Power Up: Science ACT Prep, Week 10

Teresa Lansford, Matthew McDonald
Published by *K20 Center*

This work is licensed under a Creative Commons CC BY-SA 4.0 License

Time Frame 35 minutes

Essential Question(s)

How can I increase my ACT score?

Summary

In this activity, students will practice pacing and testing stamina using TestNav as they take an online practice Science ACT. This is the tenth activity in a 10-week "Power Up" series for Science ACT prep.

Learning Goals

- Practice and reflect on pacing to increase the number of questions answered on the science portion of the ACT.
- Navigate efficiently through TestNav during a practice test.

Attachments

- Activity Slides—Science ACT Prep, Week 10.pdf
- Activity Slides—Science ACT Prep, Week 10.pptx

Materials

- Activity Slides (attached)
- Pencil
- Paper
- Student devices with internet access

5 minutes

Introduction

Teacher's Note: ACT Enhancements

The following resource has been updated to better align with the test changes that began in April 2025 for the online test and in September 2025 for the paper-pencil test. Some outside resources linked are based on the previous version of the ACT. Learn more about enhancements to the ACT in 2025.

This practice resource, while aligned to a previous version of the ACT, still provides valuable practice for students.

Introduce the activity using the attached **Activity Slides**. Share the essential question on **slide 3** and the learning objectives from **slide 4** to the extent you see fit.

Show **slide 5** and have students get their device and scratch paper; follow regular classroom procedures for this.

Display **slide 6** and direct students to either navigate to home.testnav.com or open the TestNav application on their device.

Spend 2-3 minutes transitioning through **slides 7-10**, directing students through the steps to get to their practice test.

1. Navigate to the ACT practice test through TestNav.
2. Click “Practice Tests.” It will be located below the Sign-in option. You do not need to sign in to access these practice tests.
3. Click “Science.”
4. Click “Science - Timed.”
5. Read the directions.
    - These are directions and advice about the test and using TestNav.
    - Students can, but do not need to, enter their name.
    - Students do not need to write final answers on a piece of paper.
6. Press the “Start” button.
7. Read the directions.
    - These are directions and advice about taking the online science test.
    - Students do not need to write final answers on a piece of paper.
8. Have students stop and wait for you to tell them to press the “Start” button.

35 minutes

Activity

Teacher's Note: Guiding the Activity

This test will take 35 minutes. For classes that are only 35 minutes long, try to have students come prepared to take the test for the whole time. If you run out of time, give students a 5-minute warning before the end of class.

Show **slide 11**. Read the directions for the science test on slide 11. These are directions and advice about taking the science portion of the ACT. Emphasize to students that when they press start their timer begins, but they are going to read the directions now so they are familiar and do not waste time on the practice or real exam. Knowing these directions lets them skip over this screen and start the work of the test immediately.

Let students know that they will have 35 minutes to answer 40 questions.

Display **slide 12** and direct students to begin. Tell them they can now press the “Start” button and to press the arrow for the next button to begin the test. The “Next” button is the blue arrow in the upper-left corner of the screen.

TestNav will display a five-minute warning. With about 5 minutes remaining, you can remind students to not leave any questions blank. Direct them to go ahead and select answers for all 40 questions by guessing now and then go back to doing what they can with time remaining. After the test be sure to let students know that for the real test, they will not get a reminder to guess but that making sure all answer choices are filled in can help their overall score.

After time is up on TestNav, display **slide 13** and have students record how many questions they answered correctly.

If you would like them to compare their answers correct to what their ACT score for science would be, unhide **slide 14** and have students take a moment to find their score as time allows.

To celebrate completion of the practice test and the ten week prep series, show **slide 15**: You Powered Up! and have students reflect on how well they paced themselves during the practice test today.

Encourage students to continue to work towards the actions on their goal sheets from week 1 and add new goals as they “power up” their score.

Research Rationale

Standardized testing in high schools has long stood as a metric for assessing college readiness and school accountability (McMann, 1994). While there has been debate surrounding the accuracy of such metrics, as well as concerns regarding fairness, many institutions of higher education continue to make these scores part of the admissions process (Allensworth & Clark, 2020; Black et al., 2016; Buckley et al., 2020). Aside from admissions, it is also important to keep in mind that standardized test scores can also provide students with scholarship opportunities they wouldn't otherwise have (Klasik, 2013). Though the topic of standardized testing continues to be debated, effective test prep can ensure that our students are set up for success.

With several benefits to doing well on college admissions tests, it is important to consider how best to prepare students for this type of high-stakes test. Those students from groups that may historically struggle to find success, such as those in poverty or first-generation college students, especially stand to benefit from effective test preparation (Moore & San Pedro, 2021). The American College Test (ACT) is one option students have for college admissions testing that is provided both at national centers and school sites. Taking time to understand this test including the timing, question types, rigor, and strategies for approaching specific questions can help to prepare students to do their best work on test day and ensure their score is a more accurate representation of what they know (Bishop & Davis-Becker, 2016).

Resources

- Allensworth, E. M., & Clark, K. (2020). High school GPAs and ACT scores as predictors of college completion: Examining assumptions about consistency across high schools. *Educational Researcher*, 49(3), 198-211.
- Bishop, N.S. & Davis-Becker, S. (2016). Preparing examinees for test taking: Guidelines for test developers and test users. 2nd edition. Crocker, L. (Ed). In *Handbook of Test Development* (pp. 129-142). Routledge.
- Black, S. E., Cortes, K. E., & Lincove, J. A. (2016). Efficacy versus equity: What happens when states tinker with college admissions in a race-blind era? *Educational Evaluation and Policy Analysis*, 38(2), 336–363. http://www.jstor.org/stable/44984542
- Buckley, J., Baker, D., & Rosinger, K. (2020). Should state universities downplay the SAT? *Education Next,* 20(3).
- Klasik, D. (2013). The ACT of enrollment: The college enrollment effects of state-required college entrance exam testing. *Educational Researcher*, 42(3), 151–160. http://www.jstor.org/stable/23462378
- McMann, P. K. (1994). The effects of teaching practice review items and test-taking strategies on the ACT mathematics scores of second-year algebra students. Wayne State University. https://www.monroeccc.edu/sites/default/files/upward-bound/McMannP.-the-effects-of-teaching-practice-review-items-ACT-mathematics-second-year-algebra.pdf
- Moore, R., & San Pedro, S. Z. (2021). Understanding the test preparation practices of underserved learners. *ACT Research & Policy*. Issue Brief. ACT, Inc. https://files.eric.ed.gov/fulltext/ED616526.pdf