Sample answer key to Handout E13-2-01 - for Tree 51-25-03
Actual answers will depend on which tree cookie is in your trunk.

1. Draw 3 more arrows above to show where the fires scarred the right side of the catface.
2. Look at the big fire-scarred tree cookie in your classroom. In this table, under “Fire year,” write the date of every fire scar marked on the tree cookie. Write the dates in order, from the most recent to the oldest. You might not need all the lines.
3. Back at your desk, figure out how many years occurred between fire years. To do that, subtract each date from the date above it and write the answer under “Years between fires.”
4. What is the longest time between fires? 22 years
5. What is the shortest time between fires? 5 years
6. What is the average time between fires? That is the total of the “Years between fires” column divided by the number of entries in that column. 10.2 years
7. Write a report of your results. **Evaluation:** Does the report have these items?
   - title
   - author’s name
   - date
   - 1 paragraph or more
   - complete sentences
   - how many fires the tree experienced
   - the longest and shortest time between fires
   - the average number of years between fires
   - Statement: whether the average is shorter or longer than the author’s lifetime
   - 1 fact from human history – will require some outside research by the student

<table>
<thead>
<tr>
<th>Fire year</th>
<th>Years between fires</th>
</tr>
</thead>
<tbody>
<tr>
<td>1840</td>
<td>11</td>
</tr>
<tr>
<td>1829</td>
<td>7</td>
</tr>
<tr>
<td>1822</td>
<td>10</td>
</tr>
<tr>
<td>1812</td>
<td>7</td>
</tr>
<tr>
<td>1805</td>
<td>6</td>
</tr>
<tr>
<td>1799</td>
<td>5</td>
</tr>
<tr>
<td>1794</td>
<td>6</td>
</tr>
<tr>
<td>1788</td>
<td>22</td>
</tr>
<tr>
<td>1766</td>
<td>18</td>
</tr>
<tr>
<td>1748</td>
<td></td>
</tr>
</tbody>
</table>

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1 Sampled for the following study: Moody, Tadashi J.; Fites-Kaufman, JoAnn; Stephens, Scott L. 2006. Fire history and climate influences from forests in the northern Sierra Nevada, USA. Fire Ecology. 2(1):116-141.