



Student Readiness
Support Resource
for Families
Grade 5



Accessing Student Tutorials

The Student Tutorial is a web-based video that introduces the AK STAR testing system. The tutorial will walk a student through using the online practice tests, providing basic testing instructions, where to access the provided support tools and testing tips. The tutorial is accessible to students, educators, families, and community and easily viewable on many web browsers. A username and password are not required to access the tutorial.



Quick Guide

1. Use the link posted to the [AK STAR Student Readiness webpage](https://education.alaska.gov/assessments/akstar/student-readiness) (education.alaska.gov/assessments/akstar/student-readiness) to view the Student Tutorial. After the link is selected, the video will begin to play.
2. OR use this link to take you directly to the video:
<https://vimeo.com/672021973/4d3ec642c2>



Accessing Practice Tests

The Practice Tests are for the computer-based assessment designed to provide students with a hands-on opportunity to experience the test environment. Students can navigate through a “test”, practice using test-taking tools, and try out different item types.

School districts should provide students with the opportunity to use the practice tests. Students should be familiar with navigating the test environment prior to testing so they can focus on the content of the test and confidently demonstrate their knowledge of the Alaska standards.

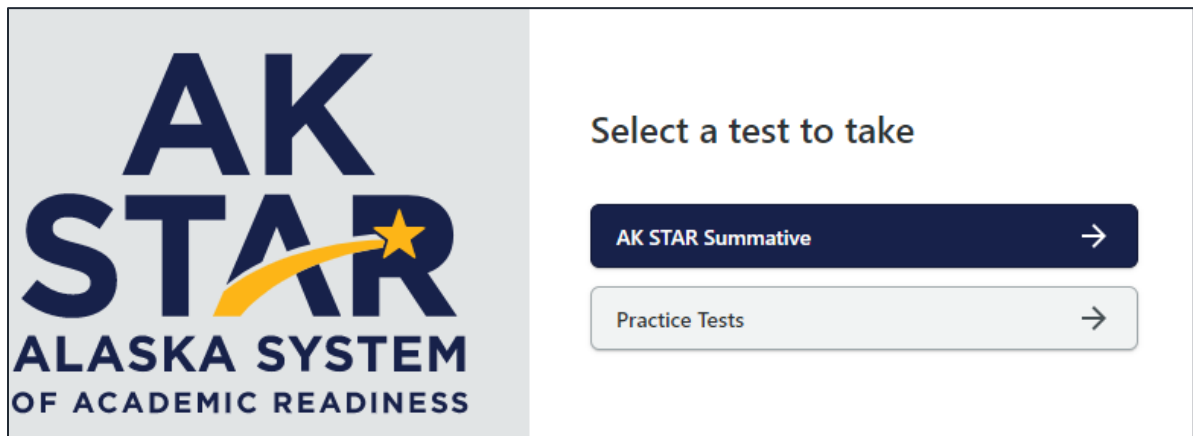
The practice tests are accessible to students, educators, parents, and community. Families are encouraged to use the practice tests and see what kinds of questions their student will be answering. Test questions are not scored, and answers are not saved.

All of the resources mentioned in the steps below are also available on the [AK STAR Student Readiness webpage](https://education.alaska.gov/assessments/akstar/student-readiness) (education.alaska.gov/assessments/akstar/student-readiness).

- Access the Practice Tests via the NWEA State Solutions Secure Browser. Districts should download the NWEA State Solutions Secure browser to provide the best testing experience for students. Directions for this download can be found in the [AK STAR System and Technology Guide](#). This will also help ensure student devices are prepared for testing during the operational administration.
- Access the Practice Tests via internet browser. The practice tests are also available outside the secure browser by using this provided link. [AK STAR Practice Tests](#)

Once on the practice test page, follow the steps below to access the appropriate practice test.

1. Select “Practice Tests” from the two options.



2. A menu of test options will be presented. Select the appropriate option from each drop-down button.



Quick Guide

3. Once you have selected all the appropriate options, select “Take Test” to begin the practice test.

Practice Using the Software

You must select an option for each field in order, from first to last.

