
SMARTER BALANCED MATHEMATICS AND NEXT GENERATION SCIENCE STANDARDS (NGSS) ASSESSMENTS: GUIDELINES FOR SPANISH READ ALOUD OF STIMULI AND ITEMS

Who is eligible for the Smarter Balanced Mathematics and NGSS Assessments Spanish Read Aloud designated support?

Students who are advancing toward English language proficiency, including identified English learners/multilingual learners (ELs/MLs) whose native language is Spanish, may benefit from using reader supports. Spanish presentation may be helpful for students who are proficient readers in Spanish and not proficient in English, or students who use dual language supports in the classroom.

A variety of reader options are available on Connecticut's state-wide assessments depending on the content area assessed, and the student's eligibility, access needs and delivery mode (embedded using the test delivery interface or non-embedded, those provided by a teacher/test administrator).

For example:

- For the NGSS and Smarter Balanced Mathematics Assessments, an English and Spanish presentation is available using an embedded toggle feature.

To accompany the Spanish presentation of math and science test items, the embedded text-to-speech in Spanish can be used as a language support for students who are already familiar with this support during instruction. When activated in the test delivery system, students can read along and listen as the math/science stimuli and items are presented. However, embedded reader options aren't always optimal depending on the student's language access needs. In this case, the non-embedded Spanish Read Aloud may be provided to those Spanish-speaking students who have less effective experience with text-to-speech in Spanish and benefit from having the test read aloud directly by a trained and qualified teacher in Spanish. Note: this support is only available on **the Smarter Balanced Mathematics and NGSS Assessments**.

Districts should establish a systemic and consistent process for identifying, determining, recording, and providing these supports for those students that require them based on documented needs. Accessibility supports, such as the provision of a human reader in English or Spanish, should be consistently applied and provided in the student's instructional setting for familiarization, otherwise they may be a distraction and impede student performance on assessments.

Communication, organization, and careful planning among test administrators, English Language Assessment Coordinators, Directors of Special Education (if applicable), and teachers are critical aspects of promoting fair, reliable, and appropriate test opportunities for students. Refer to the [*Embedded and Non-Embedded Designated Supports for English Learners/Multilingual Learners*](#)

brochure, the Smarter Balanced and NGSS Assessments Reader Options Table, and the [CSDE Assessment Guidelines](#) for information on how to determine if these supports are appropriate for your students.

What is the Smarter Balanced Mathematics and NGSS Assessments Spanish Read Aloud of Stimuli and Items?

This non-embedded designated support is intended to provide eligible students with print, visual, or language/communication needs access to the science and mathematics stimuli and test items in Spanish. While many students with these identified needs benefit from using the embedded text-to-speech designated support for mathematics and science stimuli and test items in Spanish, some students are better supported with the provision of a human reader.

The provision of the Spanish Read Aloud should be consistent with reader support provided to the student during daily instruction across academic areas. Therefore, if the student does not use a Read Aloud in Spanish provided by a human reader during instruction, it should not be recommended for use on statewide assessments.

When a student cannot access the embedded text-to-speech, the student may be eligible to work with a human reader in an individualized test setting to receive this support in Spanish.

What is a Human Reader?

The trained, qualified biliterate human reader is an adult employed by the district who has read these guidelines and agreed to the security/confidentiality agreement form prior to test administration (included within this document). This security/confidentiality form must be signed by the human reader and maintained locally with the student's record.

A human reader is, as previously mentioned, trained and qualified to read the Smarter Balanced Mathematics and the NGSS Assessment content to the eligible student in Spanish in a separate, individual test setting.

The student depends on the human reader to read the test items in Spanish accurately, pronounce words correctly, and speak in a clear voice throughout the test. The guiding principle in reading aloud is to ensure that the student has access to test content.

How does a teacher qualify to be a Human Reader for the Smarter Balanced Mathematics and NGSS Assessments Spanish Read Aloud of Stimuli and Items?

The human reader should be an adult employed by the district who is familiar with the student, and who is typically responsible for providing this support during educational instruction and assessments.

