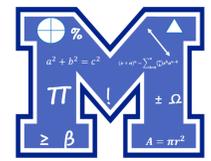


# At-Home Math Connection

## Grade 1 - Quarter 1



Dear Parents and Caregivers,

Below you will find a short description of the mathematics your child is working on this quarter. We recommend your child engage with the provided practice at home. Thank you for your continued support. Have fun with your mathematician(s)!

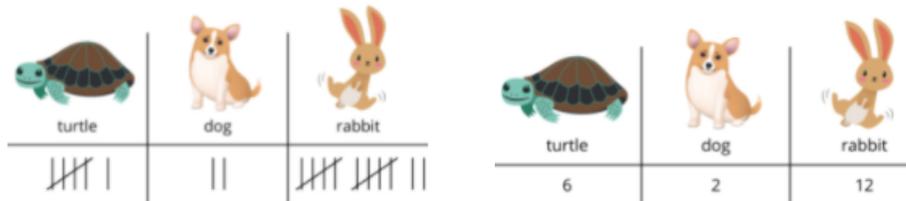
### **Quarter Focus:**

This quarter scholars count, add and subtract within 10, and answer questions about data. They also solve various types of story problems within 10

**Counting-** Scholars are provided with many opportunities throughout the day to practice counting. Objects of all kinds are counted. Scholars estimate how many of something before counting. As scholars become proficient forward counters, they should begin to count backwards.

**Represent and Answer Questions about Data-** Scholars sort, collect, and organize data about the world around them, including conducting class surveys. They create representations of data that make sense to them. They describe their categories and tell how many are in each category by counting. Scholars look at data represented in different ways (pictures, tally marks, numbers) and ask and answer questions.

For example, these diagrams show survey data from scholars who were asked “Which animal would make the best class pet?” One table uses tally marks and one table uses numbers.



**Add and Subtract within 10-** Scholars add and subtract within 10. Throughout the school year scholars will work to develop fluency within 10. At this point in the school year, the emphasis is on adding and subtracting 1 or 2 within 10.

**Addition and Subtraction Story Problems-** Scholars revisit familiar story problem types. Scholars work formally with equations for the first time. They write equations such as  $2 + 7 = \underline{9}$  and learn to identify the answer to the question in the story problem. Scholars work with problems where they have to figure out how much is being added:

*Diego had 7 pencils.*

*His sister gave him some pencils.*

*Now, Diego has 9 pencils.*

*How many pencils did Diego's sister give him?*

Scholars see that these problems can be solved by either addition or subtraction. They can solve this problem by counting on from 7 to 9 and write the equation  $7 + \underline{2} = 9$ . Students can also solve this problem by taking away 7 from 9, and write the equation  $9 - 7 = \underline{2}$ .

**Curious about the Grade 1 Quarterly Assessment?** The assessment consists of 4 performance tasks, 5 multiple choice questions, and 1 extended response. Each performance task and multiple choice is worth 2 points each. The extended response is worth 3 points.

# Try it At Home!

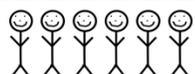
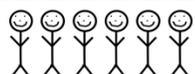
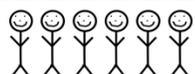
## Counting Practice:

- You will need the attached hundreds chart and some way of covering the numbers, such as tape for this activity. Cover about 12 random numbers and have your child figure out what numbers go in those spaces. Each day, cover a few more numbers until the chart is mostly covered. What strategies does your child use to figure out what numbers should go where?
- Time how fast your child can count up to 120. Play a game and record how much time it takes. Have your child try to beat their time each time.
- Using a target number (example: 20, 50, 75), make a trail snack mix using different items such as cheerios, pretzels, popcorn, chocolate chips.
- Jump rope! Have your child count how many jumps in a row he/she can do.
- Practice writing numbers in order using the blank hundred chart.

## Data Practice:

After bringing in groceries, ask your child to sort items into categories, describe the categories, and make a representation using drawings, tally marks, or numbers. Questions that may be helpful as they work:

- How did you decide to sort?
- What questions can you answer based on your data display?

<p>Use the table below to answer the following question.</p> <p style="text-align: center;"><b>Student Lunches</b></p> <table border="1" data-bbox="121 1008 682 1207"><thead><tr><th>Lunch</th><th>Number of Students</th></tr></thead><tbody><tr><td>sandwich</td><td>3</td></tr><tr><td>salad</td><td>5</td></tr><tr><td>pizza</td><td>4</td></tr></tbody></table>	Lunch	Number of Students	sandwich	3	salad	5	pizza	4	<p>1. What is the total number of students who ate pizza? _____</p>
Lunch	Number of Students								
sandwich	3								
salad	5								
pizza	4								
<p>Use the picture graph below to answer the following question.</p> <p style="text-align: center;"><b>Favorite Type of Museum</b></p> <table border="1" data-bbox="113 1449 682 1711"><tbody><tr><td>Science Museum</td><td></td></tr><tr><td>Art Museum</td><td></td></tr><tr><td>History Museum</td><td></td></tr></tbody></table> <p style="text-align: center;"> = 1 student</p>	Science Museum		Art Museum		History Museum		<p>2. How many students chose the Art Museum as their favorite type of museum? _____</p>		
Science Museum									
Art Museum									
History Museum									

**Addition and Subtraction within 10 Practice:**

Ask your child addition and subtraction questions where the answer is 10 or less (For example,  $3 + 5$  or  $6 - 1$ ).

