Glossary of Instructional Accommodations Chart 2013-14

The accommodations outlined on this chart are intended to serve as a starting point in the selection process. The chart is not intended to indicate that all accommodations listed would be appropriate for all students with the same learner characteristics, nor is the listing exhaustive. Teachers and students are encouraged to explore unique, individual solutions to provide access to instruction.

The listing of an instructional accommodation on this chart does NOT indicate that it is allowable for use on a state assessment. See Sections IV-VII for guidance.

Some resource websites have also been included in the chart for your reference.

Presentation Accommodations

Presentation Accommodations	**Large Print**
	Large print editions of texts, instructional materials, and printed tests are beneficial for some students with visual impairments. It is recommended that regular print materials be manipulated to reformat test items and enlarge or change the font as needed to accommodate the visual spacing/font enlargement needs of the student. The selected font is often one that is free of serifs (sans serifs). All text and graphic materials, including labels and captions on pictures, diagrams, maps, charts, exponential numbers, notes, and footnotes, must be presented in at least 18-point type for students who need large print assessments. Measurement tools or items being measured should be retained in their standard increments. It is important for the print to be clear, with high contrast between the color of the print and the color of the background. It is the responsibility of the school district to secure and/or to prepare large print texts and instructional materials. Such materials are not provided to students with visual impairments by the Colorado Instructional Materials Center.
	Black and White Print/High Contrast
	Some students with visual impairment may require text with high contrast ink from the color of the background page. The high contrast enables the student to see the material more effectively.
	Color Contrasting
	Some students with visual needs are better able to view information through color contrast. This need can be met for paper-based materials by either creating different color versions of content or by providing colored transparencies to place over materials. For computer use, a content and test delivery system can allow students to overlay different colors over content and choose different combinations of text and background colors.
	Increased White Space
	Increasing the amount of blank space between items in a paper-based test booklet or between instructional content may help students better see the presented material and/or maintain visual focus.
Presentation Accommodations	**Magnification Devices**
	Some students with visual impairments read regular print materials by enlarging the print size with magnification devices. These include reading glasses, eyeglass-mounted magnifiers, free standing or handheld magnifiers, and Closed Circuit Televisions (CCTVs)/Video Magnifiers to enlarge print and display printed material with various image enhancements on a screen.
	Computer Magnification
	Some content and test-delivery systems allow students to manipulate the size of text and graphics presented on the screen. It is important that the system is able to enlarge all material, including narrative text, formulas and equations, information presented in scientific and mathematical nomenclature, tables, graphs, charts, figures, and diagrams with visual clarity. The system may provide tools that allow students to either view material in magnified form on an occasional/as-needed basis or on a more permanent basis. Other desirable features of a computer magnification system would be to allow students to easily move content that is forced off the screen into viewing mode; allow magnifying tools to work in conjunction with other accessibility tools and/or accommodations provided on the computer; and give students the option of enlarging the entire test interface (including navigation buttons, menu options, and directions) or only instructional or test content.

	Braille
	Braille is a method of reading a raised-dot code with the fingertips. There are braille codes specific to literature, math, and science. Some students who are blind/visually impaired will use braille as a primary and/or a secondary literacy modality. Decisions will need to be made about whether a student will use contracted or uncontracted literary braille. If instructional tasks or assessments are timed, a braille user may need additional time to complete the task. A certified teacher of students with visual impairment should work with the student's IEP Team to determine the student's need for braille.
	A student may use a manual braille writer to produce braille. "Refreshable braille displays" are electronic devices used to read text. This device is connected to a computer via a cable or Bluetooth and produces braille output on the braille display. Braille note takers are electronic devices to read and write braille.
	Accessible Denver: Resources for the Blind or Visually Impaired: **www.denvergov.com/Resources/BlindVisuallyImpaired/tabid/431789/Default.aspx**
	Tactile Graphics
	Tactile graphic images provide graphic information that can be discerned through touch. Graphic material (e.g., maps, charts, graphs, diagrams, illustrations) is presented in a raised format (paper or thermoform). Tactile graphics cannot always capture the same information that is presented in a visual format and/or may be very time consuming for the student to acquire all the needed information in the graphic. In these instances, the student may benefit from an audio description or text/word description of the image.
	http://www.tactilegraphics.org/resources.html
Presentation Accommodations	**Audio Description of Images**
	Audio description can provide access to complex images and graphics for students with visual and print disabilities. For specific information on how best to use audio description; please go to: **http://ncam.wgbh.org/experience_learn/educational_media/describing-images-for-enhanced/guidelines-for-describing-imag#Introduction**
	Read Aloud (Oral Presentation)
	A qualified person may be provided to read aloud to students who are unable to decode text visually. Readers should use an even tone and inflection so the student can process the information. Readers need to be familiar with the terminology and symbols specific to the content. This is especially important for high school mathematics and science. Graphic materials may be described, but should also be made available in print or tactile formats. Readers must be provided to students on an individual basis, not to a group of students. A student should have the option of asking a reader to slow down or repeat text. This cannot occur effectively when a person is reading to an entire group of students.
	Teacher-Read Directions
	A trained, qualified person may be provided to students who require all directions to be read aloud. Students who require pacing and focusing may benefit from this type of accommodation. Rephrasing or clarification of directions is not allowed.
	Oral Script
	If it is determined that the student requires an oral administration type of accommodation, the same procedures outlined for use on state assessment should be routinely used in classroom assessment. Directions, assessment items and answer choices must be read verbatim from an oral script without clarifying, elaborating, or providing assistance with the meaning of words. Rephrasing or clarification of directions is not allowed.

