



# Commitment to Accessibility

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## Accessibility for all students

Zearn strives to be accessible for all students, in line with its mission to ensure all students love learning math. The Zearn student experience reflects intentional decisions meant to support a diverse range of young learners, and Zearn is working to conform with accessibility standards, including the Web Content Accessibility Guidelines (WCAG 2.0). Zearn views its commitment to accessibility as ongoing and will continue to make updates to ensure curricular materials are usable for all students, including those with disabilities.

## Accessibility features of the Zearn student experience

### **CURRICULUM APPROACH**

Zearn Math is built on the Universal Design for Learning (UDL) framework, a set of research-based guidelines designed to create flexible learning environments that ensure all students can access and participate in learning opportunities. Zearn Math aligns with UDL principles by providing students with multiple ways of engaging in learning, acquiring knowledge, and demonstrating understanding. Each day with Zearn Math, students learn independently in Digital Lessons and in small groups with their teacher and peers. Across these learning experiences, students have opportunities to engage with the same math content in multiple ways, using multiple modalities.

As students work through Independent Digital Lessons, they learn and practice new concepts at their own pace with digital manipulatives, interactive videos, pictorial representations, paper and pencil transfer, and precise digital feedback at the moment of misconception. While learning during Small Group Instruction, students model math with concrete manipulatives, represent their mathematical understanding on paper, discuss their math reasoning aloud, and receive direct feedback from their teacher and classmates. This curricular approach provides all students with opportunities to learn and succeed and ensures all individual learning differences are accommodated.

### **SOCIAL BELONGING**

Zearn aims to represent a diverse range of students in Independent Digital Lessons, to reflect the diversity of students in classrooms across the country. Students of all genders and races, as well as students with disabilities, appear on-screen in Zearn interactive videos. This accessibility feature helps all learners feel they belong and understand all kids are 'math kids' and is particularly important for girls and minority students, who may be affected by negative stereotypes about math ability.

### **LANGUAGE CHOICES**

All language used within Zearn curricular materials has been thoughtfully chosen to support the diversity of students learning with Zearn Math. These accessibility features ensure all students, from all backgrounds, can access the math content of their grade.

#### **Neutral Cultural Context**

All language is neutral on cultural context and does not include culture-specific references. Language also avoids idiomatic jargon that may be familiar only to native English speakers.

## Essential Vocabulary

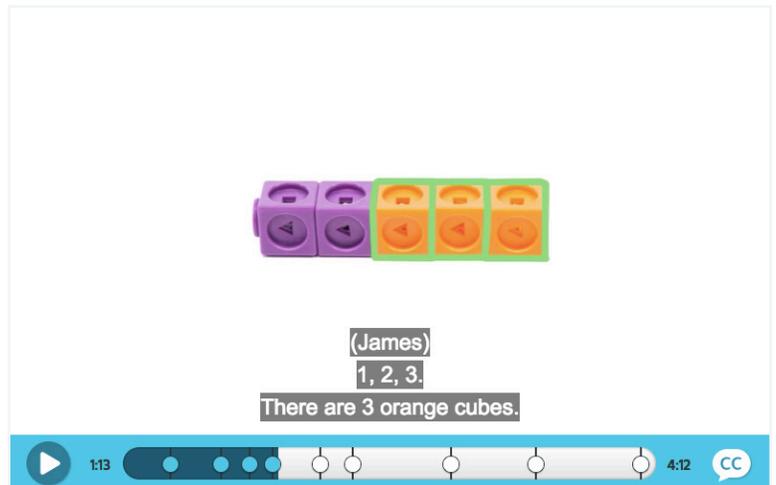
All math vocabulary critical to students' learning is introduced, taught, and used frequently throughout students' learning. Students are not expected to have prior knowledge of essential vocabulary

## Age Appropriateness

Age appropriate vocabulary and sentence structures are used across all grades.