Year
2022 ▼

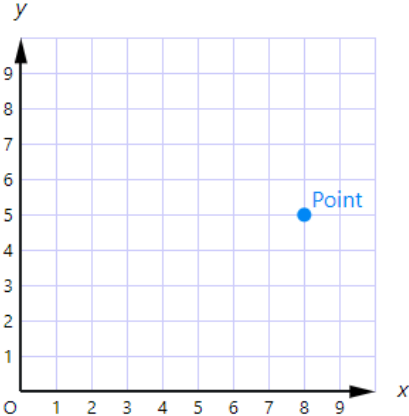
Grade
Grade 4 Practice Test ▼

Subject
English Language Arts ▼

Accommodations
No Accommodation ▼

4. If your student uses American Sign Language (ASL) or Text to Speech functionality, you can practice these item types by selecting “Grade 3-9 Accommodated Items” in the “Grade” drop down.
5. Under the “Accommodations” drop down Select ASL or Text to Speech to view those practice items.

Mathematics Grade 5 Practice Test Answer Key

Item Number	Correct Answer	Item Type
1	<input checked="" type="radio"/> $2\frac{1}{2}$	Multiple Choice Single-Select
2	<input checked="" type="radio"/> 432 cubic feet	Multiple Choice Single-Select
3		Graphing
4	<input checked="" type="radio"/> 18.75 square feet	Multiple Choice Single-Select
5	<input checked="" type="radio"/> $7\frac{8}{10}$	Multiple Choice Single-Select
6	<input checked="" type="radio"/> 15 gallons	Multiple Choice Single-Select
7	<p>Enter your answer in the space provided.</p> <div style="border: 1px solid #ccc; padding: 5px; width: fit-content; margin: 0 auto;">17</div>	Numeric Entry
8	<p>Quotient: <input type="text" value="161"/></p> <p>Remainder: <input type="text" value="15"/></p>	Multiple Numeric Entry
9	<input checked="" type="radio"/> $\frac{3}{8}$	Multiple Choice Single-Select

Item Number		Item Type									
10	$\frac{3}{8}$	Fraction Entry									
11	<input checked="" type="radio"/> 45 cubic units	Multiple Choice Single-Select									
12	The point is 2 units <input type="text" value="above"/> the <input type="text" value="x-axis"/> .	Drop-Down									
13	<input type="text" value="18500"/> grams	Numeric Entry									
14	Each term in pattern H is <input type="text" value="6"/> more than <input type="text" value=""/> the corresponding term in pattern G.	Drop-Down									
15	<p>Enter your answer in the space provided.</p> <input type="text" value=".85"/>	Numeric Entry									
16	$\frac{17}{30}$	Fraction Entry									
17	<table border="1"> <thead> <tr> <th>Statement</th> <th>True</th> <th>False</th> </tr> </thead> <tbody> <tr> <td>Volumes of prisms can be expressed in square units.</td> <td><input type="radio"/></td> <td><input checked="" type="radio"/></td> </tr> <tr> <td>A prism made from 10 unit cubes has a volume of 10 cubic units.</td> <td><input checked="" type="radio"/></td> <td><input type="radio"/></td> </tr> </tbody> </table>	Statement	True	False	Volumes of prisms can be expressed in square units.	<input type="radio"/>	<input checked="" type="radio"/>	A prism made from 10 unit cubes has a volume of 10 cubic units.	<input checked="" type="radio"/>	<input type="radio"/>	Table
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A prism made from 10 unit cubes has a volume of 10 cubic units.	<input checked="" type="radio"/>	<input type="radio"/>									
18	<input checked="" type="radio"/> All rectangles are quadrilaterals. <input checked="" type="radio"/> All quadrilaterals have 4 sides. <input type="radio"/> Thus, all rectangles have 4 sides.	Multiple Choice Single-Select									
19	<input checked="" type="radio"/> 22,655	Multiple Choice Single-Select									
20	Ada walked between <input type="text" value="5 and 6"/> miles this week.	Drop-Down									

