

# Counting Collections Trajectory Class Profile

	Collection is organized accurately	Objects counted accurately	Counted by _____.	Miscounted at _____.	Strategy used: <ul style="list-style-type: none"> <li>• Grouping</li> <li>• Decomposing</li> <li>• Place value</li> <li>• Friendly #</li> <li>• Compensating</li> <li>• Doubling</li> <li>• Halving</li> <li>• Powers of 10</li> </ul>	Labeled # objects in each group	Labeled counting accurately	Collection recorded accurately	Equation matches thinking/ counting	Additional notes/ next steps
1.										
2.										
3.										
4.										
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17.										

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18.										
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34.										
35.										



# Counting Collections

Your Name: \_\_\_\_\_ # \_\_\_\_\_

Partner's Name: \_\_\_\_\_ # \_\_\_\_\_

We estimate that our collection has \_\_\_\_\_.

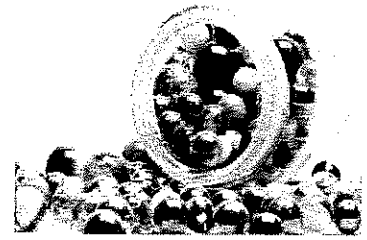
This is how we counted our collection.

This is an equation that represents my count: \_\_\_\_\_

How many objects were in your bag? \_\_\_\_\_ Was your estimation close? \_\_\_\_\_

# Conferring During Counting Collections

## *Helpful Questions and Comments*



When discussing a child's thinking, keep the questions supportive, positive, and open ended.

1. How are you going to count your collection? What is your plan?
2. Why did you chose that plan?
3. Can you tell me how you counted your collection?
4. How many objects were in your collection? Can you prove that to me?
5. Can you draw a picture to show how you counted?
6. What does this represent/mean?
7. Can you count your collection a different way? How?
8. Can you think of a more efficient way to count your collection?
9. Why is this way of counting more efficient?
10. How are you counting your collection?
11. Can you record something on your paper that would show me how you counted your collection?
12. Can you think of an equation that matches your thinking?
13. Can you think of another equation that would represent your counting?
13. Are you using a strategy to count your collection efficiently?
14. Do you see a pattern in your counting?
15. Can you predict what you will count next? How did you know that?

# Questions to Extend Collections

- How many would you have if I gave you \_\_\_\_\_ more objects?
  - 10, 20, 50, 100, 300, etc. help build place value strategies.
  - Numbers with tens and ones help students break apart numbers to add them to their collection totals.
- How many would you have if I gave you \_\_\_\_\_ more package(s)?
  - Students extend their counting strategy.
- How many would you have if you doubled your collection?
  - Helps students develop doubling strategies using place value and known facts.
- How many more objects would you need to have \_\_\_\_\_ objects?
  - Going to the next decade number helps students use place value and enforces the power of making a ten.
  - Move onto the next hundred or even to 1,000 to help students develop place value strategies with addition.
- Do you think you and your partner can equally share all of these objects? Why?
  - Helps students think about even and odd numbers when dividing by 2.
- If you and your partner shared all of these object equally, how many would you both get?
  - Helps students extend their thinking into fair share strategies and use place value strategies for division.
- Do you think the three of us could share all of these objects equally? Why?
  - Helps students think about sharing all objects fairly.



