

Glossary of Terms used in Primary Grades Instructional Data



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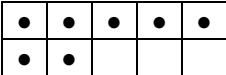

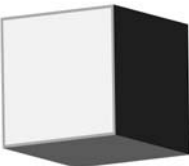

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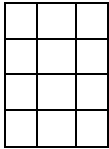
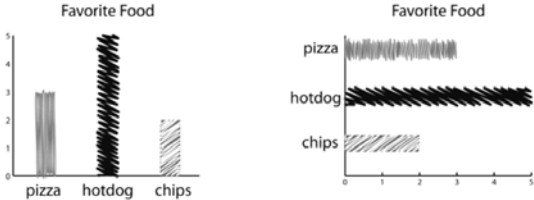
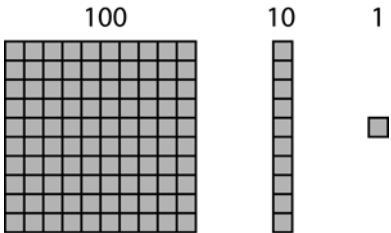
Glossary of Terms Used in Primary Grades Instructional Data Statements


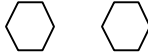
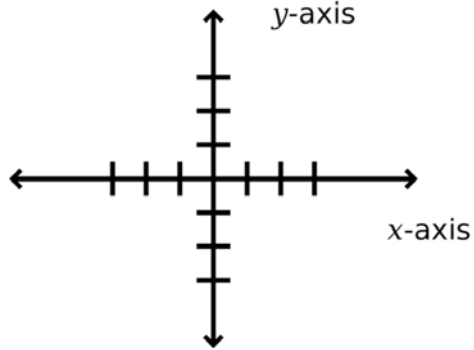
This document is provided to assist teachers in understanding the content and skills described in the Primary Grades Instructional Data statements. The two sections of the document contain terms used in mathematics instructional data statements and in the reading instructional data statements, respectively.

Glossary of Terms Used in Mathematics Instructional Data Statements

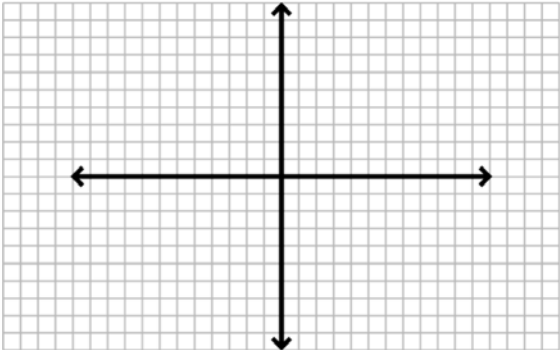
This glossary of mathematical terms is provided to assist teachers in understanding the content and skills described in the Primary Grades Instructional Data statements. Definitions used with students at the primary age would most likely not include all of the information contained here for teachers.

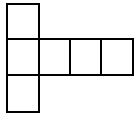

| Term | Definition |
|--------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 10-frame | <p>A 2 x 5 array in which markers or dots are placed to represent numbers</p> <p><i>7 is represented as:</i></p>  |
| 2-D figure | <p>A flat surface with length and width but no thickness; also called plane figure, two-dimensional figure</p>  |
| 3-D figure | <p>A figure with three dimensions: length, width, height; also called solid figure, three-dimensional figure</p>  |
| addend | <p>Any number that is added</p> <p><i>In the equation $3 + 4 = 7$, the addends are 3 and 4</i></p> |
| analog clock | <p>A clock with hands</p>  |

| Term | Definition |
|-----------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| arithmetic pattern | A pattern in which a fixed amount is added or subtracted to each term in order to generate the next term <i>3, 7, 11, 15, 19, 23 is an arithmetic pattern because the fixed amount added to each term is 4</i> |
| array | An arrangement of numbers or objects in rows and columns, often used for multiplication problems <i>There are 4 rows of candies in a box. Each row has 3 candies. How many candies are in the box?</i>  |
| attributes | Characteristics that identify an object as part of a group <i>Triangle: 3 sides 3 angles Sides are straight lines</i> |
| bar graph | A visual way of representing information using the height or length of rectangles to compare the data  |
| base-10 blocks | Blocks used to represent 1, 10, 100, or 1000  |
| basic fact difference | The answer to a subtraction expression, when the subtrahend and difference are both ≤ 9 <i>$15 - 8 = 7$</i> |
| basic fact equation | An equation using basic facts (i.e., adds or factors ≤ 9 , and the corresponding subtraction and division facts) <i>$5 + 3 = 8$, $9 - 4 = 5$, $3 \times 4 = 12$, $45 \div 9 = 5$</i> |
| basic fact product | The answer to a multiplication expression, when both factors are ≤ 9 <i>In the basic facts 9×9 and 3×4, 81 and 12 are the basic fact products</i> |
| basic fact quotient | The answer to a division expression, when both the divisor and quotient are ≤ 9 <i>In the basic facts $72 \div 9$ and $42 \div 6$, 8 and 7 are the basic fact quotients</i> |
| basic fact sum | The answer to an addition expression, when both addends are ≤ 9 <i>In the basic facts $9 + 9$ and $3 + 4$, 18 and 7 are the basic fact sums</i> |