	Read Aloud to Self
	This accommodation is useful for students who may need to see and hear text in order to comprehend what is written. The use of an auditory feedback device may also be beneficial, but will require individual administration in order not to disturb others .
	Audio Cassette Tape, Compact Disc, or Digital Recorder
	Written tests and instructional materials can be prerecorded on an AAC device, audio cassette, compact disc, digital recorder, or any other type of assistive technology device which a student accesses with playback. Classroom directions, assignments, and lectures could also be recorded. When taping lectures, students may need sit near the speaker, use a quality microphone, and tape only parts of the class that can clearly be replayed (e.g., turn the tape recorder off during small group discussions or pass the microphone). Advantages include ease of operation, portability and low cost. Audio versions of tests and other written materials may need to be supplemented with a print or braille version of the text, so a student can have access to complicated graphic material. Copyright issues may need to be addressed. Consult your Assistive Technology Specialist for recommendations.
Presentation Accommodations	**Audio Books**
	An audio book is a human-recorded version of a printed book. Some of these recordings contain the full book and some are abridged. Audio books are produced on tape, CD, and in other electronic formats playable on computers and various types of digital media devices. They can be borrowed from libraries, downloaded or purchased from bookstores. Many online bookstores also carry recorded books, making access even easier. In most cases audio books are subject to copyright restrictions unless they are specifically designated as public domain works or fall under copyright exemption. (also see Learning Ally
	Colorado Talking Book Library **www.cde.state.co.us/ctbl/**
	Learning Ally
	Learning Ally provides accessible audio textbooks and literature titles for individuals with visual and learning disabilities. The 71,000+ library of audio books are human voice recorded by subject specialists and are available through an individual or institutional membership. In addition to the audio format, Learning Ally is incorporating synchronized text to speech into their collection of books and will gradually add these books to the library. Learning Ally titles can be accessed by downloading through an online account. The books can then be played on the Learning Ally audio app for the iPhone, iPod Touch, or iPad, as well as software for a PC or Mac, and specialized hardware devices. Downloadable DAISY books provide instant access with enhanced navigation, bookmarking, and variable speed control.
	www.learningally.org/Audiobooks/21/ (formerly Recording for the Blind & Dyslexic)
	Electronic Books
	An electronic book (or e-book) is a digital version of a printed book. These books come in a variety of formats. Depending on the source, these books can be read aloud by a computer generated voice using special software or hardware. Unlike audio books, electronic books include the full text so that students can read along while they listen without requiring a printed copy. Digital books are widely available from online bookstores and can be downloaded from several websites. Not all publishers allow their electronic books to be read with computer speech due to copyright.
	Colorado Talking Book Library **http://www.cde.state.co.us/ctbl**
	Bookshare.org
	Bookshare is an online library of digital literature and textbooks designed for use by individuals who are blind or have other print related disabilities. The digital books are primarily contributed by volunteers or provided in digital format by publishers. Bookshare provides free individual and institutional memberships to eligible schools and students in the United States. The books are available in DAISY format which is playable with specialized hardware or software.
	www.bookshare.org (access to content)