Item Number		Item Type												
21	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="padding: 5px;">5 more than the product of 7 and 8</td> <td style="padding: 5px; border: 1px dashed blue;">$5 + 7 \times 8$</td> </tr> <tr> <td style="padding: 5px;">8 more than the product of 5 and 7</td> <td style="padding: 5px; border: 1px dashed blue;">$5 \times 7 + 8$</td> </tr> <tr> <td style="padding: 5px;">5 times the sum of 7 and 8</td> <td style="padding: 5px; border: 1px dashed blue;">$5 \times (7 + 8)$</td> </tr> <tr> <td style="padding: 5px;">8 times the sum of 5 and 7</td> <td style="padding: 5px; border: 1px dashed blue;">$(5 + 7) \times 8$</td> </tr> </table>	5 more than the product of 7 and 8	$5 + 7 \times 8$	8 more than the product of 5 and 7	$5 \times 7 + 8$	5 times the sum of 7 and 8	$5 \times (7 + 8)$	8 times the sum of 5 and 7	$(5 + 7) \times 8$	Drag and Drop				
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22	<p style="text-align: center;">Enter your answer in the space provided.</p> <div style="border: 1px solid gray; border-radius: 10px; padding: 5px; width: fit-content; margin: 0 auto;">3127</div>	Numeric Entry												
23	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="padding: 5px;">Statement</th> <th style="padding: 5px;">True</th> <th style="padding: 5px;">False</th> </tr> </thead> <tbody> <tr> <td style="padding: 5px;">The total number of jars is 7.</td> <td style="text-align: center;"><input type="radio"/></td> <td style="text-align: center;"><input checked="" type="radio"/></td> </tr> <tr> <td style="padding: 5px;">If all of the sand is equally redistributed among the jars, each jar would contain $\frac{4}{8}$ cup.</td> <td style="text-align: center;"><input checked="" type="radio"/></td> <td style="text-align: center;"><input type="radio"/></td> </tr> <tr> <td style="padding: 5px;">The difference between the amount of sand in the jar that contains the most sand and the amount in the jar that contains the least sand is $\frac{5}{8}$ cup.</td> <td style="text-align: center;"><input type="radio"/></td> <td style="text-align: center;"><input checked="" type="radio"/></td> </tr> </tbody> </table>	Statement	True	False	The total number of jars is 7.	<input type="radio"/>	<input checked="" type="radio"/>	If all of the sand is equally redistributed among the jars, each jar would contain $\frac{4}{8}$ cup.	<input checked="" type="radio"/>	<input type="radio"/>	The difference between the amount of sand in the jar that contains the most sand and the amount in the jar that contains the least sand is $\frac{5}{8}$ cup.	<input type="radio"/>	<input checked="" type="radio"/>	Table
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24	<p style="text-align: center;">Vegetables</p>	Zone												
25	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="padding: 5px;">There is $\frac{1}{5}$ package of paper to be shared evenly among 4 teachers. What fraction of the whole package will each teacher get?</td> <td style="padding: 5px; border: 1px solid gray;">$\frac{1}{5} \div 4$</td> </tr> <tr> <td style="padding: 5px;">A teacher will place paper from 4 packages into stacks. Each stack will be $\frac{1}{5}$ of a whole package. How many stacks will there be?</td> <td style="padding: 5px; border: 1px solid gray;">$4 \div \frac{1}{5}$</td> </tr> </table>	There is $\frac{1}{5}$ package of paper to be shared evenly among 4 teachers. What fraction of the whole package will each teacher get?	$\frac{1}{5} \div 4$	A teacher will place paper from 4 packages into stacks. Each stack will be $\frac{1}{5}$ of a whole package. How many stacks will there be?	$4 \div \frac{1}{5}$	Drag and Drop								
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26	<div style="border: 1px solid gray; border-radius: 10px; padding: 5px; width: fit-content; margin: 0 auto;"> <input checked="" type="radio"/> 24 </div>	Multiple Choice Single-Select												
27	<div style="border: 1px solid gray; border-radius: 10px; padding: 5px; width: fit-content; margin: 0 auto;">305 cubic centimeters</div>	Numeric Entry												