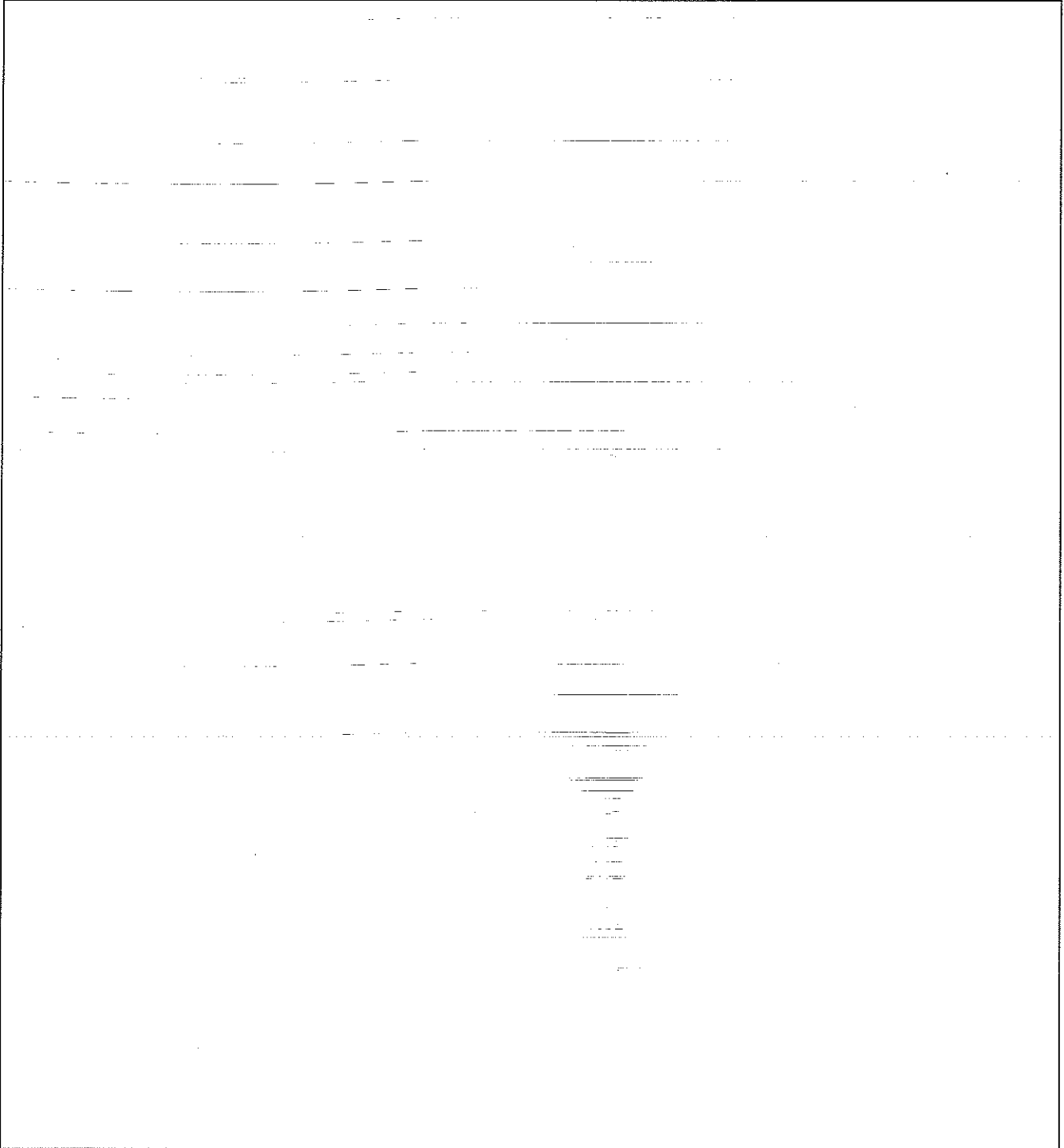
Name: \_\_\_\_\_

Date: \_\_\_\_\_

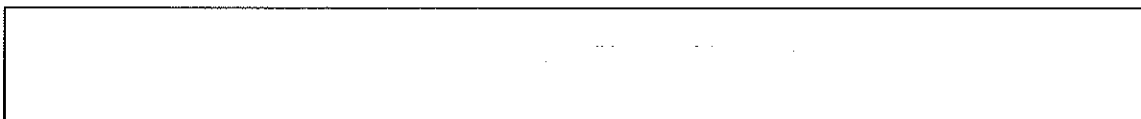
## Counting Collections

I counted \_\_\_\_\_ items altogether.

This is how they look and how I counted them:



Write a number model to match how you grouped your collection below.



Explain how you grouped and counted your collection.