Presentation Accommodations	**Accessible Materials**
	Accessible Instructional Materials (AIM) are specialized formats of curricular content that can be used by and with print-disabled learners. They include formats such as braille, audio, large print, and electronic text. If a student is unable to read or use standard print based materials but is able to understand the content presented in textbooks and other related core instructional materials that are used across the curriculum, the student may need specialized formats of the curricular materials. For some students, printed instructional materials can be a barrier to participation and achievement in the general education curriculum.
	National Center on Accessible Instructional Materials **http://aim.cast.org**
	Tarheel Reader - **www.tarheelreader.org** (collection of free, easy-to-read, and accessible books on a wide range of topics to share or create)
	Audio Amplification Devices
	Some students may benefit from hearing assistive technology to enhance their access to auditory instruction. The device used may vary depending on the impact of the hearing loss and personal amplification the student may be using. Amplification enhances the intelligibility of teacher-directed instruction, seating options, and in some cases connectivity with other technology (computers, audio devices, etc.). There is an array of options available such as infrared and frequency modulated (FM) amplification systems, in addition to a student's personal hearing aids/cochlear implant(s), to increase clarity of the teacher's voice. An FM system can also be used with headphones. The teacher/speaker wears a small microphone which would transmit to either a classroom and/or device that is worn by the student. A student-worn receiver allows the student to receive consistent voice input regardless of where the teacher is standing in the classroom. When working with students in classroom situations that contain ambient noise, another consideration to improve spoken voice input quality may be a classroom sound field amplification system. The teacher/speaker wears a small microphone, a receiver is placed in the classroom, and the teacher's voice is clearly projected for all students. Check with a certified professional in your administrative unit, such as an educational audiologist to assist with addressing individual student need and refer to the IEP for student's amplification requirements.
	This article outlines the benefit of amplification for all students: Educational Technology Support Center White Paper: Classroom Amplification Systems **calypsosystems.com/images/uploads/researchstudies/Sound_Amp_whitepaper.pdf**
	Video Tape and Descriptive Video
	Many books have been made into movies, giving students a visual and auditory way to access literature. Videotapes are often closed-captioned. Captions are visible when activated by a decoder. Built in decoders are required on all 13-inch or larger television sets. Descriptive video is a descriptive narration of key visual elements, making television programs, feature films, home videos, and other visual media accessible to people who are visually impaired. Key visual elements include actions, gestures, facial expressions, and scene changes. Inserted within the natural pauses in dialogue, audio descriptions of important visual details help to engage viewers with the story.
	Described and Captioned Media (no fee): **www.dcmp.org/** Accessible Denver: **www.denvergov.com/Resources/BlindVisuallyImpaired/tabid/431789/Default.aspx**
Presentation Accommodations	**Screen Reader**
	A screen reader is a computer application that converts text to synthesized speech and may include an auxiliary braille display or screen enlargement capability. Computer literacy is essential for screen reader use. Screen reading software allows students to listen to text as it is displayed on a computer screen. Students can choose to listen to any text multiple times. Some products work by having a student lay a page on a scanner. When a student activates the machine, it reads the text aloud using an optical character recognition (OCR) system. Math formulas are normally displayed on screen as graphics that cannot be read by a screen reader.

	Visual Cues
	Students who are deaf, deaf-blind, hard-of-hearing, or experience difficulty with auditory processing rely heavily on visual and environmental cues in the classroom, such as printed schedules, written directions, pictures, and realia. Teachers should be mindful of the student's sightline, both to see the teacher speaking/interpreter and to follow conversation during class discussion. Teachers can make natural gestures to help the student know who is speaking. Lighting is also an important consideration. Other helpful practices are to provide printed material prior to class instruction with new vocabulary highlighted, repeat/rephrase questions asked by other students, and summarize classroom discussion along with printed peer/teacher notes. It is very difficult for Deaf students to read printed text, or take notes while someone is speaking, so pacing of delivery is very important. Utilize realia, pictures and captioning to build vocabulary connections. Students with auditory processing disorders may need visual cues paired with auditory information.
	Sign Language
	The use of a sign language interpreter may be appropriate for a student who is deaf, deaf-blind or hard of hearing or for a student who receives daily instruction through sign language. Some students may need all print materials signed/interpreted, while others may need only oral instructions signed. (Note: Since signing a reading test passage would invalidate what is being measured, it is not allowed.) Interpreters must be able to accurately interpret/translate using the student's preferred mode of communication (e.g., American Sign Language (ASL), Pidgin Signed English (PSE), Manually Coded English (MCE), or other method typically used by the student). During classroom/district assessment, interpreters must not paraphrase, clarify, elaborate, provide assistance with the meaning of words (expansion), choose signs that would invalidate the intent of test questions, or give unfair advantage with visual cues or facial expression. (e.g., if a math question presented pictures of several shapes and called for the student to identify the circle, the interpreter would fingerspell C-I-R-C-L-E rather than using the sign CIRCLE that would define the term visually.) Interpreters must not give even the slightest nonverbal response to affirm or negate a student's response to test items. Interpreters need to have prior preparation in order to conceptually convey the intended meaning without providing unintended advantage or invalidating the construct being measured. Sign language interpreters should be included in test administration and security procedures training and are expected to keep all test-related information strictly confidential. (See Appendix B -Special Instructions for Signing of Oral Scripts)
Presentation Accommodations	**Picture Symbols and Real Objects**
	Picture symbols and real objects are used to represent words in a concrete manner. These accommodations assist emergent readers to understand a symbolic representation of words.
	Markers and Highlighting
	Markers and highlighting are used to draw student's attention to key elements of content. Students or teachers may use markers, arrows, stickers, or highlighting of key words as visual tools for focusing students' attention.
	Masking/Tracking Tools
	A common technique for focusing a student's attention on a specific part of a printed item is provided by masking. Masking involves blocking off content that is not of immediate interest to the student. Students may use a variety of methods to mask content, including masking templates, sticky notes, rulers or straight-edges, highlighter rulers, or blank sheets of paper. A digital content delivery system may include tools, such as Digital Answer Masking, Digital Sticky Notes, and/or Digital Line-by-Line Reader, that allow students to mask or hide portions of instructional or test content, as well as the interface, so that the student can focus on content that is of immediate interest. Masking tools allow students to cover and reveal individual answer options, navigational buttons, and menus. Tools should also be available that allow students to create custom masks that simulate the placement of sticky notes over any sized area of the screen (e.g., a graphic, chart, table, or narrative block of text). Students should be able to move, hide, and reposition any masking element placed on the screen.
	StateWide Assistive Technology, Augmentative and Alternative Communication **www.swaaac.com/index.html**