- Human readers must be trained in the administration of the assessment in accordance with state policy and must be familiar with the terminology specific to the test content and related conventions for standard oral communication.
- Human readers must be trained in Smarter Balanced Mathematics and the NGSS test

administration and security policies and procedures. Refer to the [CSDE Assessment Guidelines](#) and the [NGSS Test Administration Manual](#) for details.

- Human readers must read and sign the Smarter Balanced Mathematics and Next Generation Science Standards (NGSS) Assessments Spanish Read Aloud of Stimuli and Items Security/Confidentiality Agreement (included in this document) prior to test administration.
- Human readers should be aware of, familiar with, and provide all additional designated supports and accommodations (if applicable) provided to a student in accordance with the student's IEP, Section 504 Plan, or English Learner/Multilingual Learner Plan.

How is the Spanish Read Aloud Designated Support for Stimuli and Items provided?

- The test administrator must ensure that the student's math and science test presentation is set to Spanish (toggle) in the TIDE system **prior to testing**. The non-embedded designated support of Read Aloud Stimuli and Items (Spanish) must also be selected on the student's TIDE dashboard prior to testing.
- The human reader must access and read verbatim the standardized translation of the assessment from the student's test screen.
- The human reader must read verbatim the stimuli and items as they appear in dual language presentation.
- The Spanish Read Aloud of stimuli and items must **be** provided in a separate 1:1 test setting so as not to interfere with the assessment of other students.
- The reader will read each math or science stimuli and item exactly as presented on the test screen and as clearly as possible in Spanish.
- Throughout the assessment, the reader will strive to communicate in a neutral tone and maintain a neutral facial expression and posture.
- The human reader will avoid gesturing, head movements, or any verbal or non-verbal emphasis on words not otherwise emphasized in text.
- The human reader will avoid conversing with the student about test items as this is a violation of test security; but will respond to the student's questions by repeating the item, words, or instructions verbatim as needed.
- When providing this designated support, the human reader will not paraphrase, interpret, or define any items, words, or instructions as this is a violation of test security.
- The human reader will adjust their reading speed and volume if requested by the student.
- The human reader must not discuss any portion of the test with others.
- On-the-fly Spanish translation of stimuli and items is strictly prohibited.

How does a Human Reader read math and science stimuli?

- The reader will read the math and science content in Spanish from the student's computer screen in its entirety as punctuated (e.g., pauses at periods and commas; raised intonation for questions). Do not verbalize punctuation marks other than ellipses and quotation marks as noted below.

How are conventions read in Spanish?

- **Punctuation:** Read all text as punctuated.
- **Ellipses:** When an ellipsis is used to signify missing text in a sentence, pause briefly, and read as “punto, punto, punto.”
- **Quotations:** Quotation marks should be verbalized as “comillas” and “fin de comillas” at the beginning and end of quoted material, respectively.
- **Emphasis:** When words are printed in boldface, italics, or capitals, tell the student that the words are printed that way. In order not to provide an unfair advantage to students receiving this support, human readers should be cautious not to emphasize words not already emphasized in print. Emphasis is appropriate when italics, underlining, or bold is used in the prompt, question, or answers.

How are images, diagrams, or graphics read?

- Diagrams are imperative to student understanding and should be read in a logical order.
- Describe the image/graphic/diagram as concisely as possible following a logical progression. Focus on providing necessary information and ignoring the superfluous. Use grade-appropriate language when describing the image/graphic/diagram.
- Read the title or caption, if available.
- Any text that appears in the body of an image/graphic/diagram may be read to a student. Read text in images/graphics/diagrams in the order most suited for the student's needs. Often the reader moves top to bottom, left to right, in a clockwise direction, or general to specific in accordance with teaching practices.

How are tables read?

Tables

1. Read title.
2. Total up the columns and rows.
3. Read column/row headings.
4. Read cell values (only as directional language for the first one).

Resultados del Walk-a-Thon de la escuela

Número de estudiantes	Número de millas recorridas
30	112
46	214
37	98
41	189

“El título de la tabla es Resultados del Walk-a-Thon de la escuela. La tabla tiene dos columnas y cuatro filas. De izquierda a derecha, los títulos de las columnas se leen Número de estudiantes, Número de millas recorridas. De izquierda a derecha, la primera fila se lee treinta, ciento doce. La segunda fila se lee cuarenta y seis, doscientos catorce. La tercera fila se lee treinta y siete, noventa y ocho. La cuarta fila se lee cuarenta y uno, ciento ochenta y nueve”.