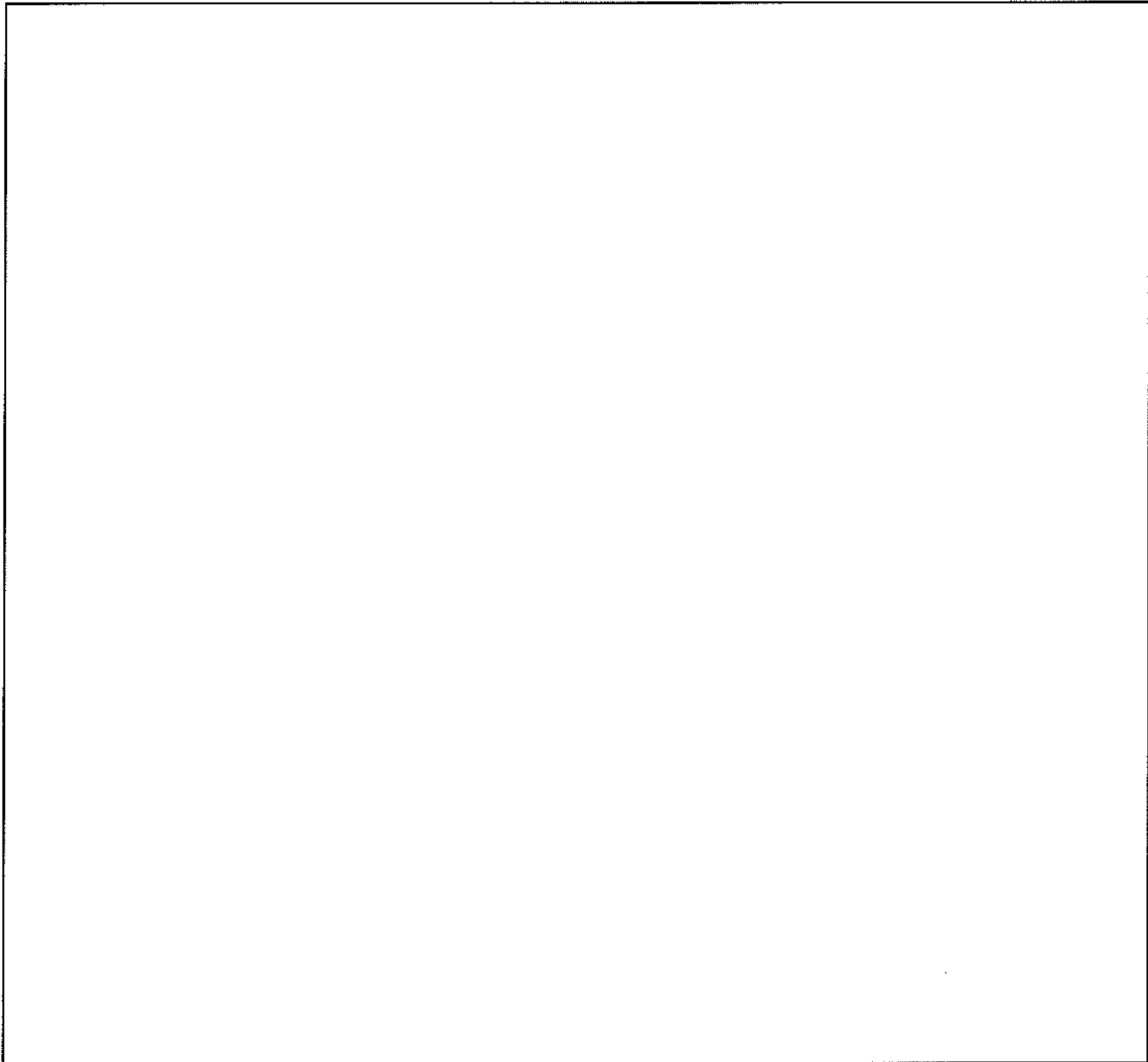
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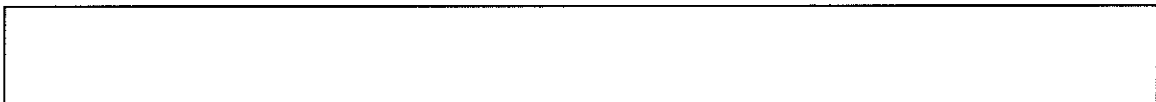
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Can you count it in a different way?



Write a number sentence to match how you grouped your collection below.





