

Decimals at the Library: Why does that book go there?

STANDARDS

Content: Order number values

Content: Give evidence of steps taken to solve a problem

Process: Use time constructively

Process: Compare and contrast relationships of elements

TASK

The LRC Director loves to have students use all the resources available in the library. This month he is spotlighting nonfiction books. He wants to advertise how easy it is to find any nonfiction book with the help of the Dewey Decimal System. In order for the Dewey Decimal System to work, books must be shelved according to call numbers which are made up of decimals and letters. If books aren't put away in the correct spot it can be difficult to find what you are looking for.

Before the LRC Director makes his advertisement he wants your help. He has asked each of you to do three trial inspections. You will randomly choose 3 books and prove they are properly shelved. The LRC Director says most confusion comes from ordering the decimals of call numbers rather than from ordering the letters. Therefore, you will go to the LRC and browse the nonfiction shelves until you come across 3 books in a row, each with a different decimal part of their call numbers. You must then prove the middle book belongs there by comparing its call number to the book on its left (the hopefully smaller number) and the book on its right (the hopefully larger number).

Your evidence will follow the steps modeled in class- including lining up decimal places, annexing zeros, crossing off, and circling the telling place value. You will then be asked to make a concluding greater than/less than statement using the two values and the appropriate symbol (> or <). You will do this 3 times at 3 different places in the LRC.

RUBRIC

Criteria	6	5	4 - 3	2 - 0
Evidence is given as to why the chosen book belongs between two call numbers	All 6 problems have decimal points lined up with appropriate work shown (annexing, crossing off, and circling making it clear why order was decided as it was)	5 problems have decimal points lined up with appropriate work shown (annexing, crossing off, and circling making it clear why order was decided as it was)	4 - 3 problems have decimal points lined up with appropriate work shown (annexing, crossing off, and circling making it clear why order was decided as it was)	2 - 0 problems have decimal points lined up with appropriate work shown (annexing, crossing off, and circling making it clear why order was decided as it was)
	3		2	
Greater than or less than statements are accurately written	All 6 statements are correct		5 - 4 statements are correct	3 - 0 statements are correct
Time is used constructively	Stayed on task and did own thinking (did not copy answers) to complete task		Needed a reminder to keep on task or to not just copy answers from others	Needed more than one reminder to keep on task and/or to not just copy answers from others

Total _____ / 12

Ordering Decimals



Name _____
6th Grade Math

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Please fill out the following work page as you accomplish this task.

Inspection 1

1. Browse through the nonfiction shelves until you come across three books in a row that each have a different call number (not just different letters, but also different numbers). For example: 567 ARN, 567.01 HEI, and 567.013 AAR.
2. Write the three numbers here (you can leave off the letters)

Book A (smallest)

Book B (in the middle)

Book C (largest)

3. Prove that Book A is shelved correctly by being before Book B. Show evidence (as modeled in class) below.

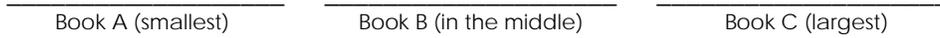
Greater than/less than statement: _____

4. Prove that Book B is shelved correctly by being before Book C. Show evidence (as modeled in class) below.

Greater than/less than statement: _____

Inspection 2

- 5. Browse through another section of the nonfiction shelves until you come across three books in a row that each have a different call number (just like before...not just different letters, but also different numbers).
- 6. Write the three numbers here (you can leave off the letters)



- 7. Prove that Book A is shelved correctly by being before Book B. Show evidence (as modeled in class) below.

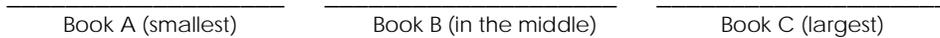
Greater than/less than statement: _____

- 8. Prove that Book B is shelved correctly by being before Book C. Show evidence (as modeled in class) below.

Greater than/less than statement: _____

Inspection 3

- 9. Browse through another section of the nonfiction shelves until you come across three books in a row that each have a different call number (just like before...not just different letters, but also different numbers).
- 10. Write the three numbers here (you can leave off the letters)



- 11. Prove that Book A is shelved correctly by being before Book B. Show evidence (as modeled in class) below.

Greater than/less than statement: _____

- 12. Prove that Book B is shelved correctly by being before Book C. Show evidence (as modeled in class) below.

Greater than/less than statement: _____