# Snack Sharing: Mandarin Oranges 

M2C3 Project (2018)

## How are Mandarin Oranges and Clementines Harvested and Packed?

- Cuties ${ }^{\mathrm{TM}}$ and Halos ${ }^{\mathrm{TM}}$ are a brand names for clementine and mandarin oranges. You see them packaged in bags and boxes. Did you ever wonder how they got there?
- Click here to see how Cuties ${ }^{\mathrm{TM}}$ are harvested
 packed.
-What do you notice?
- What do you wonder?
- What questions do you have that you could answer using mathematics?

How many mandarin oranges do you think are in this $2-\mathrm{Ib}$ bag?



This is a picture of $2-\mathrm{lb}$ bag of peeled mandarin oranges.

How many oranges do you see in this picture?

Do you think there are always the same number of oranges in a $2-\mathrm{lb}$ bag? Explain why or why not.

What do you think?
How many mandarin oranges are there in a 3 pound bag?


How many mandarin oranges are there in a 5 pound box?


## Prices for Mandarin Oranges

| Package | Weight | Number of <br> Oranges | Price |
| :---: | :---: | :---: | :---: |
|  | 2 pounds (Ib) | $15-18$ | $\$ 3.99$ |
|  | 3 pounds (Ib) |  | $\$ 5.49$ |
|  | 5 pounds (Ib) |  | $\$ 8.75$ |

How many oranges do you expect to find in the $3-\mathrm{lb}$ bag and the $5-\mathrm{lb}$ box?

## Sharing Oranges for Snacks

The Healthy Snack Club at your school wants to buy mandarin oranges for snack time. How many 3 lb bags of mandarin oranges should they buy if they want to give each student in your grade an orange?


How many boxes would they need to buy if they bought 5 lb boxes?
Could they use a combination of each?

## Mandarin Orange Task

The Healthy Snack Club at your school wants to buy mandarin oranges for snack time.

- How many 3 lb . bags of mandarin oranges should they buy if they want to give each student in your grade an orange
- How many 5 lb . boxes of mandarin oranges would they buy if they want to give each student in your grade an orange?
- What will it cost the Healthy Snack Club to buy mandarin oranges for all of the students in your grade?


## Mandarin Orange Task

## Extension:

Consider other ways to buy enough oranges for your everyone in your grade.

- Is your solution the least expensive solution? Why or why not?
- If it is not the least expensive, how could you modify it so that it would cost less to buy oranges for every student in your grade-level?

