Assessment : End-of-Unit Assessment

Teacher Instructions

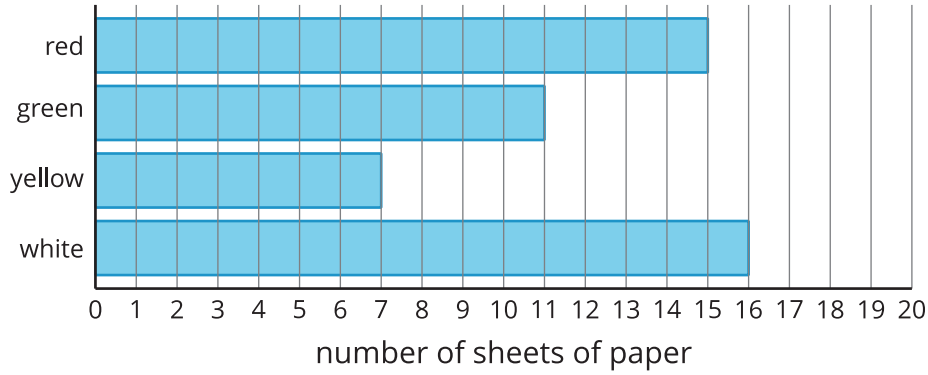
Give students access to connecting cubes.

Problem 1

Students subtract numbers in a data context reading the information from a bar graph. Students may select answer A if they compare red and green sheets of paper which are next to one another on the graph. They may select answer B if they make a small error in their counting or calculation. They may select answer D if they add the number of yellow and red sheets of paper rather than using subtraction.

Statement

The bar graph shows the number of different color sheets of paper on a desktop.



How many more sheets of red paper are there than sheets of yellow paper?

A. 4

B. 7

C. 8

D. 22

Solution

C

Aligned Standards

2.MD.D.10

Problem 2

Students are given data in a table and they create a graph. They may choose to make a picture graph or a bar graph. They are given a pre-made template for the graph, though there are no numbers on the left. This invites making a picture graph but they may also make a bar graph. Some students may make an accurate bar graph but forget to put numbers on the left next to the lines.

Statement

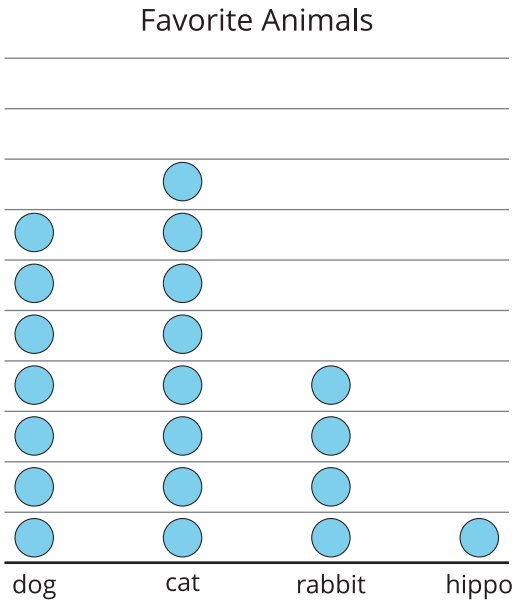
The table shows the favorite animals of some second grade students.

animal	number of students
dog	7
cat	8
rabbit	4
hippo	1

Represent the data shown in the table with a graph. You can make a bar graph or a picture graph.

Solution

Sample response:



Aligned Standards

2.MD.D.10

Problem 3

Students find the missing value to make equations true. This problem gives students the opportunity to perform arithmetic without needing to consider a context. Students may solve these problems using addition or subtraction.

Statement

Find the number that makes each equation true.

1. $7 + \_\_\_\_\_ = 18$
2. $20 - \_\_\_\_\_ = 12$
3. $9 + 7 = \_\_\_\_\_$
4. $19 - 14 = \_\_\_\_\_$

Solution

1. 11
2. 8
3. 16
4. 5

Aligned Standards

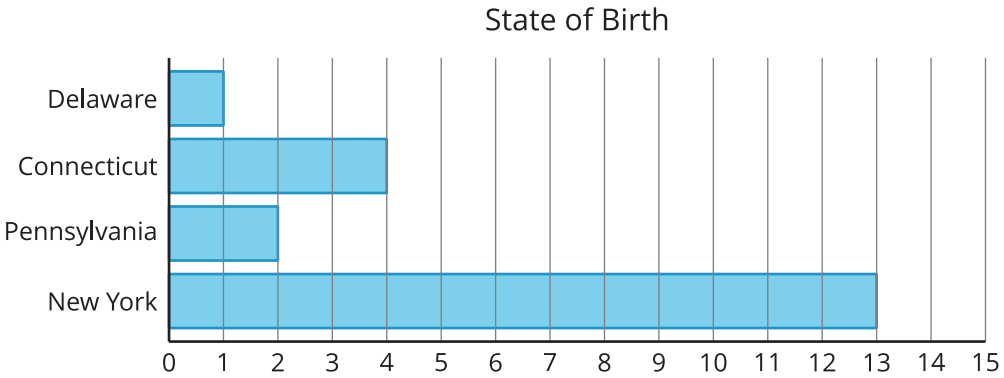
2.OA.B.2

Problem 4

Students are provided information in a bar graph. They will need to read the bar graph accurately and solve addition and subtraction problems based on the data.

