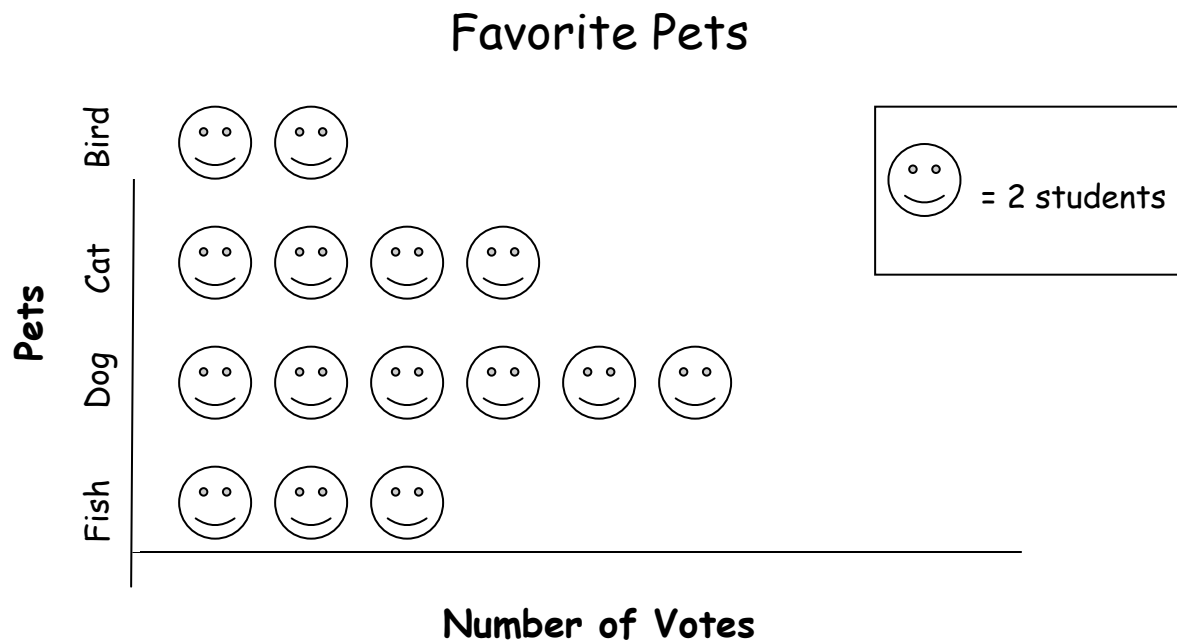


Name \_\_\_\_\_

2.MD.10

Mrs. Jones' class voted for their favorite pets. They then made a pictograph of their favorite pets.



There are \_\_\_\_\_ students altogether.

How many students voted for cats? \_\_\_\_\_

How many more students voted for dogs than birds? \_\_\_\_\_

How many voted for cats and birds together? \_\_\_\_\_



**Teacher notes:**

Draw a picture graph and a bar graph (with single-unit scale) to represent a data set with up to four categories. Solve a simple put-together, take-apart, and compare problems for using information presented in a bar graph.

Collecting data to answer a question is an important skill. Once the data have been collected, representing it in a picture or bar graph helps us analyze what we have discovered. Using an appropriate graph to display data is an important part of this standard. Once the graph has been constructed, it is important that questions are asked to talk about the information that is displayed in the graph. Questions should be more than "How many?" Questions should focus on drawing conclusions, comparing, and make generalizations about the data that are represented in the graph.

Students who demonstrate complete mastery accurately answer all 4 questions. The key tells students that each smiley face represents 2 students. Students will apply the skills of comparing and making generalizations by finding the total number of votes, comparing the number of dogs and birds and finding the total votes for only cats and birds.

Students who demonstrate partial accomplishment accurately answer 2 or 3 of the questions.

Students who demonstrate little accomplishment answer 0 or 1 questions accurately.

<b>Not yet:</b> Student shows evidence of misunderstanding, incorrect concept or procedure		<b>Got It:</b> Student essentially understands the target concept.	
<b>NEEDS IMPROVEMENT (N)</b>	<b>WITH ASSISTANCE (W)</b>		<b>INDEPENDENT (I)</b>
<b>0 Unsatisfactory: Little Accomplishment</b>  The task is attempted and some mathematical effort is made. There may be fragments of accomplishment but little or no success. Further teaching is required.	<b>1 Marginal: Partial Accomplishment</b>  Part of the task is accomplished, but there is lack of evidence of understanding or evidence of not understanding. Further teaching is required.	<b>2 Proficient: Substantial Accomplishment</b>  Student could work to full accomplishment with minimal feedback from teacher. Errors are minor. Teacher is confident that understanding is adequate to accomplish the objective with minimal assistance.	<b>3 Excellent: Full Accomplishment</b>  Strategy and execution meet the content, process, and qualitative demands of the task or concept. Student can communicate ideas. May have minor errors that do not impact the mathematics.

Adapted from Van de Walle, J. (2004) Elementary and Middle School Mathematics: Teaching Developmentally. Boston: Pearson Education, 65