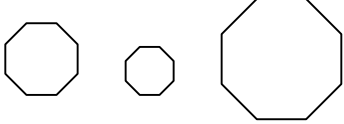
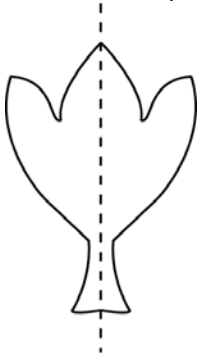
| Term | Definition |
|-------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| cardinality | Describing the number of objects in a collection Count 1, 2, 3, 4 apples and know that 4 represents the number of apples in this picture:  |
| change unknown | A story problem where initial and resulting amounts are known but the amount added to or subtracted from the initial amount is unknown Tom had 6 fish. He got more fish for his birthday. He now has 9 fish. How many fish did Tom get for his birthday? |
| compensation strategies | Rewriting an expression using numbers that are easier to compute $24 + 48$ can be written as: $20 + 48 + 4$ or $50 + 24 - 2$ or $25 + 50 - 3$ |
| congruent | Objects that have the same shape and are the same size  |
| conjecture | An observation or general conclusion based on a number of facts A student observes that $6 + 0 = 6$, $5 + 0 = 5$, $2 + 0 = 2$. The student's conjecture might be that when you add zero to a number, you get the number you had at the start |
| coordinate graph | A 2-dimensional grid which describes the location of an object using the x and y-axes  |
| counting order | Numbers or multiples of numbers in numerical order $1, 2, 3, 4, 5...$ or $5, 10, 15, 20, 25...$ |
| decomposes | Breaking a number or expression into smaller quantities 5 can be written as $2 + 3$, or $54 + 23$ can be written as $50 + 20 + 4 + 3$. At a manipulative level, you can show 5 as 2 red blocks and 3 green blocks or 4 red blocks and 1 green block, etc. |
| difference | The amount that remains after one quantity is subtracted from another In the equation, $15 - 7 = 8$, the difference is 8 |
| digit | Any one of the ten numerical symbols: 0, 1, 2, 3, 4, 5, 6, 7, 8, or 9 1-digit number 6 2-digit number 63 3-digit number 634 |
| dividend | The amount that is divided by another number, or shared equally In the equation $15 \div 3 = 5$, the dividend is 15 |
| divisor | The number by which another number is divided, or the number of equal groups into which an amount is shared In the equation $21 \div 3 = 7$, the divisor is 3 |