Item Number	Correct Answer	Item Type															
28	<table border="1"> <thead> <tr> <th>Statement</th> <th>Correct</th> <th>Incorrect</th> </tr> </thead> <tbody> <tr> <td>$(8 \times 10) + \left(6 \times \frac{1}{100}\right) + \left(5 \times \frac{1}{1,000}\right) < 80.65$</td> <td><input checked="" type="radio"/></td> <td><input type="radio"/></td> </tr> <tr> <td>$(7 \times 1) + \left(4 \times \frac{1}{10}\right) + \left(6 \times \frac{1}{1,000}\right) = 7.46$</td> <td><input type="radio"/></td> <td><input checked="" type="radio"/></td> </tr> <tr> <td>Two and twenty-nine hundredths < 2.3</td> <td><input checked="" type="radio"/></td> <td><input type="radio"/></td> </tr> <tr> <td>Three and seven hundredths = 3.07</td> <td><input checked="" type="radio"/></td> <td><input type="radio"/></td> </tr> </tbody> </table>	Statement	Correct	Incorrect	$(8 \times 10) + \left(6 \times \frac{1}{100}\right) + \left(5 \times \frac{1}{1,000}\right) < 80.65$	<input checked="" type="radio"/>	<input type="radio"/>	$(7 \times 1) + \left(4 \times \frac{1}{10}\right) + \left(6 \times \frac{1}{1,000}\right) = 7.46$	<input type="radio"/>	<input checked="" type="radio"/>	Two and twenty-nine hundredths < 2.3	<input checked="" type="radio"/>	<input type="radio"/>	Three and seven hundredths = 3.07	<input checked="" type="radio"/>	<input type="radio"/>	Table
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29A	<div style="border: 1px solid #ccc; padding: 5px; background-color: #e6f2ff;"> <input checked="" type="radio"/> $n = \frac{1}{2}$, because $\frac{1}{2} \times 5 = \frac{5}{2}$ and $\frac{5}{2} < 5$. </div>	Multiple Choice Single-Select															
29B	<p>Step One: Ted's claim is incorrect because when a number x is multiplied by a fraction less than 1, then the product is <input type="text" value="less than"/> x.</p> <p>Step Two: When the value of $n \times 5$ is greater than or equal to 5, n is <input type="text" value="greater than or equal to 1"/>.</p>	Drop-Down															
30	<p>Example: The volume of each small box is $6 \times 6 \times 4 = 144$ cubic inches. The volume of each carton is $36 \times 36 \times 36 = 46,656$ cubic inches. Since there are 972 small boxes, a total of $144 \times 972 = 139,968$ cubic inches of space is needed. $139,968 \div 46,656 = 3$; 3 cartons are needed.</p> <p style="text-align: center;">OR</p> <p>Since $36 \div 6 = 6$, $36 \div 6 = 6$, and $36 \div 4 = 9$, so 6 boxes would fit along the length, 6 boxes would fit along the depth, and 9 boxes would fit along the height. Then the total number of small boxes in each carton is $6 \times 6 \times 9 = 324$ boxes. Dividing 972 boxes by 324 boxes = 3 cartons.</p>	Written response															

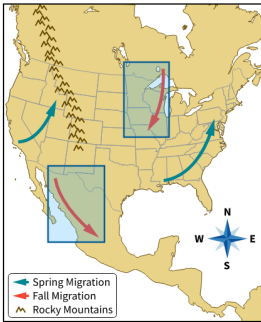
Math Written Response Rubric Grade 5

This question is worth 3 points. Each of the following components is worth 1 point.

- The response shows that the volume of one small box and the carton should be calculated OR that the number of boxes that fit in each carton should be calculated.
- The response shows that the total volume of 972 small boxes should be divided by the total volume of one carton OR that the total number of boxes should be divided by the number of boxes that fit in 1 carton.
 - This component is met if the response correctly uses one or more incorrect values.
- The response shows a correct answer of 3 cartons.
 - This component is met if the response correctly uses incorrect volumes and/or numbers of boxes.
 - Units are not needed to meet this component.

