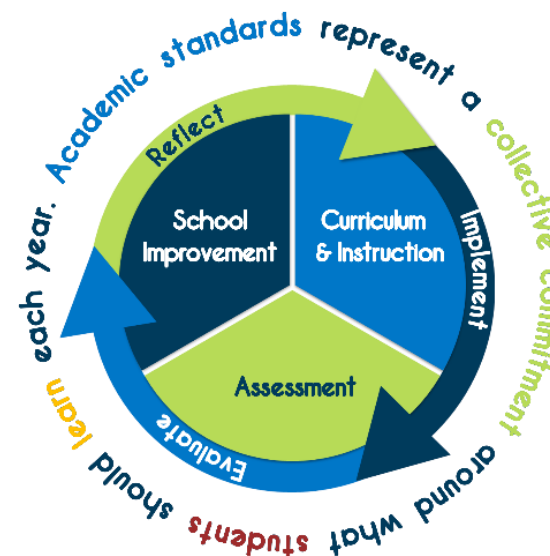


Samples to Success

Sample items provide valuable insight into how students engage with different texts, tasks, and contexts, highlighting the types of opportunities they need for success in the classroom. These items offer a shared reference point for understanding proficiency expectations, complementing the assessment's role in measuring learning.

By analyzing items alongside performance data, educators can gain a deeper understanding of students' strengths and areas for growth. Students thrive in environments rich with diverse materials, challenges that vary in task type, and multiple avenues for demonstrating understanding. High-quality instruction, aligned with the learning goals, is the most effective way to support students' growth and prepare them for success.

The items featured below are representative of those found on the ACT. The ACT assesses content in clusters where a single stimulus or related stimuli are provided and then followed by a series of multiple-choice items. The samples below represent a single item taken from a larger cluster of items to illustrate the different types of stimuli with which students interact.



Evaluating Scientific Arguments and Models with Evidence

Use HS Item Stimuli with items below

Below Proficient (CAT1-A)	Approaching Proficient (CAT1-B)	Proficient (CAT1-C)	Above Proficient (CAT1-D)
According to Scientist 2, friction between the rocks and the clay is reduced by which of the following? A. Ice only B. Algae only C. Ice and mud only D. Mud and algae only	Consider the statement “The <i>B. germanica</i> ate the food between 0 hr and 4 hr, between 4 hr and 16 hr, between 16 hr and 24 hr, and between 24 hr and 28 hr.” This statement is consistent with the data in Figure 1 for how many of the 4 foods? A. 1 B. 2 C. 3 D. 4	The phylogenetic tree constructed by which of the students supports the hypothesis that turtles are more closely related to archosaurs than to squamate? A. Student 2 only B. Student 3 only C. Students 1 and 2 only D. Students 1 and 3 only	Consider the trial in Experiment 2 that produced 550 kg of NH_3. Based on Figure 1, the number of cycles that were needed to complete the reaction in this trial was most likely: A. less than 5. B. between 5 and 10. C. between 10 and 15. D. greater than 15.

Interpretation of Data

Use HS Item Stimuli with items below

Below Proficient	Approaching Proficient	Proficient	Above Proficient
According to Figure 1, the mass of cheese remaining at 4 hr was closest to which of the following values? A. 140 mg B. 176 mg C. 185 mg D. 190 mg	According to Figure 2, the maximum positive value of V_s was approximately? A. 125 V. B. 200 V. C. 250 V. D. 275 V.	According to Figure 2, in a given year, solar time is ahead of mean time for approximately how many months in total? A. 3.5 B. 5.5 C. 7.5 D. 9.5	Based on Figure 2, at which of the following times was the current in the circuit flowing counterclockwise? A. 0 msec B. 5 msec C. 10 msec D. 15 msec

Scientific Investigation
Use HS Item Stimuli with items below

Below Proficient	Approaching Proficient		Proficient	Above Proficient
Which of the following expressions best shows the direction of the flow of soil gas through the apparatus shown in Figure 2?	How many temperatures were tested in Experiment 1, and how many temperatures were tested in Experiment 2?		Based on the results of Study 1, if a mixture with 60% by volume of compost had been tested in Study 1, the bulk density of this mixture would most likely have been:	In Study 1, which of the following procedures was likely performed to ensure that a given peak frequency measurement was not influenced by the Doppler effect?
A. Teflon tube -> pump > Rn detector	<u>Experiment 1</u>	<u>Experiment 2</u>		
B. Teflon tube -> Rn detector -> pump	A. 1	1	A. less than 159 mg/mL.	A. Measuring the mass of each bat
C. Pump -> Rn detector->Teflon tube	B. 1	5	B. between 159 mg/mL and 213 mg/mL.	B. Collecting bats from a single cave
D. Pump->Teflon tube-> Rn detector	C. 5	1	C. between 213 mg/mL and 255 mg/mL.	C. Placing the bat equidistant from 2 speakers
	D. 5	5	D. greater than 255 mg/mL.	D. Recording bats while they were stationary