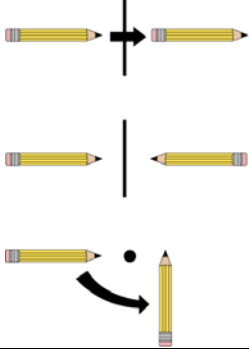
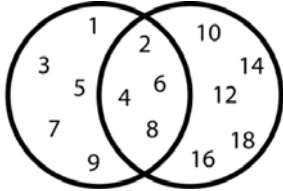
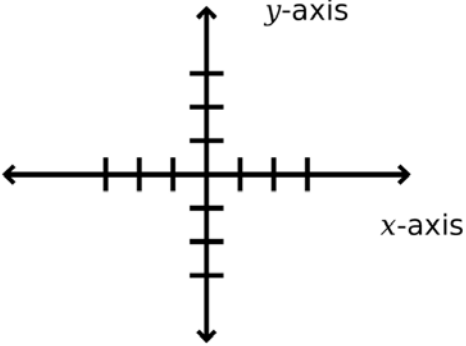
| Term | Definition | | | | | | | | | | |
|--------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------|-----------|------|---|------|---|------|---|---|---|
| elapsed time | The amount of time between two times <i>The elapsed time between 3:10 and 3:25 is 15 minutes</i> | | | | | | | | | | |
| equal sharing | A division strategy where students equally divide the given number of objects to determine the number of objects in each group <i>Sari has 30 pencils. She has 5 boxes. She wants to put the same number of pencils into each box. How many pencils should she put into each box? At the manipulative level, students would put 1 pencil into Box 1, 1 pencil into Box 2, 1 pencil into Box 3, 1 pencil into Box 4, 1 pencil into Box 5, then go back and put a second pencil into Box 1, a second pencil into Box 2, and so on, until all pencils have been put into boxes. The student then counts the number of pencils in 1 box.</i> | | | | | | | | | | |
| equation | A number sentence showing that the amount on one side of the equal sign has the same value as the amount on the other side $5 + 3 = 8$ or $5 + \square = 8$ or $5 + 3 = 6 + 2$ | | | | | | | | | | |
| even numbers | Numbers that are divisible by 2 with no remainder <i>0, 2, 4, 6, 8, 10</i> | | | | | | | | | | |
| expanded notation | Decomposing numbers to show the value of each digit $628 = 600 + 20 + 8$ | | | | | | | | | | |
| expression | A collection of numbers, symbols, variables, and/or operation signs <i>8 or $6 + 5$ or $8 - \square$, or $5n$</i> | | | | | | | | | | |
| extends a function table | Determines the next number(s) in a function table <table border="1" data-bbox="532 919 776 1100"> <thead> <tr> <th>people</th> <th># of legs</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>2</td> </tr> <tr> <td>2</td> <td>4</td> </tr> <tr> <td>3</td> <td>6</td> </tr> <tr> <td>4</td> <td>?</td> </tr> </tbody> </table> | people | # of legs | 1 | 2 | 2 | 4 | 3 | 6 | 4 | ? |
| people | # of legs | | | | | | | | | | |
| 1 | 2 | | | | | | | | | | |
| 2 | 4 | | | | | | | | | | |
| 3 | 6 | | | | | | | | | | |
| 4 | ? | | | | | | | | | | |
| extends a pattern | Determines the next number(s), letter(s), or shape(s) in a pattern <i>a a b a a a b a a a b ?</i> <i>2, 5, 8, 11, 14, ?</i> | | | | | | | | | | |
| extraneous information | Information that is not needed to solve a given story problem <i>Kim had 6 tennis balls and 2 basketballs. The basketball cost \$25.00. How many balls does Kim have?</i> | | | | | | | | | | |
| fact family | A set of facts, each of which relates the same three numbers through addition and subtraction or through multiplication and division $3 + 4 = 7$ $3 \times 4 = 12$ $4 + 3 = 7$ $4 \times 3 = 12$ $7 - 4 = 3$ $12 \div 3 = 4$ $7 - 3 = 4$ $12 \div 4 = 3$ | | | | | | | | | | |
| factor | A number you multiply <i>In the equation $3 \times 2 = 6$, the factors are 3 and 2</i> | | | | | | | | | | |
| frequency table | A table that is used to display the number of objects <table border="1" data-bbox="532 1642 756 1818"> <thead> <tr> <th>Animals</th> <th>Number</th> </tr> </thead> <tbody> <tr> <td>Cows</td> <td>6</td> </tr> <tr> <td>Dogs</td> <td>7</td> </tr> <tr> <td>Pigs</td> <td>3</td> </tr> </tbody> </table> | Animals | Number | Cows | 6 | Dogs | 7 | Pigs | 3 | | |
| Animals | Number | | | | | | | | | | |
| Cows | 6 | | | | | | | | | | |
| Dogs | 7 | | | | | | | | | | |
| Pigs | 3 | | | | | | | | | | |