ELA Grade 5 Practice Test Answer Key

Item Number	Correct Answer	Item Type								
1	<input checked="" type="radio"/> No one believes girls can be good drummers.	Multiple Choice Single-Select								
2	<p>When she walked under wind-wavy palm trees in a flower-bright park she heard the whirl of parrot wings the clack of woodpecker beaks the dancing tap of her own footsteps and the comforting pat of her own heartbeat.</p>	Select in Passage								
3	<input checked="" type="radio"/> revealing that the girl has talent and willingness to work.	Multiple Choice Single-Select								
4	<p>The girl is similar to her big sisters in that they all love to make music. ▼</p> <p>The girl is different from her big sisters in that she chooses an instrument girls rarely play. ▼</p>	Drop-Down								
5	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th colspan="2" style="background-color: #e0e0e0;">Summary</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">1</td> <td>The girl hears music in the world around her and creates her own beats on ordinary surfaces.</td> </tr> <tr> <td style="text-align: center;">2</td> <td>The music teacher the girl's father hires is impressed and gives her lessons.</td> </tr> <tr> <td style="text-align: center;">3</td> <td>Everyone hearing the girl's live performance at a café begins to sing and dance.</td> </tr> </tbody> </table>	Summary		1	The girl hears music in the world around her and creates her own beats on ordinary surfaces.	2	The music teacher the girl's father hires is impressed and gives her lessons.	3	Everyone hearing the girl's live performance at a café begins to sing and dance.	Drag and Drop
Summary										
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6A	<input checked="" type="radio"/> inspire people to change their minds.	Multiple Choice Single-Select								
6B	<input checked="" type="radio"/> Lines 95 through 102	Multiple Choice Single-Select								

Item Number		Item Type															
7	<p>If you see one with orange-and-black patterned wings, you may be looking at a monarch on the trip of a lifetime. Monarch butterflies make what is believed to be the world's longest insect migration, traveling from parts of North America as far north as Canada to as far south as central California and Mexico.</p>	Select in Passage															
8	<p><input checked="" type="radio"/> "They may be tiny, but they are mighty." (paragraph 2)</p>	Multiple Choice Single-Select															
9		Zone															
10	<p>According to paragraph 9, tens of millions of monarchs travel from east of the Rockies to</p> <p>Mexico's Sierra Madre.</p>	Drop-Down															
11	<p><input checked="" type="radio"/> There is no milkweed growing in Mexico.</p>	Multiple Choice Single-Select															
12	<table border="1" data-bbox="542 1119 980 1239"> <thead> <tr> <th>Student Note</th> <th>Should Be Included</th> <th>Should Not Be Included</th> </tr> </thead> <tbody> <tr> <td>Monarchs eat differently at different stages.</td> <td><input checked="" type="radio"/></td> <td><input type="radio"/></td> </tr> <tr> <td>Monarchs cluster together at night.</td> <td><input type="radio"/></td> <td><input checked="" type="radio"/></td> </tr> <tr> <td>Monarchs drink nectar often as they fly.</td> <td><input checked="" type="radio"/></td> <td><input type="radio"/></td> </tr> <tr> <td>Monarchs become semi-dormant in Mexico.</td> <td><input type="radio"/></td> <td><input checked="" type="radio"/></td> </tr> </tbody> </table>	Student Note	Should Be Included	Should Not Be Included	Monarchs eat differently at different stages.	<input checked="" type="radio"/>	<input type="radio"/>	Monarchs cluster together at night.	<input type="radio"/>	<input checked="" type="radio"/>	Monarchs drink nectar often as they fly.	<input checked="" type="radio"/>	<input type="radio"/>	Monarchs become semi-dormant in Mexico.	<input type="radio"/>	<input checked="" type="radio"/>	Table
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13	<p><input type="checkbox"/> A video about the life cycle of monarch butterflies</p> <p><input type="checkbox"/> A scientist's personal journal kept while watching fourth-generation monarchs</p> <p><input checked="" type="checkbox"/> An illustrated report showing the decrease of American wildflowers</p> <p><input checked="" type="checkbox"/> An article explaining how oyamel fir forest removal has affected the environment</p> <p><input type="checkbox"/> A time line showing past and possible future earthquakes in California</p>	Multiple Choice Multiple-Select															
14	<p>Pigs make great companions, but they can be naughty and stubborn.</p>	Drop-Down															

