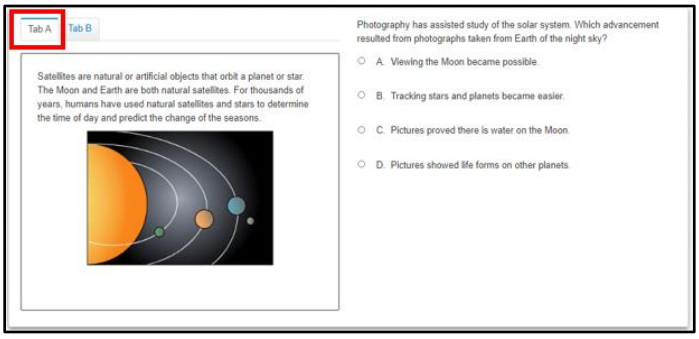
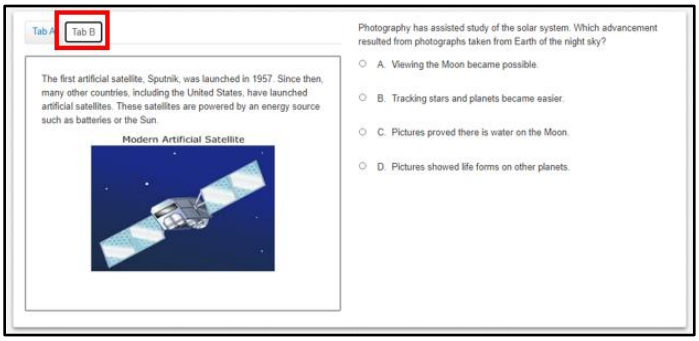
Science MCA-IV New Items Tutorial Teacher Guide

This guide provides educators with details on the new tabbed phenomena and constructed-response items students will experience as field test items on the Science MCA in spring 2021. In order for tabbed phenomena and constructed response items to be included in the Science MCA-IV, they need to be field tested in the current Science MCA in spring 2021.

In order to ensure that students are familiar with these new elements, MDE has created the Science MCA-IV New Items Tutorial (PearsonAccess Next > Preparing for Testing > Student Tutorial). Educators may also access the tutorial to familiarize themselves with it before using the tutorial with students. Standard text-to-speech is available if students need audio support for the text in the Science MCA-IV tutorial.

Note: Field test items do not count towards a student's score, but it is critical that students are familiar with these new elements and complete them to the best of their abilities. Field testing is the process MDE uses to develop and construct tests for future years. The same test security procedures also apply to field test items. Additional resources for educators are available on the Testing 1, 2, 3 website (under the Science accordion).

Science MCA-IV	Sample Screenshot
Tabbed Phenomena For Science MCA-IV, the stimuli will be based on phenomena, which are observable events occurring in the universe that can be explained or predicted with scientific reasoning. The text, graphics, animations, or simulations included in the phenomenon will be used to provide context for the student to engage in the items. For MCA-IV, the items will be organized within phenomena instead of scenarios. Students will see a split screen showing the science scene and question. The left side of the screen will display the scene, while the question and answer choice(s) are shown on the right. Phenomena may be shown on multiple tabs. Students must select each tab to view the full phenomena. Students may need to drag the scrollbar up or down to see the whole tab or question. The tab that appears with the question has the information students need to answer the question. Students can use text-to-speech to listen to the information on this tab. Students may also view information on other tabs to help them answer the question; however, text-to-speech is only available on the tab that first appears.	 

Pearson

Science MCA-IV	Sample Screenshot
Constructed Response Items For constructed response items, students compose their own answer to the question or prompt by entering their response into the text box using the keyboard or touchscreen on their device. Students must enter at least 1 character for the question before they can go to the next item. Students will be scored based on their understanding of science concepts and practices, and not on their grammar, spelling, or sentence mechanics. • A variety of text formatting options are available within the text box: bold, italics, underline, bulleted lists, and numbered lists. Students may use these formatting tools, but they are not required. Note: On iPads, once selected, the formatting buttons cover the first line of text, making it difficult to format text on the first line. • The Undo and Redo buttons are available to remove or add back text entered. • Spell Check is available for students to confirm correct spelling if they wish. If the Spell Check button is selected, words that may be incorrectly spelled will appear with a red underline. Students can select the red underlined word to view suggested spelling corrections. The response is limited to 1,000 characters (e.g., letters, numbers, punctuation, spacing) for all constructed response items.