| Term | Definition | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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| function table | <p>A table that is used to display a function</p> <table border="1"> <thead> <tr> <th>people</th> <th># of legs</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>2</td> </tr> <tr> <td>2</td> <td>4</td> </tr> <tr> <td>3</td> <td>6</td> </tr> <tr> <td>4</td> <td>8</td> </tr> </tbody> </table> | people | # of legs | 1 | 2 | 2 | 4 | 3 | 6 | 4 | 8 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| people | # of legs | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1 | 2 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2 | 4 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 3 | 6 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 4 | 8 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| geometric pattern | <p>A pattern in which you multiply each term by a given amount to determine the next term in the pattern</p> <p><i>The pattern 3, 6, 12, 24, 48 is a geometric pattern because you multiply by 2 to get the next term in the pattern</i></p> | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| grid lines | <p>A network of uniformly spaced horizontal and vertical lines</p>  | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| hundreds chart | <p>A 10 x 10 grid representing the numbers from 1 to 100 in rows and columns of ten</p> <table border="1"> <tbody> <tr><td>1</td><td>2</td><td>3</td><td>4</td><td>5</td><td>6</td><td>7</td><td>8</td><td>9</td><td>10</td></tr> <tr><td>11</td><td>12</td><td>13</td><td>14</td><td>15</td><td>16</td><td>17</td><td>18</td><td>19</td><td>20</td></tr> <tr><td>21</td><td>22</td><td>23</td><td>24</td><td>25</td><td>26</td><td>27</td><td>28</td><td>29</td><td>30</td></tr> <tr><td>31</td><td>32</td><td>33</td><td>34</td><td>35</td><td>36</td><td>37</td><td>38</td><td>39</td><td>40</td></tr> <tr><td>41</td><td>42</td><td>43</td><td>44</td><td>45</td><td>46</td><td>47</td><td>48</td><td>49</td><td>50</td></tr> <tr><td>51</td><td>52</td><td>53</td><td>54</td><td>55</td><td>56</td><td>57</td><td>58</td><td>59</td><td>60</td></tr> <tr><td>61</td><td>62</td><td>63</td><td>64</td><td>65</td><td>66</td><td>67</td><td>68</td><td>69</td><td>70</td></tr> <tr><td>71</td><td>72</td><td>73</td><td>74</td><td>75</td><td>76</td><td>77</td><td>78</td><td>79</td><td>80</td></tr> <tr><td>81</td><td>82</td><td>83</td><td>84</td><td>85</td><td>86</td><td>87</td><td>88</td><td>89</td><td>90</td></tr> <tr><td>91</td><td>92</td><td>93</td><td>94</td><td>95</td><td>96</td><td>97</td><td>98</td><td>99</td><td>100</td></tr> </tbody> </table> | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 | 42 | 43 | 44 | 45 | 46 | 47 | 48 | 49 | 50 | 51 | 52 | 53 | 54 | 55 | 56 | 57 | 58 | 59 | 60 | 61 | 62 | 63 | 64 | 65 | 66 | 67 | 68 | 69 | 70 | 71 | 72 | 73 | 74 | 75 | 76 | 77 | 78 | 79 | 80 | 81 | 82 | 83 | 84 | 85 | 86 | 87 | 88 | 89 | 90 | 91 | 92 | 93 | 94 | 95 | 96 | 97 | 98 | 99 | 100 |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 41 | 42 | 43 | 44 | 45 | 46 | 47 | 48 | 49 | 50 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 51 | 52 | 53 | 54 | 55 | 56 | 57 | 58 | 59 | 60 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 61 | 62 | 63 | 64 | 65 | 66 | 67 | 68 | 69 | 70 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 71 | 72 | 73 | 74 | 75 | 76 | 77 | 78 | 79 | 80 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 81 | 82 | 83 | 84 | 85 | 86 | 87 | 88 | 89 | 90 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 91 | 92 | 93 | 94 | 95 | 96 | 97 | 98 | 99 | 100 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| input | <p>The 'x' term in a function. In the example below, the numbers in the people column represent the inputs</p> <table border="1"> <thead> <tr> <th>people</th> <th># of legs</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>2</td> </tr> <tr> <td>2</td> <td>4</td> </tr> <tr> <td>3</td> <td>6</td> </tr> <tr> <td>4</td> <td>?</td> </tr> </tbody> </table> | people | # of legs | 1 | 2 | 2 | 4 | 3 | 6 | 4 | ? | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| people | # of legs | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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| 2 | 4 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 3 | 6 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 4 | ? | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

