- Also note that the frame Cece has been given is different from the Compare and Contrast writing frame, which would begin with, “Mineral B and Mineral E are sim-ilar because they both have a shiny and streaky appearance.” The frame Cece is following has topic sentences that introduce the subject of a paragraph without including any information or data. This practice is taught in some writing programs and typically results in less succinct and meaningful introductory sentences.