

Sample Student Work Using “The Big Q”

Examples covering grades 1-5 are linked below. For each grade’s sample problem, two different approaches are provided to illustrate the variation in students’ use of the graphic organizer known as “The Big Q.” Observe that students may employ abbreviations and “shorthand,” which are acceptable to the extent that the students’ ideas are communicated fully to the teacher. All samples shown below would be considered “proficient” when graded.

○ What would 1st-grade examples of “The Big Q” look like?

- A A 1st-grade problem is about seashells. For younger students a pre-printed “Big Q” form may be provided as shown.
- In [sample 1A](#), the student added.
 - In [sample 1B](#), the student counted.

○ What would 2nd-grade examples of “The Big Q” look like?

- A A 2nd-grade problem compares quantities of starfish.
- In [sample 2A](#), the student drew a picture and wrote a number sentence.
 - In [sample 2B](#), the student labeled the graph and subtracted.
 - In [sample 2C](#), the student drew a picture.

○ What would 3rd-grade examples of “The Big Q” look like?

- A A 3rd-grade problem asks about students in Mrs. Callaway’s class. Instead of writing on a pre-printed “Big Q” provided by the teacher, students simply draw their own “Big Q” in an area of empty space beside the problem.
- In [sample 3A](#), the student created a number line.
 - In [sample 3B](#), the student constructed a chart of place values.

○ What would 4th-grade examples of “The Big Q” look like?

- A A 4th-grade problem is concerned with Donald’s distribution of lollipops.
- In [sample 4A](#), the student drew a picture.
 - In [sample 4B](#), the student used two strategies—working backward from the answer choices and drawing a picture.

○ What would 5th-grade examples of “The Big Q” look like?

- A A 5th-grade problem describes Sissy’s quilting project. Students may use different words for the same idea (such as “reducing”=“simplifying” and “whole”=“total”) as they express their understanding. In both samples, the students used a graphic organizer called a “factor tree” to help them break down the numbers during Step 3.
- In [sample 5A](#), the student used the “#” symbol to mean number/quantity.
 - In [sample 5B](#), the student abbreviated “prime factor” by using the notation “PF.”