	Notes, Outlines, and Instructions
	Written class notes may be taken by another student on NCR paper (duplicate set paper) or printed/photocopied. A teacher could provide a printed copy of step-by-step instructions, examples, assignments or notes from an interactive whiteboard. Students could also be given a detailed outline of the material to be covered prior to or during the class period, and an outline of material to be covered (syllabus) at the beginning of each grading period. iPad apps such as ScreenChomp, Board Cam, ReplayNotes for Kids and others allow for screen capture or audio recording for later playback.
	Talking Materials/Text-to-Speech
	Many classroom materials are now available with auditory components. These include calculators, "talking" clocks, thermometers, timers, and voltmeters. Students benefit by listening to a fully approved, standardized human voice or synthesized voice recordings that have been vetted for correct pronunciation, assuring accurate presentation of words, symbols, and equations. The system should allow students to decide when they want to hear the text read to them and allow them to play sound clips repeatedly. All components of the delivery interface containing text, such as buttons, menu options, and directions, should have read-aloud available for them. A text-to-speech accommodation must be supplemented with a standard print, braille, or large print version of the test so the student can have access to all the instructional materials, and complete the assignment while using the technology.
	Graphic Organizers
	Various types of graphic organizers or Foldables® may be beneficial for students who need support for organization and sequencing of multi-step processes.
	Graphic Organizer generator: www.teach-nology.com/web_tools/graphic_org/ Dinah Zike's Foldables® http://www.dinah.com/
	Other Presentation Accommodations
	Some students may have other presentation accommodations in place during instruction to help them access the learning objectives. If these accommodations will also be needed on the state assessment, a Nonstandard Accommodation request form must be completed by the District Assessment Coordinator and submitted to the Office of Student Assessment for approval. The accommodation should also be documented in the student's IEP or Section 504 Plan as an instructional accommodation and be noted as "pending CDE approval" in the assessment accommodation section.

Presentation Accommodations:
Considerations in the Transformation of Accommodations from Paper/pencil to Computer-based Tests

Note: The accommodations listed below are offered as general suggestions. Please check with your Assistive Technologist specialist, Occupational Therapist, Speech-Language Pathologist, Deaf Education specialist or TVI-vision specialist for specific equipment and software recommendations.

Large Print and Magnification	• Capacity to self-select print size or magnification • Ability to scroll or advance screen • Apply magnification to screen graphics and tables without distortion • Very gradually consider building visual stamina; avoid visual fatigue • Choose background to improve readability of overlying text
Instructions simplified/clarified	• Capacity to self-select audio (screen reader), alternate language or signed versions of instructions and test items (all students wear ear/headphones) • Choose to have text repeated

