Power Up: Science ACT Prep, Week 1

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Time Frame 35 minutes

Essential Question(s)

How can I increase my ACT score?

Summary

In this first ACT science prep activity, students will focus on reflecting on their score from taking the test and setting a goal for a future ACT. First, students review and reflect on test-taking tips from other students. Then students review their existing science scores before setting a goal to reach on the ACT and the science test when they take the test again. Students choose at least one action to practice as a good habit leading up to the ACT, and they record their progress towards meeting their goal. This is the first activity in a 10-week "Power Up" series for ACT prep.

Learning Goals

- Understand the purpose of the ACT and the importance of the science section.
- Evaluate current ACT performance and set a realistic goal for the overall test and the science component.

Attachments

- Activity Slides - Power Up_ Science ACT Prep, Week 1.pdf
- Activity Slides - Power Up_ Science ACT Prep, Week 1.pptx
- Goal Setting—Science ACT Prep, Week 1 - Spanish.pdf
- Goal Setting—Science ACT Prep, Week 1.pdf
- MyACT Quick Start Guide.pdf

Materials

- Activity Slides (attached)
- Goal Setting handout (attached; one per student)
- MyACT Quick Start Guide document (attached; for teacher use)
- ACT score report (obtained from site testing coordinator or by students from my.act.org)
- Sticky notes (one per student)
- Coloring utensils (highlighters or colored pencils; 1–2 per student)
- Pencil/pen
- Device to access ACT score or a printed report (for each student)
- Calculators (optional)

Preparation

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.

The science portion of the ACT is now optional.

Learn more about enhancements to the ACT in 2025.

Standardized testing, particularly the ACT, continues to be a metric used by many universities and scholarship organizations. Now is the time to motivate students to “power up” their ACT knowledge and show what they know on this important test. Many students lack knowledge of basic tips and tricks that could lead to big score gains, and some need a refresher on specific content that the ACT assesses. This 10-week series addresses key components of the science assessment and equips students with what they need to boost their scores.

Coordinate with the site testing coordinator to make sure students have their ACT score report paper or access to their ACT ID number and the month and year that they took the ACT. Make sure students have access to this information prior to this ACT-prep activity.

Have your school’s average ACT scores for this first goal setting activity. Students without ACT scores can use the school’s average ACT scores for this activity. There will be opportunities later on in this series for students to compare their first set of scores to new ones after they have taken a practice test.

If students do not have an online account, help them create one using the attached **MyACT Quick Start Guide**, which provides detailed instructions for creating an online account.

5 minutes

Introduction

Introduce the activity using the attached **Activity Slides**. Share the essential question on **slide 3** and the learning objectives from **slide 4**. Next, display **slide 5** and explain to students that they will be watching a video with tips from students who have taken the ACT and are sharing what has worked for them.

Play the video on the slide, "ACT Advice from Students #1."

Embedded video

https://youtube.com/watch?v=wLh_pAi1bXs

Show **slide 6** and ask students to share the Point of Most Significance (POMS) from the video. What point or suggestion did they feel was the most valuable?

25 minutes

Activity

Show **slide 7** and direct students to access the ACT student portal at my.act.org. Let students know that they can track their progress and set goals from test to test if they have access to their ACT online portal.

Have students navigate to their score report. Hand out the **Goal Setting** handout. Display **slide 8** and have them use coloring utensils to fill in their current composite score and science score, but have them wait to fill in their goals.

Teacher's Note

As students complete their Goal Setting handout, be mindful that some students may feel insecure or embarrassed by their scores. Be intentionally encouraging and remind students that the purpose of this 10-week series is to improve their scores.

Display **slide 9**. Share with students that, while some schools are moving toward a test-optional format, the ACT can be important in obtaining scholarships and school admissions. If you have students who plan to enter the workforce directly after high school, let them know that improving this score can provide more options if they later decide to pursue a degree or obtain certifications. This ACT practice helps with general test preparation and reading comprehension skills that can transfer to other areas of life. Share that their scores are also used to show the state what students have learned. If your school has an average goal to achieve, you can share that here.

