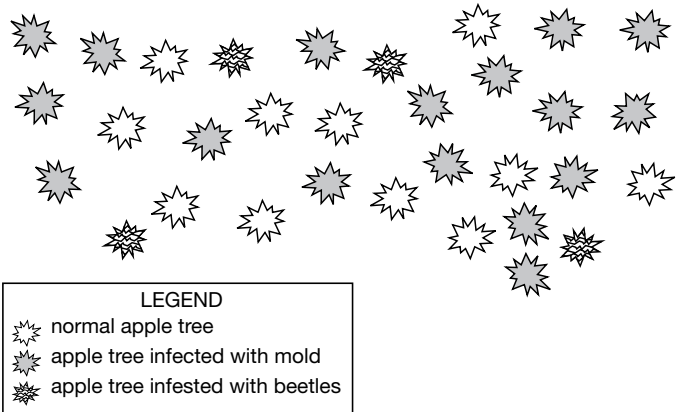


Name _____

Problem Solving: Writing to Explain

An environmental scientist is studying an old apple orchard. The orchard is shown on the right. Some of the trees are infected with mold. Other trees are infested with beetles. Some trees are normal.



The scientist knows that pictures and symbols can be used to write a good math explanation. So she decides to organize her findings in the chart on the right.

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| ☀ | ☀ | ☀ | ☀ | ☀ | ☀ | ☀ | ☀ | ☀ |
| ☀ | ☀ | ☀ | ☀ | ☀ | ☀ | ☀ | ☀ | ☀ |
| ☀ | ☀ | ☀ | ☀ | ☀ | ☀ | ☀ | ☀ | ☀ |
| ☀ | ☀ | ☀ | ☀ | ☀ | ☀ | ☀ | ☀ | ☀ |

Use this chart to estimate the fractional part of the orchard that is infected with mold, using a benchmark fraction that is close to the actual amount.

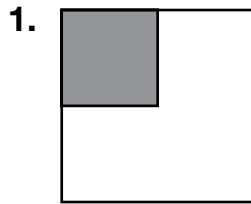
A little more than half the grid is covered by trees that are infected with mold.

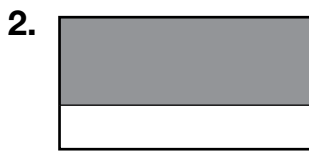
Use this chart to estimate the fractional part of the orchard that is infested with beetles. Explain how you decided.

Name _____

Problem Solving: Writing to Explain

Estimate the fractional part of the shaded portions below.
Explain how you decided.





3. Draw a square and shade about $\frac{1}{8}$ of it. How did you decide how much to shade?

4. Draw two rectangles that are different sizes. Shade about $\frac{1}{2}$ of each. Are the shaded parts the same amount? Explain.

5. Look at a picture of the American flag. Approximately what part of the flag is blue? Explain.