Audio presentation of instructions and test items	• Ability to self-select audio (screen reader) • Use screen reader that converts text into synthesized speech or braille • Control audio speed and quality of audio presentation • Wear headphones or test individually • Ability to process audio descriptions of graphics and other visual media • Choose to repeat as many times as needed • Ability to understand synthesized voice of reader • Activate alternative text or "alt tags" for images
Sign Language	• Capacity to self-select alternate versions of written text/ instructions presented in sign language • Capacity to self-select signed versions of instructions and test items • Not feasible to read lips on video • Check equipment compatibility • Consider quality, accuracy and appropriate speed of signed information
Languages other than English	• Capacity to self-select alternate language versions of test items in written or audio format • Be aware that translation may require different speed than English • Use machine translation capabilities • Check compatibility of interfaces • Enable pop-up translation features • Ability to regulate audio speed
Braille	• Ability to use screen reader to convert text into synthesized speech or braille • Provide tactile graphics or three-dimensional models for some images • Select screen and text colors • Check compatibility of equipment and interfaces • Express need for additional time if necessary
Highlighters or Place holder	• Capacity to self-select highlighter tool • Ability to select text for highlighting
Graphics or images that supplement text	*Carefully consider images selected for presentation; avoid complex backgrounds or wallpaper that may interfere with the readability of overlying text • Select alternative text or "alt tags" for images • Use tactile graphics or three-dimensional models for images
Paper/pencil format	• Select for students who are not yet computer literate • Use if needed accessibility features or accommodations are not available
Use of Color	• Ability to self-select appropriate screen and text color • Ability to adjust contrast/ size and font

Multiple column layout	*For classroom presentation, keep in mind that linear presentation order needs to be logical.
Book Creators:	Book Writer (can add video and sound) (fee) Create Book from Text: Txt2Book (fee) https://itunes.apple.com/us/app/txt2book-create-book-from/id492393388?mt=8 CAST Book Builder http://bookbuilder.cast.org/ Tarheel Reader http://tarheelreader.org/ (Literacy!)
Class collaboration	Edmodo – web-based platform that provides a safe and easy way for your class to connect and collaborate, share content, and access homework, grades and school notices. http://www.educatorstechnology.com/2013/06/a-handy-guide-to-everything-teachers.html

Response Accommodations

Response Accommodations	**Speech-to-Text/Voice Recognition Software**
	Speech-to-text conversion, or voice recognition, allows a student to use his/her voice as an input device. Voice recognition may be used to dictate text into the computer or to give commands to the computer (e.g., opening application programs, pulling down menus, or saving work). Allow ample time for instruction and practice when using these types of devices.
	Brailler
	A brailler is a machine used to produce text in braille. As combinations of its six keys are pressed, the braille cells are embossed on the paper rolled into the machine. Some students use an electronic braille device or note taker, in which the braille is stored in the machine for later embossing through an alternative computer port. Such tools are procured by a teacher certified in the area of visual impairments. Consult your teacher of students with visual impairments (TVI) for recommendations for individual students.
	Voice Recording Devices
	A student uses a tape recorder or other recording device to record class work or test responses rather than writing on paper.
	Computer or Personal Portable Keyboard
	Computers, or other word processing systems, allow a student to produce a written response to instructional materials or assessments. Students should receive adequate instruction and time for use in order to build fluency and independence.

	Wireless Devices
	iPads, tablets, and other wireless devices have become useful tools for students as both presentation and response accommodations.
	Scribe
	A scribe is a skilled person who has been trained to write down what a student dictates by an assistive communication device, pointing, sign language, or speech. A scribe may not edit or alter student work in any way, and must record word-for-word exactly what the student has dictated. Following the dictation, scribes should request clarification from the student about the use of capitalization and punctuation, and must allow the student to review and edit what the scribe has written. Individuals who serve as a scribe need to become familiar with the content-area vocabulary involved and understand the strict boundaries of the assistance to be provided. The role of the scribe is to write what is dictated, no more and no less. The use of a scribe should be limited as it inhibits a student's ability to produce his/her work independently. Appropriate assistive technology should be provided, taught, and used whenever possible. The educational goal is for the student to be able to produce work independently. Examples of inappropriate use of a scribe may include: "The student can tell much more than he/she can write." or "This student can do so much better with a scribe." Such statements may well be true for many students. However, such a reason indicates convenience rather than need and may result in educational advantage. A scribe is not to be routinely used because a student lacks language competency, handwriting fluency, or spelling skill.
	See Section III for an example decision-making process your district may choose to adapt. **The CDE thanks Cherry Creek School District for sharing this resource.* For use on state assessment, see Appendix **C** - Special Instructions for Scribe
Response Accommodations	**Calculator**
	If a student's disability affects math calculation, but not reasoning, a calculator or other assistive device (e.g., abacus, arithmetic table, manipulatives, or number chart) may be used for instruction. It is important to determine whether the use of a calculation device is a matter of convenience, or a necessary accommodation. It is important to know the goal of instruction and assessment before making decisions about the use of calculation devices. For example, if students are learning subtraction with regrouping, using a calculator would not give a student an opportunity to show regrouping. On the other hand, if students are learning problem solving skills that include subtraction (e.g., bargain shopping for items with a better value), the use of a calculation device may be a valid accommodation. Calculators may be adapted with large keys or voice output (talking calculators). In other cases, an abacus may be useful for students when mathematics/science problems are to be calculated without a calculator. The abacus functions as a paper and pencil device for students with visual impairments.
	Spelling and Grammar Devices
	The use of a dictionary may be beneficial for assignments that require an extended response or essay. Spelling and grammar can also be checked with pocket spellcheckers. Students enter an approximate spelling and then see or hear the correct spelling or correct use of a word. Students who use a word processor may be allowed to use a spell check or other electronic spelling device.
	Word Prediction
	Word prediction software can work in various modes of operation based on the student's needs. This accommodation provides a word list pop-up tool that can assist the student with word choice and spelling based on the letters that a student types on the screen.
	Word Prediction Software Comparison Chart: **http://www.spectronicsinoz.com/article/word-prediction-software-comparison-chart** Write Online (fee for license) **http://www.cricksoft.com/us/products/tools/writeonline/special-needs.aspx**