| Term | Definition |
|---------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| likelihood | <p>Expressing probability using terms such as impossible, unlikely, equally likely, likely and certain</p> <p><i>Without looking, pull a block from a bag with 8 red blocks and 2 blue blocks.</i></p> <p><i>It is unlikely a blue block will be selected</i></p> <p><i>It is likely a red block will be selected</i></p> <p><i>Without looking, pull a block from a bag with 8 red blocks and 0 blue blocks</i></p> <p><i>It is certain a red block will be selected</i></p> <p><i>It is impossible a blue block will be selected</i></p> <p><i>Without looking, pull a block from a bag with 8 red blocks and 8 blue blocks</i></p> <p><i>It is equally likely that a blue or red block will be selected</i></p> |
| manipulatives | <p>Objects or pictures of objects that children move to solve a problem</p> <ul style="list-style-type: none"> ▪ Using manipulatives—Student must move object(s) to show their answer; used in enhanced items ▪ Manipulatives given—Student may move object(s) to help figure out the answer, but they must select a number as their answer; used in enhanced items ▪ Manipulatives shown—Pictures of objects are in the item, but they cannot be moved; used in multiple choice items |
| mass | <p>The amount of matter in an object</p> <p><i>The mass of a table is 29 kg</i></p> |
| minuend | <p>The number you subtract from</p> <p><i>In the equation $15 - 8 = 7$, the minuend is 15</i></p> |
| net | <p>The 2-dimensional drawing that can be folded to make a 3-dimensional figure</p> <p><i>The net below can be folded to make a cube:</i></p>  |
| non-routine story problem | <p>A story problem that often requires the use of reasoning skills or logic; students typically cannot write an equation to explain how to solve the problem</p> <p><i>There are birds and cats on the farm. There are 7 heads and 22 legs. How many cats are on the farm?</i></p> |
| non-standard unit | <p>A unit of measure not found on a ruler (e.g., paper clips used to measure length)</p> |
| number line | <p>A model that represents the value and order of numbers according to their positions on a line</p>  |
| numeral | <p>A symbol representing a particular number</p> <p><i>The number six is represented by 6 in the decimal system, VI in the Roman system</i></p> |
| odd numbers | <p>Numbers that are not evenly divisible by 2</p> <p><i>1, 3, 5, 7, 9</i></p> |
| one-to-one correspondence | <p>Connecting the sequence of numbers in a one-to-one match with the number of objects being counted</p> <p><i>Touch or move the first object, say 1, touch or move the second object, say 2, touch or move the third object, say 3</i></p> |
| operation | <p>A mathematical process</p> <p><i>Addition, subtraction, multiplication, division</i></p> |
| ordinal position | <p>A number indicating position</p> <p><i>1st, 2nd, 3rd, 4th</i></p> |

| Term | Definition | | | | | | | | | | | | | | | |
|----------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|-----------|---|---|---|---------|---|---|---|---|-------|---|---|---|--|
| output | <p>The 'y' term in a function</p> <p><i>The numbers in the # of legs column represent the output</i></p> <table border="1"> <thead> <tr> <th>people</th> <th># of legs</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>2</td> </tr> <tr> <td>2</td> <td>4</td> </tr> <tr> <td>3</td> <td>6</td> </tr> <tr> <td>4</td> <td>?</td> </tr> </tbody> </table> | people | # of legs | 1 | 2 | 2 | 4 | 3 | 6 | 4 | ? | | | | | |
| people | # of legs | | | | | | | | | | | | | | | |
| 1 | 2 | | | | | | | | | | | | | | | |
| 2 | 4 | | | | | | | | | | | | | | | |
| 3 | 6 | | | | | | | | | | | | | | | |
| 4 | ? | | | | | | | | | | | | | | | |
| part unknown | <p>A story problem where the whole or total amount is known, one part of the whole is known, but the other part is unknown</p> <p><i>Pat has 9 pencils. 4 pencils are red; the rest are green. How many pencils are green?</i></p> | | | | | | | | | | | | | | | |
| pictograph | <p>A visual way of representing information using pictures or symbols to represent data</p> <p style="text-align: center;">Favorite Lunch</p> <table border="1"> <tbody> <tr> <td>Sandwich</td> <td>☺</td> <td>☺</td> <td>☺</td> <td>☺</td> </tr> <tr> <td>Hot dog</td> <td>☺</td> <td>☺</td> <td></td> <td></td> </tr> <tr> <td>Pizza</td> <td>☺</td> <td>☺</td> <td>☺</td> <td></td> </tr> </tbody> </table> | Sandwich | ☺ | ☺ | ☺ | ☺ | Hot dog | ☺ | ☺ | | | Pizza | ☺ | ☺ | ☺ | |
| Sandwich | ☺ | ☺ | ☺ | ☺ | | | | | | | | | | | | |
| Hot dog | ☺ | ☺ | | | | | | | | | | | | | | |
| Pizza | ☺ | ☺ | ☺ | | | | | | | | | | | | | |
| place value | <p>The value of the digit depends on where it is located in a string of digits</p> <p><i>In 258, the 2 means 2 hundreds or 200, the 5 means 5 tens or 50, the 8 means 8 ones or 8</i></p> | | | | | | | | | | | | | | | |
| population | <p>The total set of people or objects in a given group</p> <p><i>If you want to determine the favorite movie of students in 1st grade at Elementary School, the population is students in 1st grade at that school</i></p> | | | | | | | | | | | | | | | |
| product | <p>The result of multiplying</p> <p><i>In the equation, $3 \times 2 = 6$, the product is 6</i></p> | | | | | | | | | | | | | | | |
| quotient | <p>The result of dividing</p> <p><i>In the equation, $15 \div 3 = 5$, the quotient is 5</i></p> | | | | | | | | | | | | | | | |
| regrouping | <p>Using place value concepts to rewrite a number</p> <p><i>The number 32 is 3 tens and 2 ones or 2 tens and 12 ones</i></p> | | | | | | | | | | | | | | | |
| repeated addition | <p>A strategy to solve multiplication problems where the student adds factors the appropriate number of times</p> <p><i>To determine the number of wheels on 6 tricycles, the student could add $3 + 3 + 3 + 3 + 3 + 3$</i></p> | | | | | | | | | | | | | | | |
| repeated subtraction | <p>A division strategy where the student repeatedly subtracts a given amount (divisor) to determine the number of times subtraction is necessary (quotient)</p> <p><i>Maria has 30 pencils. She wants to put 5 pencils into each box. How many boxes does she need? At the manipulative level, students put 5 pencils into the first box, then 5 pencils into the next box, then 5 pencils into the next box until all 30 pencils have been put into boxes. The student then counts the number of boxes used.</i></p> | | | | | | | | | | | | | | | |
| repeating pattern | <p>A pattern where a group of numbers or symbols are used in the same order many times</p> <p><i>2 5 4 2 5 4 2 5 4 2 5 4 ...</i></p> <p><i>$\Delta \square \bullet \emptyset \Delta \square \bullet \emptyset \Delta \square \bullet \emptyset \Delta \square \bullet \emptyset \dots$</i></p> | | | | | | | | | | | | | | | |
| result unknown | <p>A story problem where the initial amount and the amount added to or subtracted from the initial amount are known, but the resulting amount is unknown</p> <p><i>Tom had 6 fish. He got 3 fish for his birthday. How many fish does Tom now have?</i></p> | | | | | | | | | | | | | | | |
| rote counting | <p>Naming the number words in the correct sequence</p> <p><i>Saying one, two, three, four, five, six, seven, eight, nine, ten</i></p> | | | | | | | | | | | | | | | |