Questions that may be helpful as they work:

- How could you draw the problem?
- Could you tell me how to count on or count back to find the answer?

- Use objects (pennies, buttons, beans) to model the following expressions:  $4 + 3$ ,  $6 - 1$ ,  $5 + 4$ , and  $9 - 2$ .
- Draw a picture to model the following expressions:

$8 - 4$	$3 + 7$	$5 - 2$	$8 + 1$

**Addition and Subtraction Story Problems Practice:**

When presenting problems and different situations it is important to use manipulatives (objects) to act out the situations in the story. Encourage your child to explain their thinking and how they solved the problems so they can hear many different ways of approaching the problem. When solving problems, pose the following questions:

- What’s going on in the problem/situation?
- What do you notice?
- What do you wonder?
- Tell me something about this problem?
- What do you predict the solution might look like?

<b>Practice</b>	
1. Mike has 5 toy cars. He loses 3. How many toy cars does Mike have now?	2. Jennifer has 4 sugar cookies and 3 chocolate chip cookies. How many cookies does she have altogether?

3. There are 9 birds in the tree. Some birds flew away. Now there are 5 birds in the tree. How many birds flew away?

4. Linda has 6 marbles. Mike gave Linda some more marbles. Then she had 10 marbles. How many marbles did Mike give Linda?

5. Mary has 3 blue cubes and 3 red cubes. How many cubes does Mary have?

6. 9 apples are on the table. 7 are red and the rest are green. How many apples are green?

7. Steve has 6 M&Ms. Some are red and some are green. How many red M&Ms could there be? How many green M&Ms could there be? Show as many ways as you can how the red and green M&Ms could look. Write an equation for each representation.

<b>Answer Key</b>
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**Data Practice**

1. 4 students	2. 8 students
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**Addition and Subtraction Story Problems Practice**

1. 2 cars	2. 7 cookies	3. 4 birds	4. 4 marbles
5. 6 cubes	6. 2 apples	7. $5 + 1 = 6$ $4 + 2 = 6$ $3 + 3 = 6$ $2 + 4 = 6$ $1 + 5 = 6$	

~Adapted from: Illustrative Math Family Materials, Howard County Public School District, Kansas Department of Education - Flip Book, Number Talks - by: Sherry Parrish, Teaching Student-Centered Mathematics - by: John A. Van de Walle, et al.

## Hundred Chart

<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>	<b>8</b>	<b>9</b>	<b>10</b>
<b>11</b>	<b>12</b>	<b>13</b>	<b>14</b>	<b>15</b>	<b>16</b>	<b>17</b>	<b>18</b>	<b>19</b>	<b>20</b>
<b>21</b>	<b>22</b>	<b>23</b>	<b>24</b>	<b>25</b>	<b>26</b>	<b>27</b>	<b>28</b>	<b>29</b>	<b>30</b>
<b>31</b>	<b>32</b>	<b>33</b>	<b>34</b>	<b>35</b>	<b>36</b>	<b>37</b>	<b>38</b>	<b>39</b>	<b>40</b>
<b>41</b>	<b>42</b>	<b>43</b>	<b>44</b>	<b>45</b>	<b>46</b>	<b>47</b>	<b>48</b>	<b>49</b>	<b>50</b>
<b>51</b>	<b>52</b>	<b>53</b>	<b>54</b>	<b>55</b>	<b>56</b>	<b>57</b>	<b>58</b>	<b>59</b>	<b>60</b>
<b>61</b>	<b>62</b>	<b>63</b>	<b>64</b>	<b>65</b>	<b>66</b>	<b>67</b>	<b>68</b>	<b>69</b>	<b>70</b>
<b>71</b>	<b>72</b>	<b>73</b>	<b>74</b>	<b>75</b>	<b>76</b>	<b>77</b>	<b>78</b>	<b>79</b>	<b>80</b>
<b>81</b>	<b>82</b>	<b>83</b>	<b>84</b>	<b>85</b>	<b>86</b>	<b>87</b>	<b>88</b>	<b>89</b>	<b>90</b>
<b>91</b>	<b>92</b>	<b>93</b>	<b>94</b>	<b>95</b>	<b>96</b>	<b>97</b>	<b>98</b>	<b>99</b>	<b>100</b>