Item Number		Item Type
15	(6) Pet pigs are different from farm pigs in that they are smaller. (7) Because they are smaller, they can live inside.	Drag and Drop
16A	(9) Pigs need time outside because they like to poke around and explore. (10) Like dogs, pigs enjoyed being petted and having their bellies scratched.	Select in Passage
16B	enjoy	Text Entry
17	<input checked="" type="radio"/> A smart and friendly pig might be the right pet for you!	Multiple Choice Single-Select
18	Even though young Mikan was awkward when he moved, it did not stop him from enjoying his favorite sport.	Drop-Down
19	<input checked="" type="checkbox"/> He wore glasses. <input type="checkbox"/> He once broke his leg. <input type="checkbox"/> He played the piano. <input checked="" type="checkbox"/> He was too tall. <input type="checkbox"/> He was a fast runner. <input type="checkbox"/> He took dancing lessons.	Multiple Choice Multiple-Select
20	<input checked="" type="radio"/> "So Mikan learned to shoot baskets from farther back." (paragraph 15)	Multiple Choice Single-Select
21	<p>Example Student Response</p> <p>Ray Meyer did play an important role in Mikan becoming a successful athlete. How he played an important role is that, first of all, he was the coach had faith in him, even when other schools were rejecting him. This is important because if Ray had rejected him, Mikan might not have become a great basketball player. The second way Ray was important in the success of Mikan is how he trained him. The coach asked the boxing team to show him how to jump rope and punch the light bag. The coach also made him take dance lessons. All of this helped him.</p>	Written Response

Item Number		Item Type						
22	<input checked="" type="radio"/> Paragraph 15							
23	<input checked="" type="radio"/> It encourages her to take challenges.							
24	<input checked="" type="checkbox"/> "Did she even have a chance?" (paragraph 20) <input type="checkbox"/> "Ludy whooped, 'Ooh la la!'" (paragraph 25) <input type="checkbox"/> "Would they be kind?" (paragraph 29) <input checked="" type="checkbox"/> "Was she good enough to win?" (paragraph 31) <input type="checkbox"/> "Ludy thought of Coach Bartlett and her thirteen hundred friends at college." (paragraph 35)	Multiple Choice Multiple-Select						
25	<input checked="" type="radio"/> They both practiced in new ways to learn different skills.	Multiple Choice Single-Select						
26	<table border="1"> <thead> <tr> <th data-bbox="500 1041 646 1083">Main Idea for both passages</th> <th data-bbox="646 1041 1027 1083">People can learn to use their physical differences to their advantage when it comes to sports.</th> </tr> </thead> <tbody> <tr> <td data-bbox="500 1083 646 1167">Supporting detail from "Bigger than the Rules"</td> <td data-bbox="646 1083 1027 1167">Detail from "Bigger than the Rules": "Now 6 feet 8 inches (203 cm) tall and broad-shouldered, his specialty was guarding the basket and blocking shots." (paragraph 4)</td> </tr> <tr> <td data-bbox="500 1167 646 1251">Supporting detail from "Long-Armed Ludy"</td> <td data-bbox="646 1167 1027 1251">Detail from "Long-Armed Ludy": "For the next two months, Ludy trained twice as hard. At the Women's Olympics, she'd have to throw with both of her long arms." (paragraph 26)</td> </tr> </tbody> </table>	Main Idea for both passages	People can learn to use their physical differences to their advantage when it comes to sports.	Supporting detail from "Bigger than the Rules"	Detail from "Bigger than the Rules": "Now 6 feet 8 inches (203 cm) tall and broad-shouldered, his specialty was guarding the basket and blocking shots." (paragraph 4)	Supporting detail from "Long-Armed Ludy"	Detail from "Long-Armed Ludy": "For the next two months, Ludy trained twice as hard. At the Women's Olympics, she'd have to throw with both of her long arms." (paragraph 26)	Drag and Drop
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