1. Observations are foundational to being a scientist. Observations lead to questions and questions lead to discoveries. This informs the direction of scientific investigations.

   Pause the video. **Describe** what it means to investigate something.

   ________________________________________________________________

2. What do you notice along the trail down to the creek? What do you wonder?  
   **Record** your observations using the t-chart below:

<table>
<thead>
<tr>
<th>Notice</th>
<th>Wonder</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

3. Fill in the blanks
   A. Biotic means that something is: __________________________________________
   B. Abiotic means that something is: __________________________________________

4. Interdependence = Biotic things depend on each other and abiotic resources for survival.  
   **Draw and label** one example of interdependence in your yard or a local park?

5. Ecosystem = A community of interdependent biotic things that interact with their non-living abiotic environment.  
   **Describe** an ecosystem near where you live: __________________________________________

6. Riparian zones = transitional areas between land and water. These areas include the borders of streams, rivers, lakes and wetlands.  
   **Name and describe** one riparian area near where you live: ________________________________
7. Pause the video. In the table below, predict two biotic and abiotic things you expect to encounter at Park Creek:

<table>
<thead>
<tr>
<th>Biotic Predictions</th>
<th>Abiotic Predictions</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

8. Indicator species = An organism whose presence, abundance or absence reflects a specific environmental condition. After watching the entire video go to wildlife.ca.gov and search the term ‘indicator species’ using the search bar at the top right corner of the page:

**Name** one indicator species and **describe** where it’s found in California

A. Indicator species: __________________________________________________________

B. Where is it found: _______________________________________________________

9. **Identify** and **describe** two human impacts to a riparian zone. Do you think it is a positive, negative or neutral (no effect)?

<table>
<thead>
<tr>
<th>Human Impact</th>
<th>Positive / Negative / Neutral Effect?</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Example</strong></td>
<td>Car oil leaking into a neighborhood stream</td>
</tr>
<tr>
<td>#1</td>
<td></td>
</tr>
<tr>
<td>#2</td>
<td></td>
</tr>
</tbody>
</table>

10. **Describe** an investigation you could carry out at the riparian ecosystem. You can use your answer from **Question 6**.

__________________________________________________________________________________
__________________________________________________________________________________

11. **How could you use your findings to make a positive human impact on this waterway?**

__________________________________________________________________________________
__________________________________________________________________________________