Power Up: Math ACT Prep, Week 5

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Published by *K20 Center*

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Time Frame 35 minutes

Essential Question(s)

How can I increase my ACT score?

Summary

In this activity, students will reflect on how they are feeling about the upcoming ACT, and then take a 10-minute practice test. Students will analyze their questions and reflect on why they may have guessed on any of the questions. This is the fifth activity in a 10-week "Power Up" series for ACT prep.

Learning Goals

- Analyze why you might guess on an ACT question.
- Evaluate current performance regarding accuracy and pacing.

Attachments

- Activity Slides—Math ACT Prep, Week 5.pdf
- Activity Slides—Math ACT Prep, Week 5.pptx
- Checkpoint Challenge—Math ACT Prep, Week 5.pdf

Materials

- Activity Slides (attached)
- Checkpoint Challenge (attached; one per student; printed front/back)
- Goal Setting handout (from week 1)
- Pencil
- Paper
- Calculators
- Coloring Utensils (optional; 3 per student)

10 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.

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 ask students how they feel about the math portion of the ACT. Have students indicate their answer by moving to the left or right side of the room as shown on the slide.

Once students are in one of the two groups, direct students to discuss with someone in their group about why they moved to that side of the room.

After a couple of minutes, have everyone from one side of the room find a partner from the other side of the room such that everyone who is feeling confident about the math portion of the ACT is paired with someone feeling less confident. If there were unequal quantities of students on each side of the room, have students get into small groups of 2-3 where everyone in the new group did not have the same initial feelings about the math portion of the ACT. Then direct students to share with their partner(s) why they feel the way they do about the math portion of the ACT.

After a couple of minutes, have students finish their discussions and show **slide 6**. Share with the class the famous quote from Henry Ford: *Whether you think you can or think you can't, you're right*. Help explain to students the importance of having a positive attitude and that impacting their level of success.

Have students return to their seats and get their calculator out; follow regular classroom procedures for this.

20 minutes

Activity

Display **slide 7** and give each student a copy of the attached **Checkpoint Challenge** handout and a piece of notebook paper. Have students use the notebook paper to cover the questions on the handout. Let them know that they will be allowed to use it for scratch work. Once everyone has a copy of the handout, tell them to move their notebook paper and begin. Start the 10-minute timer on the slide.

After the time expires, show **slide 8** and introduce students to the GUS Method instructional strategy. Then direct them to make a note next to each question indicating their feelings towards the answer they selected. They can write G, U, or S (or use the visual graphics on the slide: question mark, tilde, or check mark) next to each question. Students may want to use three different coloring tools to indicate their three options:

- **G** (question mark) means they **guessed** when selecting one of the answer choices and have no clue how to solve the problem.
- **U** (tilde) means they eliminated some wrong options, but are **unsure** if they selected the right answer choice.
- **S** (check mark) means they are completely **sure** about their answer selection.

Show **slide 9** and review the answers with the class. Remind students that the ACT is not designed for everyone to earn a perfect score and that it is okay if they only answered approximately half of the questions correctly on this assessment.

Briefly have students look at the questions they answered correctly and marked that they guessed on that question. Remind students that the chance of getting a question correct is why they should never leave a question blank on the ACT.

Move to **slide 10** and direct students' attention to the questions that they marked with a "G" for having guessed on the question. Tell students to make a note of why they guessed by writing "what" or "how" next to those question(s):

- **WHAT?** Were they unsure of what the question was asking for? Were they unsure of what skill the questions was asking them to demonstrate?
- **HOW?** Were they unsure of how to do the math? Were they unsure of how to demonstrate the requested skill?

Give students 1-2 minutes to make these notes on their handout.

Transition through **slides 11-23** and spend time on the slides that correspond to the questions your students guessed on.

Teacher's Note: Guiding the Activity

These questions are much like those from the ACT where they increase in difficulty as the question number increases.

Have students take the following idea into consideration: *If they were not efficient on questions 1-4, for example, and they guessed on questions 7-9, then they likely still have time to actually try out the last question.* Remind students that there is a delicate balance between accuracy and pacing on the ACT.

5 minutes

Wrap-Up

Show **slide 24** and have students take a moment to think about if they were more impacted by the "what" or the "how" of the practice questions. Let students know if they struggled with understanding **what** the question was asking for, then maybe they need to slow down when they are reading the question. It is more important to get some of the questions answered correctly and not read every question, than to read every question and just guess through the entire exam. Let students know if they struggled with understanding **how** to do the math, then maybe they need to study differently, create flashcards with formulas, etc.

Show **slide 25**. Have students get out their Goal Setting handout from week 1 and ask students to read through the list of possible actions on their handout and commit to a new action they can practice in the coming weeks. Remind them that in the coming weeks they will have the option to add other actions. For now, based on what they know about themselves and their goals, have them commit to just one action they can take and practice as a habit. Have students record the number of their selected action in the chart at the bottom of their handout. If they prefer and have enough room, students can instead copy the entire goal.

Before you dismiss, show **slide 26**: *You Powered Up!* and remind students to use the columns to record each date they practice that skill to power up their ACT abilities.

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.
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