$\qquad$
$\qquad$
$\qquad$

Objective: Use a rate table to find equivalent comparisons. Use the table to find unit rates, and then use unit rates to find other equivalent ratios.

Rate Table $=$ A table that shows the value of a single item in terms of another item. It is used to show equivalent ratios of the two items.

## Part A:

1. Miss Serafin wants to calculate costs quickly for many different numbers of pumpkins. Complete the rate table below with prices for each of the number of pumpkins.

Pumpkin Pricing

| Number of <br> Pumpkins | 1 | 3 | 5 | 7 | 9 | 11 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Cost (\$) | $\$ 2$ | - | - | - | - | - |

2. How much would 300 pumpkins cost?
3. How many pumpkins could Miss Serafin buy with $\$ 50$ ? For $\$ 100$ ?

Part B: Heritage Middle School's Student Council wants to sell popcorn to raise money. One ounce of popcorn (unpopped) kernels makes 4 cups of popcorn. One serving is a bag of popcorn that holds 2 cups of popcorn.

1. Use a rate table to find the number of ounces of popcorn kernels needed to determine the cups of popcorn.

## Cups of Popcorn from Ounces of Kernels

| Number of cups of <br> Popcorn | 4 |  |  |  |  |  |  |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Number of ounces <br> of Popcorn Kernels | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |

2. How many cups of popcorn can you make from 12 ounces of popcorn kernels? From 30 ounces of popcorn kernels?
3. How many ounces of popcorn kernels are needed to make 40 cups of popcorn? To make 100 cups of popcorn?

Extension: In Investigation 2, you used ratios to share equally and unequally according to certain rules. You used rate tables and unit rates to solve problems. These questions will help you summarize what you have learned.

1. How can you determine a unit rate for a situation?
2. Describe some ways that unit rates are useful.
3. What strategies do you use to make a rate table?
4. Describe some ways that rate tables are useful.
5. How are your strategies for writing equivalent ratios the same as or different from writing equivalent fractions?