	Prompt / Encourage Student Responses
	Some students may respond to prompting or encouragement to maintain focus during instruction or testing. On a paper-based task, teachers may encourage or prompt the student to continue. For example, a teacher may walk by a student's desk and point to a picture symbol or card that encourages the student to refocus on the work at hand. In a computer-based environment, the system can be programmed to generate a prompt after a predefined number of minutes elapsed since a student interacted with the content.
	Organization Tools
	Organization tools include graph paper, highlighters, place markers, and scratch paper. Students may not be allowed to write in books owned by the school. Photocopying parts of written text allows a student to use a highlighter and write in the margins.
Response Accommodations	**Graphic Organizers**
	Graphic organizers help students arrange information into patterns in order to organize their work and stay focused on the content. Graphic organizers are especially helpful for writing reports and essays. Semantic mapping software is now available to enable students to understand a narrative story, informational text, or writing elements through graphics.
	Specialized Paper
	Some students require special paper in order to respond in writing. Some examples include graph paper, paper with raised lines, or paper with colored/highlighted lines.
	Additional Paper
	Some students may benefit from having additional paper available to use during instruction. This paper may be blank (scratch), lined, graph, or other paper.
	Slant Boards
	Slant boards often help students with motor fatigue or students who need closer visual accesses to print material. An inclined surface may assist in maintaining better posture, thus allowing a student to respond in writing with less fatigue.
	Pencil Grip / Large #2 Pencil
	A pencil grip/large #2 pencil that the student is accustomed to using may help the student with motor fatigue and thus allow the student to respond in writing.
	Abacus / Tactile Math Manipulatives
	Some students require an abacus or physical objects in order to accomplish math calculations. Some examples include raised touch math dots, counters, number lines, 1-100 chart, raised line graph paper, shape construction board, braille ruler, or protractor.
	Other Response Accommodations
	Some students may have other response accommodations in place during instruction to help them access the learning objectives. If these accommodations will also be needed on the state assessment, a Nonstandard Accommodation request form must be completed by the District Assessment Coordinator and submitted to the Office of Student Assessment for approval. The accommodation should also be documented in the student's IEP or Section 504 Plan as an instructional accommodation and be noted as "pending CDE approval" in the assessment accommodation section.

Response Accommodations: Technology

Considerations in the Transformation of Accommodations from Paper/pencil to Computer-based Tests

Note: The accommodations listed below are offered as general suggestions. Please check with your Assistive Technologist specialist, Occupational Therapist, Speech-Language Pathologist, Deaf Education specialist or TVI-vision specialist for specific equipment and software recommendations.

Write **Alternate Pencil** **Augmentative Communication Device**	• Capacity to select among multiple options to indicate response—mouse click; keyboard; touch screen; speech recognition; assistive devices to access the keyboard(e.g., mouth stick, eye gaze, or head wand • Partner Assisted Scanning to select letter for multiple choice
Scribe	• Ability to use speech recognition software to dictate response • Ability to use multiple options to indicate response (listed above)
Brailler **Tape Recorder** **Paper/pencil response**	• Ability to use speech recognition software • Ability to operate equipment and dictate response • Capability of producing response using braille writer or other equipment • Use paper/pencil in addition to computer (e.g. use scratch paper for solving problems, drafting ideas Use paper and pencil in place of computer (e.g. or composing extended response items)
Spell Check	• Ability to self-select the spell-check option • Capacity to disable option when spelling achievement is being measured • May have implications when using speech recognition software
Calculator	• Ability to self-select calculator option • Capacity to disable option when math fluency is being measured
English or bilingual dictionary / glossary	• Ability to self-select dictionary option • Ability to access pop-up definitions built into assessment • Capacity for use of multiple languages
iPad Apps for Differentiation	• Anne Beninghof's Ideas for Education – Reading Comprehension Booster iPad app (purchase) **http://www.ideasforeducators.com/** • Anne's Blog: **http://www.ideasforeducators.com/idea-blog.html** • ***15 iPad Skills Every Teacher and Student Should Have***, Educational Technology and Mobile Learning **http://www.educatorstechnology.com/2013/01/15-ipad-skills-students-must-have.html** • Create iBooks on the iPad (fee) **https://itunes.apple.com/us/app/book-creator-for-ipad/id442378070?mt=8**