| Term | Definition |
|--------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| sample of the population | The part of the population of a given group, selected to give information about the population as a whole <i>If you want to determine the favorite movie of students in 1st grade at Elementary School, you could put all names of 1st grade students in a hat, randomly select 25% of the names, and ask them the question. The 25% of students surveyed is the sample of the population.</i> |
| set | A collection of numbers or objects that are members of a defined group <i>The set of odd numbers less than 10 is {1, 3, 5, 7, 9}</i> |
| similar | Objects that have the same shape, but are not the same size  |
| start unknown | A story problem where the amount added to or subtracted from the initial amount is known and the resulting amount is known but the initial amount is unknown <i>Tom had some fish. He got 5 fish for his birthday. He now has 9 fish. How many fish did Tom have before his birthday?</i> |
| strategy | A plan or method to solve a problem <i>Draw a picture, make a table, work backwards, make a list, guess and check</i> |
| subtrahend | The number subtracted from another number <i>In the equation $15 - 8 = 7$, the subtrahend is 8</i> |
| sum | The total or the answer to an addition problem <i>In the equation $3 + 4 = 7$, the sum is 7</i> |
| symbol | A notation used to represent an operation or unknown number $= + > \square$ |
| symmetry | When one half of an object exactly matches the other half  |
| tallies or tally marks | Marks used to keep track of the number of objects or events being counted <i>Leslie sees 7 cars could be shown using the tallies </i> |

| Term | Definition |
|------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| transformation | <p>The result of an object being moved (slide, flip, turn)</p>  |
| unit | <p>A specific fixed amount used for measurement</p> <p><i>Inch; meter; pound</i></p> |
| Venn diagram | <p>A drawing showing the relation between sets of numbers or objects drawn as circles or geometric shapes</p> <p><i>Numbers less than 10 compared to even numbers greater than 2</i></p>  |
| weight | <p>The force of gravity on an object</p> <p><i>Weight of a man on the earth is 168 pounds. Weight of the same man on the moon is 28 pounds.</i></p> |
| x-axis y-axis | <p>The horizontal axis on a coordinate grid</p> <p>The vertical axis on a coordinate grid</p>  |

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Glossary of Terms Used in Reading Instructional Data Statements

This glossary of reading and writing terms is provided to assist teachers in understanding the content and skills described in Primary Grades Instructional Data statements. Definitions used with students at the primary age would most likely not include all of the information contained here for teachers.

