Geoarchaeology Case Study Questions:
Mt. Vesuvius, Italy

Please discuss the following questions with your group and then write your answers in the space provided.

Part 1

1. Read the following passage from one of Pliny the Younger’s letters to Cornelius Tacitus. This passage gives us insight about what was going through the mind of an average citizen of Pompeii during the onset of the eruption.

“Soon afterwards the cloud sank down to earth and covered the sea; it had already blotted out Capri and hidden the promontory of Misenum from sight. Then my mother implored, entreated and commanded me to escape the best I could—a young man might escape, whereas she was old and slow and could die in peace as long as she had not been the cause of my death too. I refused to save myself without her, and grasping her hand forced her to quicken her pace. She gave in reluctantly, blaming herself for delaying me. Ashes were already falling, not as yet very thickly. I looked round: a dense black cloud was coming up behind us, spreading over the earth like a flood. ‘Let us leave the road while we can still see,’ I said, ‘or we shall be knocked down and trampled underfoot in the dark by the crowd behind.’ We had scarcely sat down to rest when darkness fell, not the dark of a moonless or cloudy night, but as if the lamp had been put out in a closed room. You could hear the shrieks of women, the wailing of infants, and the shouting of men; some were calling their parents, others their children or their wives, trying to recognize them by their voices. People bewailed their own fate or that of their relatives, and there were some who prayed for death in their terror of dying. Many besought the aid of the gods, but still more imagined there were no gods left, and that the universe was plunged into eternal darkness for evermore.”
a. What would it have felt like, physically and emotionally?

b. What decisions did they need to make?

c. What did people understand about what was happening?

2. Look at the photos of artefacts, artwork and architecture found at Pompeii. These help us understand what the Pompeiian society and economy were like before the eruption.
   a. Were arts, culture and religion important to people in Pompeii?

b. Do you think Pompeii was a wealthy town?

c. How might they have used the surrounding land to feed the population?
3. Look at the landscape around Vesuvius, using the resource provided for this question (part 1, question 3).

Mt. Vesuvius viewed from the ruins of Pompeii.

a. Is it hilly, mountainous, flat, or a combination of the above?

b. How easy would it have been to use the land or move around in it (use the artefacts from question 2 to help you with this)?

c. Would Vesuvius have been visible all over the landscape or only visible from Pompeii and Herculaneum?
4. Use the table below to help you describe the two main **stratigraphic** layers at Pompeii (**within and below** where the body **casts** were found). “Example X” has been provided for you as a guide.

<table>
<thead>
<tr>
<th></th>
<th>Colour</th>
<th>Shape of particles (round or sharp?)</th>
<th>Distribution of particles (mostly one size or mix of sizes?)*</th>
<th>Size of particles (describe amount of small, medium and large)^</th>
</tr>
</thead>
<tbody>
<tr>
<td>Example X</td>
<td>Grey</td>
<td>Sharp</td>
<td>Mix</td>
<td>Half medium-large and half small</td>
</tr>
<tr>
<td>Layer 1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Layer 2</td>
<td></td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>

*Use the idea of conformity (mostly one size) vs. variety (mix of sizes) to help you with this.

^small=clay (or mud), medium=sand, large=rocks taking up ¼ or more of your palm.

**Part 2**

5. Geoarchaeologists and geographers often combine the size and distribution of particles into a bar graph (or histogram) in order to help them visualise their results. Use the table below to:
   a. **Describe** samples 3 and 4.
   b. **Match** them with the appropriate **particle size graph** provided (A or B).
   c. **Match** them with the more **similar layer** from question 4 (1 or 2).

Each graph and layer **may only be selected once**, using only the features in this table (not colour or shape).

<table>
<thead>
<tr>
<th></th>
<th>Distribution of particles (mostly one size or mix of sizes?*)</th>
<th>Size of particles (describe amount of small, medium and large)^</th>
<th>Graph (A or B)</th>
<th>Similar Layer in Q4 (1 or 2)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sample 3</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Sample 4</td>
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6. Use your earlier descriptions of layers 1 and 2 (question 4) and the correlation of these with particle size graphs A and B (question 5) to help you with this question.
   a. What types of volcanic deposits (refer to the list of key terms) are layers 1 and 2?
   b. If most of the body casts were found in layer 1, what was happening before most of the deaths at Pompeii?
   c. Can you tell what caused most of the fatalities by identifying the deposit type that they were found in?

Mt. Vesuvius erupting in 1872.
Part 3

7. Assign each of your group members one or two of the six questions above, depending on your group size. Each question should only be assigned to one person.
   a. Think about the implications of your findings – what does your answer to that question say about how people lived in Pompeii? Summarise this on only one sticky-note for each question. This should be completed individually, don’t just repeat the group answer you already have written down.

b. After everyone has completed their summary/ies, share them with the group.

c. Arrange the six summary sticky-notes into two chronological blocks: one for summaries that have to do with life in Pompeii **before the eruption** and one for those that relate to life **during the eruption**. Think about telling a story. You may add additional sticky-notes to connect your summaries if you wish.