**Title/Focus:** Data

**Tally Chart**

<table>
<thead>
<tr>
<th>What is your favorite super power?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Power</td>
</tr>
<tr>
<td>Strength</td>
</tr>
<tr>
<td>Invisibility</td>
</tr>
<tr>
<td>Flight</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Tally Marks</th>
</tr>
</thead>
<tbody>
<tr>
<td>one</td>
</tr>
<tr>
<td>five</td>
</tr>
</tbody>
</table>

**Tally Chart**

<table>
<thead>
<tr>
<th>Book</th>
<th>Tally</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>B</td>
<td></td>
<td></td>
</tr>
<tr>
<td>C</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Picture Graph**

Title: Favorite Super Power

<table>
<thead>
<tr>
<th>Super Power</th>
<th>Tally</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strength</td>
<td>1</td>
</tr>
<tr>
<td>Invisibility</td>
<td></td>
</tr>
<tr>
<td>Flight</td>
<td></td>
</tr>
</tbody>
</table>

**Key:** [ ] = 1 Vote

**Mathematical Standards and Practices**

We will organize, represent, and interpret data by attending to precision.

We will analyze our data by asking and answering questions.

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**Inquiry Chart**

What we know about Data?  What we want to learn about Data?
### Planning Focus: 1st Grade Data

**CCSSM:**

CCSS.MATH.CONTENT.1.MD.C.4

Organize, represent, and interpret data with up to three categories; ask and answer questions about the total number of data points, how many in each category, and how many more or less are in one category than in another.

**Mathematical Practices being emphasized:**

3. Construct viable arguments & critique the reasoning of others
6. Attend to precision

### Essential Questions

- Why do we collect data?
- How can we organize data?
- How do tally marks help us understand data?

### Key Concepts

- Collecting and organizing data
- Tally Charts
- Picture Graphs

### Pre and Post Assessments

- Write tally marks for the number 4 & 8.
- Write the number that matches twelve tally marks.
- Create tally chart. How many more tables are there than clocks in the classroom?

### Visual Models/Algorithms/Diagrams for Compendium

**Tally Chart**

<table>
<thead>
<tr>
<th>Title</th>
<th>Tally Marks</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Book A</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Book B</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>Book C</td>
<td>8</td>
<td></td>
</tr>
</tbody>
</table>

**Tally Marks**

- one: 1
- five: 5
- eight: 8
- twelve: 12

**Picture Graph**

```
Title: Favorite Super Power
Strength
Invisibility
Flight

Key: □ = 1 vote
```
Connections (Real World Applications)

What data might a first grader need to collect?

Why might you need to write tally marks?

When might you need to use tally marks?

Language Functions/Structures

There are ______ tally marks for ______. _______ students voted for ______ and ______ together.

There are more ______ than ______. Together there are ______ votes for ______ and ______.

There are fewer ______ than ______. There are ______ more voted for ______ than ______.

We can organize the data by ______. ______ has the most votes.

One kind of data I can collect is ______. ______ has the fewest votes.

I can collect data about ______. ______ is my favorite ______.

My favorite ______ is ______.

Vocabulary

Data organize analyze
Tally marks collect 5 group
Tally chart more than
Survey less than
Picture Graph fewer
Key table

Focus and Motivation

Video: Brain Pop Jr., Pictographs
Chant: Data Here, Data There
Read Aloud:

- Tally O'Malley by Stuart Murphy & Cynthia Jabar
- The Great Graph Contest by Loreen Leedy

Online games:

- Fuzz Bugs Graphing, ABCYA
- Picture Graphing with Fish, Education.com
- Color Bar Graph, Education.com
- Sorting at the Zoo, Education.com

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