Setting / Environment Accommodations

Setting / Environment Accommodations	**Reduce Distractions to the Student and Auditory Sensitivity Accommodations**
	A setting accommodation to reduce distractions would allow a student to do individual work or take tests in a different location, usually in a place with few or no other students. Changes may also be made to a student's location within a room. For example, a student who is easily distracted may not want to sit near windows, doors, or pencil sharpeners. Preferential seating near the teacher's desk or in the front of a classroom may be helpful for some students. Enclosed classrooms may be more appropriate than open classrooms. Study carrels or other means of focusing sightline may be helpful for students who are easily distracted. Students with low vision may prefer to sit in the part of a room that has the best non-glare lighting.
	Auditory Calming/Music /Noise Buffers
	Some students concentrate best while wearing noise buffers such as earphones, earplugs, or music.
	Reduce Distractions to Other Students
	Some students use accommodations that may distract other students, such as having an oral administration or scribe. In addition, some students might perform better when they can read and think aloud, or a student may make noises or use equipment that distracts other students. Distractions to other students are reduced by using these accommodations in individual settings.
	Change Location to Increase Physical Access or to Use Special Equipment
	Occasionally a setting might be changed to increase physical access for a student. For example, a student who uses a wheelchair with a specially designed tabletop and assistive technology may not have adequate space in an auditorium with theater seating. Other students may need equipment that requires specific locations for learning and assessment. For example, a student who uses a computer for word processing might need to complete assignments and take tests in a computer lab. A student who uses large-print materials may need to sit at a table rather than at a desk with a small surface area. Another student might benefit from a standing work station or in a study carrel. Provide space for a guide or working dog, and explain to other students that the dog is working and should be ignored. Make certain the school is accessible for students with mobility impairments. Students should have access to the building, cafeteria, classrooms, media center, restrooms, and playground. In essence, they should be able to access any room or space on the school grounds used by students in general.
Setting/Environment Accommodations	**Adaptive Furniture/Equipment**
	Some students benefit from the use of adaptive or customized furniture to aid positioning during instruction or assessment. Other students may find it helpful to use a slant board or wedge to minimize visual fatigue and provide a better work surface.
	Special Chairs
	Some students may need to physically move during instruction and have a difficult time sitting in a regular chair, so ball chairs or rocking chairs may be beneficial. Another way to accommodate this type of need is to modify a regular chair by adding a cushion or a small ball.
	Fidget Toys
	Some students may need something in their hand to manipulate as they work in order to focus their attention. Some examples of these are small balls, pieces of textured cloth, or putty. For additional suggestions, consult your school's Occupational Therapist or Physical Therapist.

	Weighted Vests
	Some students may require accommodations that provide proprioceptive input and aid in self-regulation; items such as weighted vests or blankets may assist in calming or focusing a student's attention to the task at hand.
	Thera-tubing or Stretchy Bands
	Thera-tubing is often used as a replacement accommodation for foot tapping. These bands provide students resistance and are used as a calming or focusing accommodation.
	Other Setting/Environment Accommodations
	Some students may have other setting/environment accommodations in place during instruction to help them access the learning objectives. If these accommodations will also be needed on the state assessment, a Nonstandard Accommodation request form must be completed by the District Assessment Coordinator and submitted to the Office of Student Assessment for approval. The accommodation should also be documented in the student's IEP or Section 504 Plan as an instructional accommodation and be noted as "pending CDE approval" in the assessment accommodation section.

Setting / Environment Accommodations:
Considerations in the Transformation of Accommodations from Paper/pencil to Computer-based Tests

Note: The accommodations listed below are offered as general suggestions. Please check with your Assistive Technologist specialist, Occupational Therapist, Speech-Language Pathologist, Deaf Education specialist, behavior specialist or TVI/vision specialist for specific equipment and software recommendations.