| Term | Definition |
|-------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| alphabetic principle | Knowledge of the alphabetic principle is awareness that written words are composed of letters that are intentionally and conventionally related to phonemic segments of the words of oral language ¹ |
| antonym | A word that has a meaning opposite to that of another word |
| base word | A word to which prefixes and suffixes can be added; also called the <i>root word</i> |
| blending | To draw individual sounds together to pronounce a word |
| capitalization | The practice or act of capitalizing according to standard English rules |
| complex sentence | A sentence that contains a main clause and one or more dependent clauses |
| compound word | A word composed of two distinct words (e.g., doghouse) |
| consonant | A letter that represents a consonant; linguistically, consonants are phonemes where the flow of air is cut off partially or completely |
| blend | A sequence of consonants before or after a vowel (e.g., tr, gl) |
| consonant cluster | Adjacent consonants before or after a vowel sound (e.g., spl, scr) |
| consonant digraph | Two adjacent consonant letters that create a single sound but are not represented by either letter alone: sh in ship th in that (voiced th) th in think (unvoiced th) ch in chair tch in watch ph in phone gh in enough |
| consonants: silent consonants | Silent consonants are those which are not pronounced when combined with other specific letters: m(b) in lamb (w)r in wrong (k)n in know s(t) in listen f(t) in often (g)n in sign |
| contraction | A shortened form of a pair of words with the missing letter(s) indicated by an apostrophe (e.g., isn't) |

¹ Susan M. Burns, Peg Griffin, Catherine E. Snow, eds. *Starting Out Right, A Guide to Promoting Children's Reading Success*. Washington, D.C.: National Academy Press, 1999.

| Term | Definition |
|----------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| diphthong | A vowel combination in a single syllable involving a glided speech sound from one vowel to the other: oi in boil oy in toy ou in out ow in plow ew in flew |
| draft | The initial composition of a piece of writing |
| dramatic genres | Types of dramatic writing, including comedies, tragedies, histories, farces, etc.; dramatic genres are intended to be performed |
| editing | Proofreading a piece of writing for clarity and correct use of mechanical conventions |
| evaluative comprehension | The ability to understand fact, opinion, bias, assumptions, and elements of persuasion; can evaluate the validity and quality of written materials; can compare works, evaluate conclusions, and apply what is learned to real life experiences |
| fantasy | A subdivision of the prose fiction genre characterized by having magical, supernatural, or fantastical elements (e.g., talking animals, people who can fly) |
| fiction | Storytelling about imagined events; fiction is not constrained, like nonfiction, to verifiable facts and sequence of events |
| genre | A division of a particular form of art according to criteria particular to that form; in all art forms, genres are vague categories with no fixed boundaries and are formed by sets of conventions; some common literary genres are prose, drama, and poetry; all three can be further subdivided into "prose genres," "dramatic genres," and "poetic genres" |
| grammatical form | The syntactic conventions of a language used to convey semantic meaning (e.g., an interrogative sentence is a grammatical form used to ask a question) |
| grapheme | A letter or group of letters that spell one sound (e.g., b, sh, ough as in though) |
| homographs | Words that are spelled the same but have different meanings and origins; they do not necessarily have the same pronunciation |
| homonyms | Words that are spelled and pronounced the same, but have different meanings |
| homophones | Words that sound the same but are spelled differently and have different meanings |
| imagery | A literary reference to the five senses which creates a mental picture; imagery is often achieved through figurative language |
| informational text | Texts that are non-fiction; includes functional, technical, workplace writing, textbooks, newspapers, etc. |
| interpretive comprehension | The ability to make reasonable predictions before, during, and after reading; can draw inferences necessary for understanding; can recognize and connect cause and effect relationships; and can summarize and synthesize information from a variety of written materials |
| literal comprehension | The ability to recall, identify, classify, sequence details and facts, interpret directions, and identify stated main ideas from a variety of written materials |
| literary elements | (Also known as <i>elements of literature</i>) individual aspects or characteristics, like plot, setting, characters, of a whole work of literature; literary elements are not "used" by authors; rather, they exist inherently in forms of literature and are derived by the readers of the work in question; they serve as a way to talk about, organize, and conceptually connect with text |
| literary passage | A portion or section of a larger literary work |
| literary texts | Texts that can be either fiction or nonfiction prose, dramatic, or poetry; what distinguishes literary text is that it is imaginative and many forms do not have to adhere to facts and verifiable information; NWEA has classified biographies, autobiographies and literary essays as literary texts, along with the conventional genres such as short story, legend, fable, tall tale, etc. |

