**Apples or Oranges?**

You just bought a farm in Los Angeles. You want to grow apples or oranges but you know that the right climate determines what kind of fruit can grow best in an area. You are considering an apple variety called “Rome Beauty,” which has been popular since the 1840s. It is excellent for baking and the trees grow apples from November to April. In order for the tree to produce apples, the temperature needs to drop below freezing (32 degrees). You are also considering a new variety of orange called “Washington Navel.” Eliza Tibbets, a friend living in Riverside, says it is a wonderful orange. It is seedless, very juicy, sweet, and easy to peel. The trees grow oranges from November to April. In order for the tree to produce oranges, the temperature cannot drop below freezing (32 degrees).

What will you grow? Apples or oranges? **Fill out the chart below to decide.**

<table>
<thead>
<tr>
<th>Variety</th>
<th>Season</th>
<th>Climatic Needs</th>
<th>Best Zone</th>
</tr>
</thead>
<tbody>
<tr>
<td>Apple</td>
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<td></td>
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<tr>
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In which zone is Los Angeles? ___________________________

Describe Los Angeles’s climate zone. _____________________________________________________
________________________________________________________________________________________

What fruit will you grow in the Los Angeles area and why? ________________________________
________________________________________________________________________________________

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**Background information:** Although the apple is the most widely adapted deciduous fruit, the mild winters of the low desert and the marine and coastal climates of Southern California do not provide enough winter cold for most standard varieties. People who do grow apples in Southern California often live in higher elevations. The “Rome Beauty” used in this activity is a red striped apple first described in California in 1848. This apple is not as good as other varieties when eaten raw, but is excellent for baking.

Oranges, on the other hand, thrive on the mild winters of Southern California. The Los Angeles County area is well known for having produced oranges in great quantities in the late nineteenth and early twentieth centuries. The “Washington Navel” described in this activity became popular when it was introduced by Eliza Tibbets of Riverside in 1873 because it was sweet, juicy, seedless, and easy to peel.

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**Links to standards**

**Social Studies:** 4.1.3, 4.1.4, 4.1.5

**Language Arts:** RI.4.1, RI.4.3, RI.4.7, RF.4.3, RF.4.4a&c, W.4.2a, W.4.6, W.4.7, W.4.10

**Science:** LS-3b

**Math:** 4.MD.4
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In which zone is Los Angeles? ________________

Describe Los Angeles’s climate zone. ______________________________________________________
____________________________________________________________________________________
____________________________________________________________________________________

What fruit will you grow in the Los Angeles area and why? ________________________________
____________________________________________________________________________________

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**Zone 1: Temperate Climate**
Temperature drops below 32°.

**Zone 2: Semi-tropical Climate**
Temperature stays above 32°.
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<tbody>
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<td>Nov-Apr</td>
<td>below 32º</td>
<td>1</td>
</tr>
<tr>
<td>Orange Washington Navel</td>
<td>Nov-Apr</td>
<td>above 32º</td>
<td>2</td>
</tr>
</tbody>
</table>

In which zone is Los Angeles? **2**

Describe Los Angeles’s climate zone. **Semi-tropical climate.**

The temperature stays above 32º.

What fruit will you grow in the Los Angeles area and why? **Washington Navel**

oranges because oranges grow at a temperature above 32º.