Name: \_\_\_\_\_

Partner: \_\_\_\_\_

## Counting Collections Recording Sheet

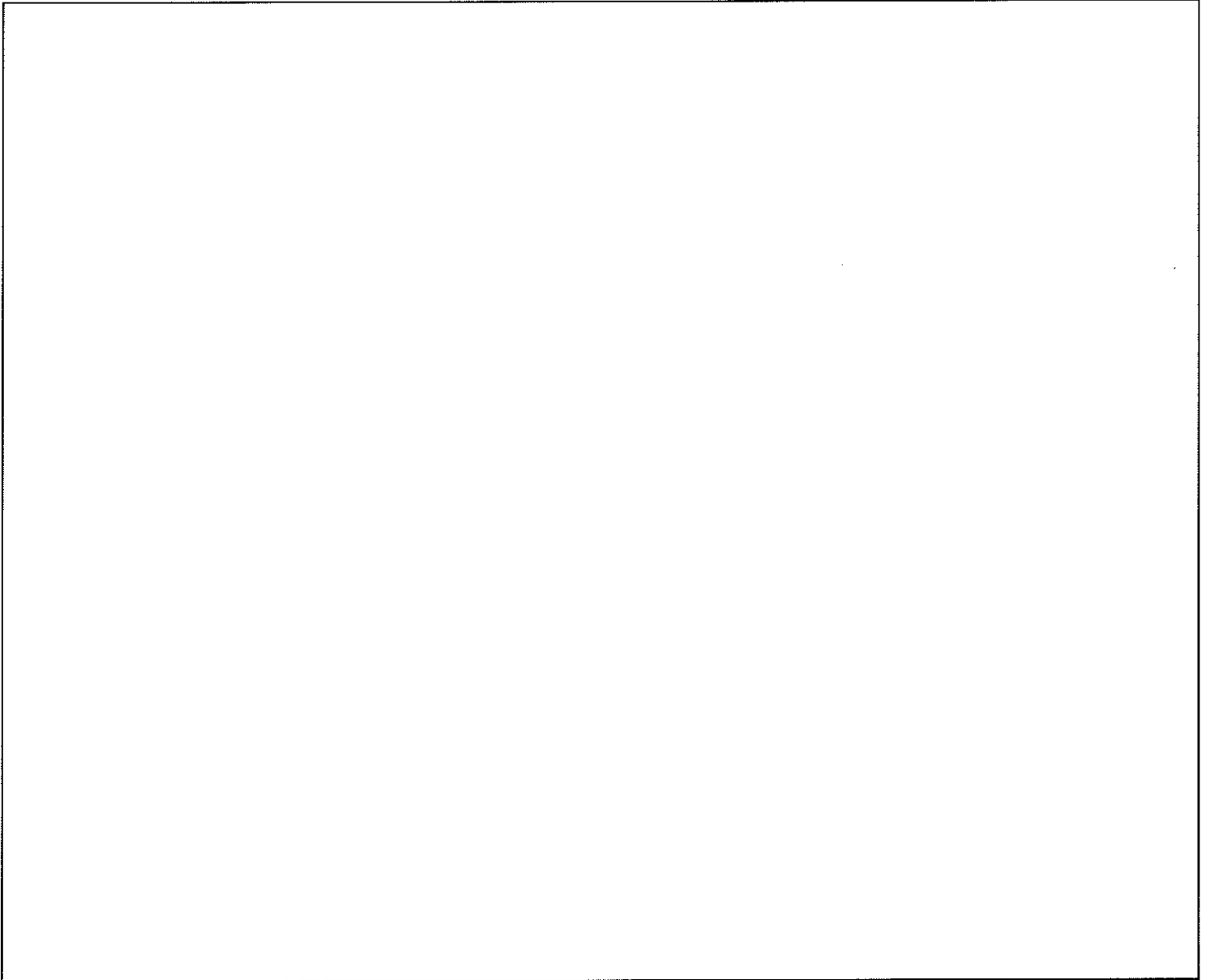
What are you counting today? \_\_\_\_\_

1. **Estimate** how many objects you think are in your collection. **Estimate:** \_\_\_\_\_
2. With your partner, **discuss how you will organize your collection** in order to count it in the most efficient way.
3. **Organize your collection.** If your estimate has changed, write your new revised estimate below.  
**Revised estimate:** \_\_\_\_\_
4. **Count your collection together.** Use **pictures, numbers, symbols, and words to explain** how you organized and counted your collection.

5. **Total** number of objects in your collection: \_\_\_\_\_
6. Make sure you **labeled your drawings with the exact numbers you said as you counted.**
7. **Write an equation** that shows how you counted your collection.

# Counting Your Collection a **Different** Way

1. With your partner, **discuss** how you will organize your collection to count it in a **different** way.
2. **Organize** your collection.
3. **Count your collection together.** Use **pictures, numbers, symbols, and words to explain** how you organized and counted your collection.

A large empty rectangular box with a black border, intended for students to draw their collection and explain their counting method.

4. **Total** number of objects in your collection: \_\_\_\_\_
5. Make sure you **labeled your drawings with the exact numbers you said as you counted.**
6. **Write an equation** that shows how you counted your collection.

Name: \_\_\_\_\_

Partner: \_\_\_\_\_

## Counting Collections Recording Sheet

What are you counting today? \_\_\_\_\_

1. **Estimate** how many objects you think are in your collection. **Estimate:** \_\_\_\_\_
2. With your partner, **discuss how you will organize your collection** in order to count it in the most efficient way.
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**Revised estimate:** \_\_\_\_\_
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5. **Total** number of objects in your collection: \_\_\_\_\_
6. Make sure you **labeled your drawings with the exact numbers you said as you counted.**
7. **Write an equation** that shows how you counted your collection.

## Part 2: Extending your thinking

Write the question you are answering from the "Push Your Thinking" chart.

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Show your thinking in the box.

Answer: \_\_\_\_\_ Equation that matches your solution strategy: \_\_\_\_\_

**Now try another one....**

Write the question you are answering from the "Push Your Thinking" chart.

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Show your thinking in the box.

Answer: \_\_\_\_\_ Equation that matches your solution strategy: \_\_\_\_\_