| Term | Definition |
|------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| lowercase | The diminutive written form of a letter; in English, there are two written forms for each letter: uppercase and lowercase |
| map key | An explanatory description or legend to features on a map |
| noun | A part of speech that names a person, place, or thing |
| onset/rime | The initial consonant sound or sounds that come before a vowel in a syllable; the remainder of the syllable is called its rime; in the word back, “b” is the onset and “ack” in the rime |
| paraphrased | A restatement of a text or passage using different phrasing |
| phoneme | A single unit of sound in speech; the English language has around 44 phonemes |
| phonemic awareness | The understanding that words are made up of individual sounds (phonemes); phonemic awareness is a sub-category of phonological awareness |
| phonics | The relationships between the sounds of a language and the letters used to represent those sounds; also a type of reading instruction to teach the sound-symbol correlation |
| phonological awareness | The understanding of the sound structures in language, and the ability to distinguish units of speech, such as words, syllables, and phonemes (e.g., egg is one word which has one syllable and two phonemes) |
| phonogram | A vowel followed by a consonant sound; can be an entire syllable or part of a word (e.g., ack, ing, ed) |
| picture word | A graphic representation of a word |
| poetic genres | Types of poems, such as epics, ballads, dramatic monologues, lyrics, etc.; poetic genres often employ verse, but do not have to; there are many poems that are written in prose, such as free-verse, haiku, etc. |
| prefix | A type of affix that precedes the word, or morpheme, to which it is attached |
| pre-writing | The planning, researching, taking notes, and outlining of a piece of writing |
| problem | A literary element which is a subset of the plot; it refers to the development of the central conflict in a literary work |
| pronoun | A part of speech that refers to a noun or another pronoun; the word the pronoun refers to is its antecedent |
| pronoun referent | The noun or noun phrase that the pronoun is replacing in a sentence (also called the <i>antecedent</i>) |
| publishing | The performance, printing, or distribution of a piece of writing |
| prose | A kind of writing that is unmetred and often follows the natural pattern of speech; prose is often contrasted with verse, that is highly stylized language that is metered; prose can appear in poems, in all genres of fiction and nonfiction, and in drama |
| prose genres | Types of writing characterized by the use of prose; some prose genres are fiction, non-fiction, newspapers, magazines, etc. |
| punctuation | The act or practice of punctuating written work according to agreed upon conventions; punctuation marks are symbols that indicate the structure and organization of writing, as well as intonation and pauses to be observed when reading |
| pre-reading behaviors | The pre-reading behaviors assessed in the Early Literacy Screen Assessment include the following concepts and skills: <ul style="list-style-type: none"> ▪ The ability to identify a person reading, to recognize a book ▪ The understanding of the concepts of beginning, middle, and end ▪ The knowledge that a book tells a story |
| predictable text | Texts that support beginning readers through rhyme, repetition, cumulative sequence, or the use of children’s oral language through familiar songs |
| revising | Reviewing of a piece of writing with the intent to improve organization, sentence and paragraph structures, syntax, transitions, and the overall rhetoric |
| rhyme | The repetition of identical or similar sounds in two or more different words; rhyme generally follows a pattern and is a sonic technique most often used in poetry |
| root word | The primary lexical unit of a word; affixes and inflectional endings can be attached to the root word; also called the <i>stem</i> or <i>base word</i> |

| Term | Definition |
|-------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Schwa | An unspecified vowel sound found in unstressed syllables in the English language |
| segment | To split up a word into its individual phonemes |
| semantic cues | One of the three cueing systems that help readers decode words and text; semantic cues are hints based on the meaning of the words or meaning given via illustrations |
| setting | A literary element that refers to the time and location a story or play takes place |
| simple sentence | A sentence structure that contains one independent clause and no dependent clauses |
| spelling patterns | A spelling system that associates certain combinations of letters with certain sounds and syllables; orthographic structures (e.g., cvc, cvce, c+le) |
| suffix | A type of affix that follows the word, or morpheme, to which it is attached; like prefixes, suffixes often have Greek or Latin origins |
| syllabication | The separation of words into syllables (either written or spoken) |
| syllable | A unit of organization for a sequence of speech sounds; an open syllable ends in a vowel sound; a closed syllable ends in a consonant sound |
| synonyms | Different words with similar or identical meanings |
| text form | Refers to the type of written document, such as list, advertisement, paragraph, etc. |
| word form | Refers to the part of speech, number, tense, gender (when appropriate) and inflectional ending of a given word; it is a term commonly used in morphology, the study of the structure of words |
| writing process | A term used to describe the life cycle of written works in a way that encourages composition students to see writing as an ongoing process; it indicates that writing serves a purpose, and that most writing passes through several clear steps |
| writing web | A graphic organizer, generally used during the prewriting stage of the writing process, that helps students organize their brainstorming ideas and begin to see how the topics and concepts might relate to each other |

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