How are mathematical expressions read?

- The human reader must read mathematical expressions precisely and with care to avoid misrepresentation for a student who has no visual reference. For mathematics items involving algebraic expressions or other mathematical notation, it may be preferable for the reader to silently read the mathematical notations or the entire question before reading it aloud to the student.
- Human readers must read mathematical expressions with technical accuracy. Similar expressions should be treated consistently.
- In general, numbers and symbols can be read according to their common Spanish usage for the student’s grade level.
- Abbreviations and acronyms should be read as full words. For example, 10 cm needs to be read as “diez centímetros.” Some abbreviations may be read differently by different readers. For example, cm^3 may be read as “centímetros cúbicos” or “centímetros al cubo.”

Test Reader Guidance for Mathematics

Numbers

Description	Example(s)	Read as:
Large whole numbers	632,407,981	"seiscientos treinta y dos millones cuatrocientos siete mil novecientos ochenta y uno"
	45,000,689,112	"cuarenta y cinco mil millones seiscientos ochenta y nueve mil ciento doce"
Decimal numbers	0.056	"cero punto cero cinco seis"
	4.37	"cuatro punto tres siete"
Fractions – common Fractions – not common – read as "numerator over denominator"	$\frac{1}{2}, \frac{1}{4}, \frac{2}{3}, \frac{4}{5}$	"un medio, un cuarto, dos tercios, cuatro quintos"
	$\frac{14}{25}$	"catorce sobre veinticinco"
	$\frac{487}{6972}$	"cuatrocientos ochenta y siete sobre seis mil novecientos setenta y dos"
Mixed numbers - read with "and" between whole number and fraction	$3\frac{1}{2}$	"tres y un medio"
	$57\frac{3}{4}$	"cincuenta y siete y tres cuartos"
Percents	62%	"sesenta y dos por ciento"
	7.5%	"siete punto cinco por ciento"
	0.23%	"cero punto veintitrés por ciento"
Money - if contains a decimal point, read as "dollars AND cents"	\$4.98	"cuatro dólares y noventa y ocho centavos"
	\$0.33	"cero dólares y treinta y tres centavos"
	\$5368.00	"cinco mil trescientos sesenta y ocho dólares y cero centavos"

Description	Example(s)	Read as:
Negative numbers - do NOT read negative sign as "minus"	- 3	"negativo tres"
	$-\frac{5}{8}$	"negativo cinco octavos"
	-7.56	"negativo siete punto cinco seis"
Dates (years)	1987	"mil novecientos ochenta y siete"
	2005	"dos mil cinco"
Roman Numerals	I	"número uno romano"
	II	"número dos romano"
	III	"número tres romano"
	IV	"número cuatro romano"
Ratios	$x : y$	"'x' es a 'y'"
Square roots and cube roots	$\sqrt{6}$	"raíz cuadrada de seis"
	$\sqrt[3]{16}$	"raíz cúbica de dieciséis"

Operations

Description	Example(s)	Read as:
Addition	$\begin{array}{r} 13 \\ + 27 \\ \hline \end{array} \quad 13 + 27 =$	"trece más veintisiete es igual a"
	$13 + 27 = ?$	"trece más veintisiete es igual a signo de interrogación"
Subtraction	$\begin{array}{r} 487 \\ - 159 \\ \hline \end{array} \quad 487 - 159 =$	"cuatrocientos ochenta y siete menos ciento cincuenta y nueve es igual a"
	$487 - 159 = ?$	"cuatrocientos ochenta y siete menos ciento cincuenta y nueve es igual a signo de interrogación"
Multiplication	$\begin{array}{r} 63 \\ \times 49 \\ \hline \end{array} \quad 63 \times 49 =$	"sesenta y tres por cuarenta y nueve es igual a"
	$63 \times 49 = ?$	"sesenta y tres por cuarenta y nueve es igual a signo de interrogación"

