**Pollen Analysis Answer Key**

**Activity Step 1)** Pollen Analysis table.

| **Year (CE)** | **Maize Pollen Count** | **Pine Pollen Count** |
| --- | --- | --- |
| 1000 | 5 | 19 |
| 1200 | 6 | 18 |
| 1400 | 11 | 14 |
| 1600 | 16 | 14 |
| 1800 | 21 | 5 |

**Activity Step 2)** Pollen Analysis graph and discussion question answers.

**Question**: How does each plant species change over time? How do they compare with one another?

***Answer****: Overall, the graph shows that maize crops increased and pine tree populations decreased over time.*

**Question**: How did ancient peoples use these two resources? Use your answers to explain the patterns you see on your graph. What would their environment have looked like at different periods in time?

***Answer****: Ancient people grew and harvested maize for food. They used pine trees to build palisades, dwellings, and other structures. This might imply that people were planting more agricultural fields and cutting down more trees for building projects, leading to fewer pine forests.*

**Question**: What environmental factors might have caused these trends within pine tree populations? How might ancient people have adapted to these changes?

***Answer****: Environmental events such as droughts, floods, fires, and very hot or cold temperatures could have caused pines to die out. Ancient people might have started using different tree species to build their houses or moved to a new settlement with a greater number of natural resources.*