Answer on Question #78687 - Chemistry - General Chemistry

Question:

Two students performed the same experiment, testing how far iodine will diffuse through starchy tissue, such as potatoes. They cut 5 potato squares each, all of equal sizes, and placed them into small cups with iodine solution for 15 minutes. Then they measured how far from the edge of the potato the iodine diffused into the potatoes, in millimeters.

Student 1Student 2Distance Diffused (mm)Trial 13.253.14Trial 23.173.43Trial 33.263.22Trial 43.643.37Trial 53.443.28

[Distance Diffused(mm) Trial 1 Trial 2 Trial3 Trial 4 Trial 5 Student 1 3.25 3.17 3.26 3.64 3.44 Student 2 3.14 3.43 3.22 3.37 3.28]

Whose results are more reliable, why?

- A. Student 1, because they have a wider range.
- B. Student 2, because they have a wider range.
- C. Student 1, because they have a narrower range.
- D. Student 2, because they have a narrower range.

Solution:

So, correct answer is D - Student 2, because they have a narrower range.

Answer: D. Student 2, because they have a narrower range.