Description	Example(s)	Read as:
Division – Vertical or Horizontal	$\frac{120}{15} = 8$ $120 \div 15 = 8$	“ciento veinte dividido entre quince es igual a ocho”
Operations with boxes	$3 + \square = 8$	“tres más casilla es igual a ocho”

Expressions

Description	Example(s)	Read as:
Expressions containing variables (any letter may be used as a variable)	$N + 4$	“‘N’ más cuatro”
	$8x - 3$	“ocho ‘x’ menos tres”
	$4(y - 2) + 5 = 7$	“cuatro abre paréntesis ‘y’ menos dos cierra paréntesis más cinco es igual a siete”
	$V = \frac{4}{3}\pi r^3$	“‘V’ es igual a cuatro tercios de pi por ‘r’ al cubo”
	$\frac{ t - 2}{6} \leq 15$	“el valor absoluto de ‘t’ menos 2 dividido entre seis es menor que o igual a quince”
	$x^2y^3 = -36$	“‘x’ al cuadrado por ‘y’ al cubo es igual a negativo treinta y seis” o “‘x’ a la segunda potencia por ‘y’ a la tercera potencia es igual a negativo treinta y seis”
Functions and inverse functions (Read “of” instead of parentheses)	$f(x)$	“‘f’ de ‘x’”
	$f(x + 2)$	“‘f’ de ‘x’ más dos”
	$f(g(x))$	“‘f’ de ‘g’ de ‘x’”

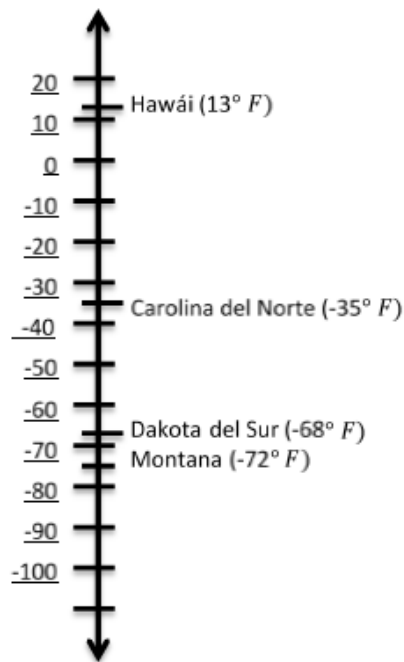
Description	Example(s)	Read as:
Coordinate pairs Answer choices with no other text	the point (-1, 2) the point A is at (6, 3) A. (-3, -4)	"el punto (pausa) negativo uno coma dos" "el punto 'A' está en (pausa) seis coma tres" "'A' (pausa) negativo tres coma negativo cuatro"
Comparing Lines, Shapes, and Angles		
Description	Example(s)	Read as:
Parallels	$\overline{AB} \parallel \overline{CD}$	"el segmento de recta AB es paralelo al segmento de recta CD"
Perpendiculars	$\overline{AB} \perp \overline{CD}$	"el segmento de recta AB es perpendicular al segmento de recta CD"
Similar and congruent	$\triangle ABC \sim \triangle DEF$ $\angle ABC \cong \angle DEF$	"el triángulo ABC es semejante al triángulo DEF" "el ángulo ABC es congruente con el ángulo DEF"
Lines, line segments, rays, arcs	\leftrightarrow \overline{BC} \rightarrow \overrightarrow{BC} \widehat{BC}	"recta B C" "segmento de recta C D" "rayo B C" "arco B C"

Trigonometry

Description	Example(s)	Read as:
Sine	$\sin 25^\circ$	"seno de veinticinco grados"
Cosine	$\cos 35^\circ$	"coseno de treinta y cinco grados"
Tangent	$\tan 10^\circ$	"tangente de diez grados"