Statement

The bar graph shows the states where the students in a second grade class were born.



1. How many students in the class were born in New York?
2. How many students in the class were born in Pennsylvania or in Connecticut?
3. How many fewer students in the class were born in Connecticut than in New York?

Solution

1. 13
2. 6
3. 9

Aligned Standards

2.MD.D.10

Problem 5

Students solve a Compare Smaller Unknown story problem. They may subtract by place value without decomposing a ten. Students may find the sum $48 + 26$ instead of the difference if they do not read the problem carefully.

Statement

A farmer has 48 chickens on her farm. There are 26 more chickens than there are pigs. How many pigs are there on the farm? Show your thinking using diagrams, numbers, words, or equations.

Solution

There are 22 pigs on the farm because there are 48 chickens and $48 - 26 = 22$.

Aligned Standards

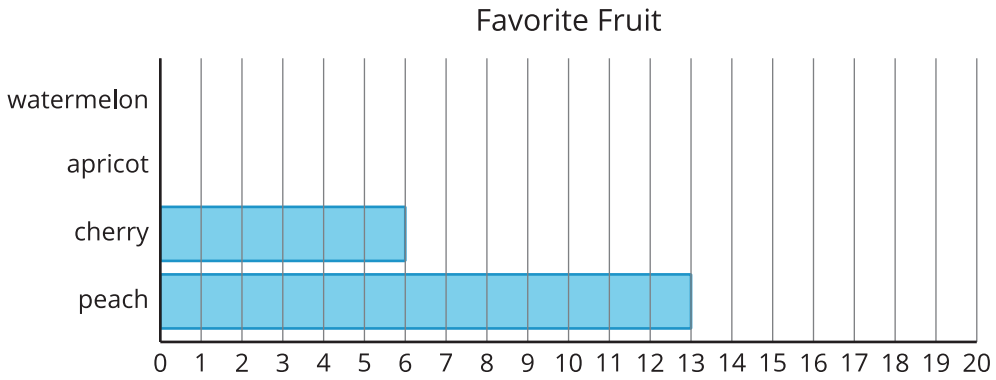
2.OA.A.1

Problem 6

Students interpret a partially filled in bar graph and then solve problems about and complete the graph. The main arithmetic part of the problem is a Put Together Addend Unknown problem which students may solve by adding on or as a Take From Result Unknown problem.

Statement

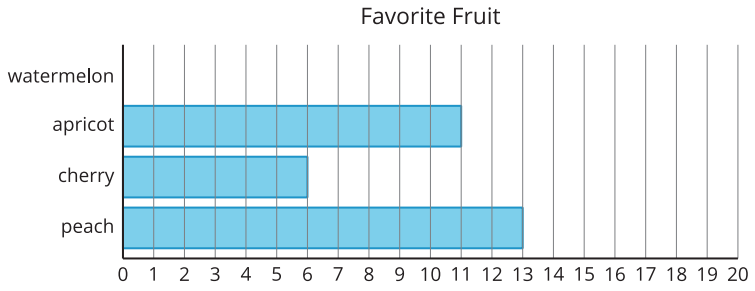
The second grade students at a school chose their favorite summer fruit. The graph shows some of their choices.



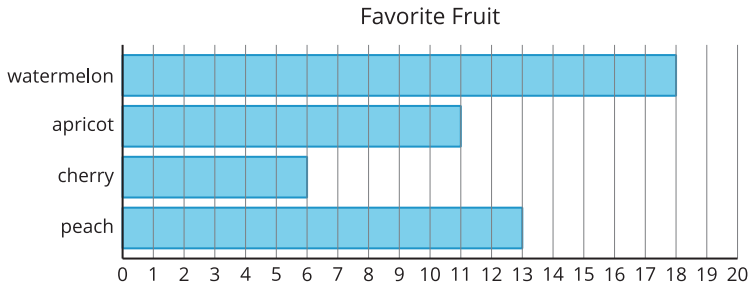
1. How many second graders chose cherry or peach?
2. 11 students chose apricot. Show this on the graph.
3. 29 students chose watermelon or apricot. How many students chose watermelon? Show or explain your reasoning.
4. Show the number of students who chose watermelon on the graph.

Solution

1. 19
2.



3. 18: I took 10 from 29 and that left 19 and then I took 1 more and that leaves 18.
4.



Aligned Standards

2.MD.D.10, 2.OA.A.1