Pill Bug Data Detectives

Choose organizers that fit science data.

3.1.F "construct appropriate graphic organizers to collect data, including tables, bar graphs, line graphs, tree maps, concept maps, Venn diagrams, flow charts or sequence maps, and input-output tables that show cause and effect; and"

NAME _____ DATE _____

1 READ AND MARK

Read it twice

YOUR JOB Circle each graphic organizer named in the passage, then underline the words that tell what it helps scientists do.

Organizing a Garden Study

1. During a schoolyard study, Ms. Lee's class checked one garden bed at the same time for four days. Students gently looked under loose leaves and counted the pill bugs they found. They put each day's count in a data table. A table keeps labels and numbers in neat rows, so the class could collect observations without mixing up the days.

PILL BUGS FOUND IN THE GARDEN BED

Day	Pill bugs counted
Monday	6
Tuesday	9
Wednesday	7
Thursday	11

2. After collecting the numbers, the class made a bar graph. The days went along the bottom, and the number of pill bugs went up the side. One bar showed each day's count. A bar graph makes it easy to compare amounts, such as finding which day had more or fewer pill bugs than another day.

3. Graphic organizers can also show other kinds of science thinking. A Venn diagram helps sort ways two habitats are alike and different. A flow chart or sequence map puts investigation steps in order. An input-output table can show cause and effect, such as how the amount of water given to a plant affects its growth.

2 ANSWER WITH EVIDENCE

Use the passage

1. Use the pill-bug data table. What labels should go along the bottom and the side of a bar graph made from this data?

2. A student has counts for four kinds of rocks and wants to compare the amounts quickly. Which graphic organizer should the student make? Why?

3. A scientist wants to sort ways a frog and a turtle are alike and different. Which graphic organizer should the scientist use? What does it show?

4. Name an organizer for each job: showing investigation steps in order, and showing how hours of sunlight may affect plant height.

3 YOUR TURN

Your own words

Take 10 crayons from a crayon box. Sort them into four color groups, then fill in the data table with each group and its count. Your four counts must total 10.

COLOR GROUP	NUMBER OF CRAYONS

ANSWER KEY

Pill Bug Data Detectives

GRADE 3 · TEKS 3.1.F

PART 1 · READ AND MARK

Circle each graphic organizer named in the passage, then underline the words that tell what it helps scientists do. Accept any marking that follows this job and points at the right text.

PART 2 · ANSWERS

#	QUESTION	ANSWER
1	Use the pill-bug data table. What labels should go along the bottom and the side of a bar graph made from this data?	**The days go along the bottom. The number of pill bugs counted goes up the side.**
2	A student has counts for four kinds of rocks and wants to compare the amounts quickly. Which graphic organizer should the student make? Why?	**A bar graph, because it makes amounts easy to compare.**
3	A scientist wants to sort ways a frog and a turtle are alike and different. Which graphic organizer should the scientist use? What does it show?	**A Venn diagram. It shows how the frog and turtle are alike and different.**
4	Name an organizer for each job: showing investigation steps in order, and showing how hours of sunlight may affect plant height.	**Use a flow chart or sequence map for steps in order. Use an input-output table to show how sunlight may affect plant height.**

PART 3 · YOUR TURN (SAMPLE ANSWER)

COLOR GROUP	NUMBER OF CRAYONS
Red	3
Blue	2
Green	2
Other colors	3

Accept clear labels that match the passage, including sequence map for flow chart. For the table task, accept any four color groups with accurate counts that total 10.