

Lesson 8: Interpret Picture Graphs

Standards Alignments

Building On 1.OA.C.5, 2.MD.D.10

Addressing 2.MD.D.10

Teacher-facing Learning Goals

- Answer questions based on a picture graph.
- Determine whether a question can be answered by a given picture graph.
- Interpret data represented in a picture graph.

Student-facing Learning Goals

- Let's answer questions based on picture graphs.

Lesson Purpose

The purpose of this lesson is for students to read and interpret a **picture graph**, which is a standard way of representing data.

In the previous lesson, students looked at different ways to organize data to make it easier to ask and answer questions about data. In this lesson, students are introduced to a picture graph as a way to represent data. Throughout the lesson, students make sense of the structure and features of a picture graph as they consider what they can learn from a picture graph and the types of questions a picture graph can and cannot be used to answer. They use picture graphs to answer questions about how many are in a category as well as questions that ask them to combine or compare categories.

Access for:

Students with Disabilities

- Representation (Activity 2)

English Learners

- MLR8 (Activity 1)

Instructional Routines

How Many Do You See? (Warm-up)

Lesson Timeline

Warm-up

10 min

Teacher Reflection Question

Reflect on who participated in math class today. What assumptions are you making about those

Activity 1	20 min
Activity 2	15 min
Lesson Synthesis	10 min
Cool-down	5 min

who did not participate? How can you leverage each of your students' ideas to support them in being seen and heard in tomorrow's math class?

Cool-down (to be completed at the end of the lesson)

 5 min

Use a Picture Graph

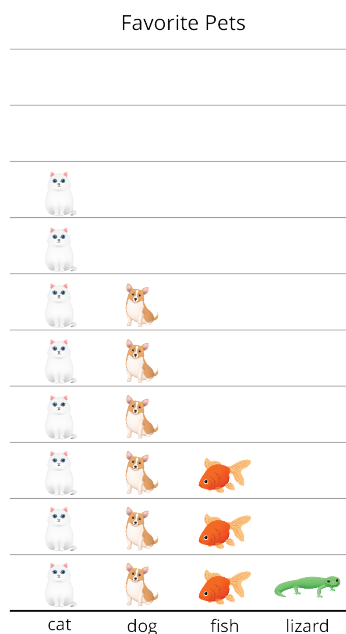
Standards Alignments

Addressing 2.MD.D.10

Student-facing Task Statement

A group of students were asked, "What is your favorite pet?" Their responses are shown in this picture graph.

- Circle the 2 questions that can be answered by the picture graph.
 - How many students chose a cat as their favorite pet?
 - How many more students like rabbits than dogs?
 - Who owns a lizard?
 - How many more students chose cats than dogs?
 - Why don't more students like dogs?
- Pick a question that can't be answered by the data on the graph. Explain why it can't be answered.



Student Responses

- A, D

2. For B, the graph doesn't tell us the number of rabbits.
For C, the graph doesn't tell us the names of the owners.
For E, the graph doesn't tell us why the students choose their pets.