Writing **Alternate Pencil** **Augmentative Communication Device**	• Capacity to select among multiple options to indicate response—mouse click; keyboard; touch screen; speech recognition; assistive devices to access the keyboard(e.g., mouth stick, eye gaze, or head wand • Partner Assisted Scanning to select letter for multiple choice
Scribe	• Ability to use speech recognition software to dictate response • Ability to use multiple options to indicate response (listed above)
Brailler **Tape Recorder** **Paper/pencil response**	• Ability to use speech recognition software • Ability to operate equipment and dictate response • Capability of producing response using braille writer or other equipment • Use paper/pencil in addition to computer (e.g. use scratch paper for solving problems, drafting ideas Use paper and pencil in place of computer (e.g. or composing extended response items)
Spell Check	• Ability to self-select the spell-check option • Capacity to disable option when spelling achievement is being measured • May have implications when using speech recognition software

Calculator	• Ability to self-select calculator option • Capacity to disable option when math fluency is being measured
English or bilingual dictionary / glossary	• Ability to self-select dictionary option • Ability to access pop-up definitions built into assessment • Capacity for use of multiple languages

Timing / Scheduling Accommodations

Timing / Scheduling Accommodations

Extended Time

A student's educational team is to determine, based on documentation, a specific amount of extra time to complete assignments, projects, and tests. Data can be collected to assist in the calculation of a typical amount of time that a student requires to perform a given task. For timed tests, a standard extension may be time and one-half. This means that a student is allowed 90 minutes to take a test that normally has a 60-minute time limit. For rare cases, double time may also be allowed. Decisions should be made on a student-by-student basis and evidenced with the collected data. Usually "unlimited" time is not appropriate or feasible. The amount of extra time a student needs (time and 1/2, double time, etc.) should be documented in the IEP based on gathered evidence of need. Students who have too much time may lose interest and motivation to do their best work, while others may simply need additional time to complete work independently.

Multiple or Frequent Breaks

Breaks may be given at predetermined intervals or after completion of assignments, tests, or activities. Sometimes a student is allowed to take breaks when individually needed. If the length of a break is predetermined, a timer might be used to signal the end of the break. In an assessment, the breaks do not extend the allotted time.

"Stop the Clock" Breaks

For timed tests, the testing clock can be paused for a period of time to allow the student to refresh, refocus, or take a restroom break. The time allowed, whether standard or extended time, is then resumed when the student returns to task.

Change Time of Day, Schedule, or Order of Activities

If possible, schedule tests and activities that require focused attention at the time of day when a student is most likely to demonstrate peak performance. Sometimes students are allowed to complete activities over multiple days – completing a portion each day in order to reduce fatigue for students who are medically fragile or have significant support needs.

Verbal/Visual/Tactile Prompts to Stay on Task

Such prompts as general verbal reminders ("Keep on/continue working" or "Stay on task"), visual reminders (picture symbols or color-coded cards), and tactile reminders (gentle touch on the hand or arm, soft tap on the table, paperclips to divide tests into sections) may be used to refocus student attention.

Countdown Timers

Countdown timers allow the student to track how much time is left for timed assignments or assessments.

	Other Timing/Scheduling Accommodations
	Some students may have other timing/scheduling accommodations in place during instruction to help them access the learning objectives. If these accommodations will also be needed on the state assessment, a Nonstandard Accommodation request form must be completed by the District Assessment Coordinator and submitted to the Assessment Unit for approval. The accommodation should also be documented in the student's IEP or Section 504 Plan as an instructional accommodation and be noted as "pending CDE approval" in the assessment accommodation section.

Timing / Scheduling Accommodations:

Considerations in the Transformation of Accommodations from Paper/pencil to Computer-based Tests

Note: The accommodations listed below are offered as general suggestions. Please check with your Assistive Technologist specialist, Occupational Therapist, Speech-Language Pathologist, Deaf Education specialist, behavior specialist or TVI/vision specialist for specific equipment and software recommendations.

Extended Time	• A consideration is the availability and/or location of computers and peripherals • Timing may need to be adjusted to allow a student to access equipment • Partner Assisted Scanning to select letter for multiple choice
Time of day beneficial for the student	• For use when individualized timing is required (e.g. for a student who is more alert at a certain time of day because of medication) • Consider availability/location of computers and peripherals
Breaks	• Ability to save completed work • Capacity to turn monitor on/off or activate blank screen • Ability to retain place and return to continue working • In testing situations, maintain security
Multiple work/test sessions possibly over multiple days	• Ability to maintain place and save completed responses • Ability to maintain security • Ability to log on/log off • For short breaks, ability to create a blank screen rather than logging out