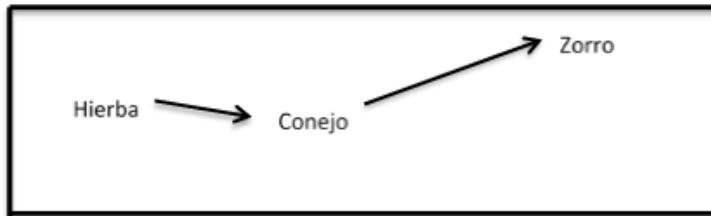
IMAGES/GRAPHICS/DIAGRAMS/TABLES

From Top to Bottom



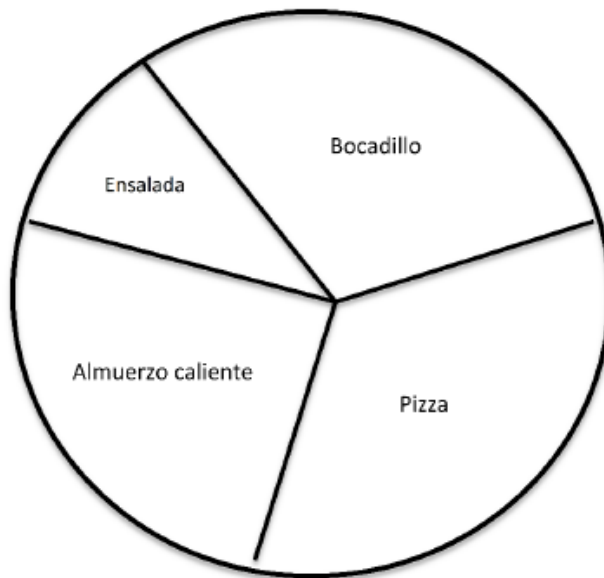
"La recta numérica muestra una línea vertical rotulada de 20 a negativo 100. Cuatro temperaturas están marcadas en la recta numérica. Leyendo desde arriba hacia abajo, los estados representados son: Hawái, trece grados Fahrenheit, Carolina del Norte, negativo treinta y cinco grados Fahrenheit, Dakota del Sur, negativo sesenta y ocho grados Fahrenheit, Montana, negativo setenta y dos grados Fahrenheit".

From Left to Right



“De izquierda a derecha, la figura se lee: hierba, conejo, zorro”.

Clockwise (Start Wherever Makes Sense.)



“Desde arriba y en sentido de las manecillas del reloj, la figura se lee: bocadillo, pizza, almuerzo caliente, ensalada”.

(Portions of these guidelines, including Appendix A, were developed by the Smarter Balanced Consortium, and adapted by the Connecticut State Department of Education for use on its state-wide testing program.)

**Appendix A. Smarter Balanced Mathematics and Next Generation Science Standards (NGSS)
Assessments
Spanish Read Aloud of Stimuli and Items
Security/Confidentiality Agreement**

A human reader for the Smarter Balanced Mathematics and NGSS Assessments Spanish Read Aloud of Stimuli and Items is a trained, qualified, biliterate adult employed by the district who has read these guidelines and agreed to this security/confidentiality agreement prior to test administration. This security agreement must be signed by the human reader and maintained locally.

The human reader reads the content of the Smarter Balanced Mathematics and NGSS stimuli and items from the student’s computer screen to the eligible EL/ML student in an individual setting. The student depends on the human reader to read the test items in Spanish accurately, pronounce words correctly, and speak in a clear voice throughout the test session.

The guiding principle in the Spanish Read Aloud of math and science stimuli and items is to ensure that the student has access to test content in Spanish.

This **designated support** is for eligible students who have an identified need determined by a team of educators with input from the parent/guardian and student. For more information about other designated supports, please see the current edition of the [CSDE Assessment Guidelines](#), located on the [Connecticut Comprehensive Assessment Program Portal](#).

Verification: By signing my name below, I verify that I have read and understand my responsibilities as a human reader as described in this document. Please provide a copy of this signed form to the English Learner Assessment Coordinator (ELAC) and the District Administrator (DA in TIDE) for testing.

Teacher Name:	
(Please Print)	Telephone Number:
Teacher Signature:	
	Email:
District Administrator (DA in TIDE) Name:	
(Please Print)	Telephone Number:
District Administrator (DA in TIDE) Signature:	
English Learner Assessment Coordinator (ELAC) Name:	
(Please Print)	
ELAC Signature:	