Display **slide 10**. This slide shows how many science questions a student must get correct to get each ACT score from 1 to 36. For example, to score a 28, they would need to answer 31 questions correctly.

Invite students to set a goal for a range of scores. First, ask students to consider what goal they can reach for their next composite and science scores, thinking about what they have just seen on the previous slides. Recommend one step above where they currently are, but allow students to set a goal for two steps if you feel like they are ready for the commitment and dedication it would take for a more significant score jump. Remind students that they can improve their score each time they take the test and that this goal is only for the next time they take the test at school. Direct students' attention back to the slide and ask them to look at the rows with scores in their range. Have them record on their goal sheet the number of problems they would need to get correct.

Teacher's Note: Slide 10

The official ACT exam may have a different key to convert the number of questions correct (raw score) to the scale of 1-36 (scale score). **The chart on the slide serves as a helpful estimate.**

Move to **slide 11,** which has directions for calculating the percentage of correct answers students would need to meet their goal. Using a calculator or scratch paper, have students find their goal percentage by taking the number of questions they recorded on their goal sheet and dividing it by the total number of questions on the science test (40). Have them multiply that answer by 100 and record the percentage.

Ask the class to think about the following question: "*What is an action you can take between now and the next ACT exam to help improve your score?*"

After giving the students a few moments to think, move to **slide 12**. Ask students to read through the list of possible actions on their handout and commit to one action they can practice in the coming weeks. Explain 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.

Ask students to use the columns to record each date they practice that skill to power up their ACT abilities.

Teacher's Note: Goal Setting and Fee Waivers for Future ACT Tests

Students may want a much larger jump for their scores. Encourage dreaming big but setting smaller obtainable goals along the way. Students can set one of these smaller goals for themselves and plan to increase that goal once they meet it. Let students know that just taking a test multiple times can help to improve their score because they will become familiar with the test setting and content.

For students who might be concerned about testing costs, share information on fee waivers available to some students using the video on **slide 13,** "How to Apply for an ACT Fee Waiver," or direct students to ACT Fee Waiver Program.

Embedded video
https://youtube.com/watch?v=8KVRiyY6h0I

Teacher's Note: Goal Setting Handout

The Goal Setting handout will be important for this 10-week series of activities. Students will set new goals at two other times in the coming lessons and need this sheet for reference. Keep your students' sheets in the classroom if possible. Consider having students take pictures of their Goal Setting handouts to help remind them to practice their goals.

If you do not have the space to keep students' Goal Setting handouts in your classroom, encourage students who have a device to take a picture of their goal sheet to keep. Let them know to bring the handout back to class with them each time.

Direct students to put their Goal Setting handouts in a designated space and remind them that they will revisit the handout at a later time. If time allows, recommend to students that they set an alarm or reminder on their device to help them remember to practice their selected action.

5 minutes

Wrap-Up

For a helpful visual representation of classroom goals and to monitor goal setting, use the strategy Sticky Bars as an Exit Ticket for the activity. Find space on a wall or use large chart paper and put the numbers 1–6 along the bottom x-axis. Display **slide 14**. Give each student a sticky note and have them write their name on the note. Next, have students come up to the chart and place their notes above the goal they selected, creating a bar graph. This visual can be used from week to week to check in with students about whether they are working on their goals or to discuss which goals are most important to the class.

Teacher's Note: Sticky Bars Location

If space is a concern, do the Sticky Bars activity and then take a picture. You can add this picture to the slides for future ACT lessons as a goal check-in.

Next Step

Next week's activity, Power Up: ACT Science Prep, Week 2 will review common ACT science vocabulary and can be found here: "Power UP: Science ACT Prep, Week 2."

Research Rationale

Standardized testing in high schools has long been used 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). In addition to admissions, it is important to keep in mind that standardized test scores can also provide students with scholarship opportunities they would not otherwise have (Klasik, 2013). Although the topic of standardized testing continues to be debated, effective test preparation 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. 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 the time to understand this test, including the timing, question types, rigor, and strategies for approaching specific questions, can help 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

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