## CLOSED CAPTIONING

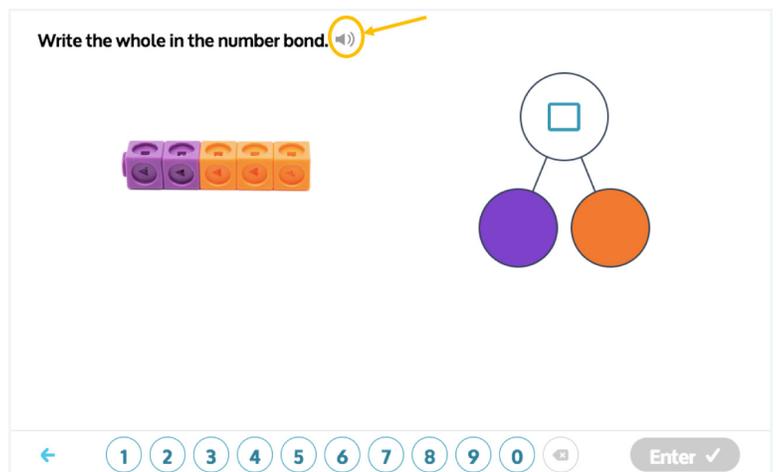
Closed captioning for all interactive student videos is available for all Missions for all grades. Closed captioning allows students to turn on an English text transcription of all dialogue and other relevant audio information in the Zearn Math video player. This accessibility feature is particularly important for deaf and hard-of-hearing students, as well as English Learners.



## AUDIO SUPPORT

All instructional prompts students see in Independent Digital Lessons have audio support through either recorded audio or Zearn's text-to-speech feature. Students can click on the audio button next to text questions or prompts to hear the words spoken aloud. All math expressions in Zearn digital lessons are read correctly with Zearn's text-to-speech tool.

To support younger students, Zearn provides additional audio supports for student tasks and questions in Grade 1 and 2 Independent Digital Lessons (e.g. fill in the blank in a word sentence, selecting from among multiple choice options). For older students in G3-5, additional audio support outside of instructional prompts can be accessed using supported browser text-to-speech tools. These accessibility features are particularly important for students with cognitive impairments, students with learning differences, young students, and English Language Learners.

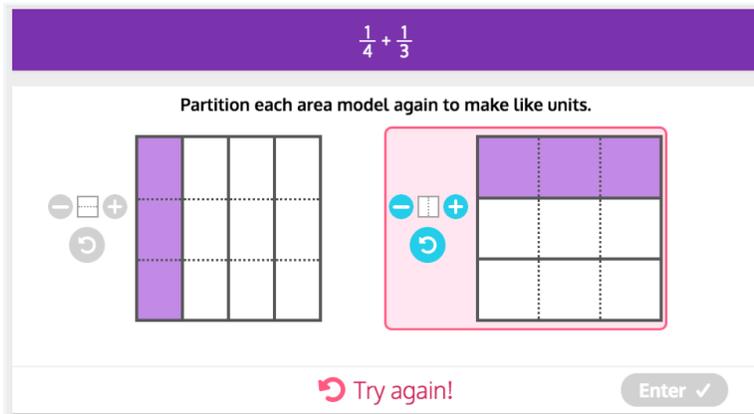


## VISUAL CLARITY

The appearance of Zearn's digital lessons are intended to meet web standards and make all content visually clear and understandable. These accessibility features are particularly important for students with color blindness or any visual impairments.

### Use of Color

Zearn is intentional about ensuring that color is not used as the only visual means of conveying information. In digital lessons, when a student receives precise feedback on an answer, that feedback is provided in multiple ways--visually with color, with clear iconography, and through specific messages such as “Nice!”, “Try again”, or “Check the answer.” Additionally, where color is used to draw attention to a specific piece of information, Zearn also uses prompts to convey the same information.



### Color Contrast

Zearn aims to conform to minimum color contrast requirements. Zearn digital lessons use larger fonts that meet a minimum contrast ratio of 3:1. Font smaller than 18pt or 14pt bold meet a contrast ratio of 4.5:1. Where specific elements of digital lessons do not meet contrast standards today, Zearn is working to make improvements.

### Font Readability

Throughout digital lessons, Zearn avoids using font smaller than 10pt, with most text using at least 16pt font. Font types are simple, clear, and have limited variation in order to ensure all text is readable.

### Zoomability

Students may resize Zearn digital pages up to 200% through browser settings to view images or text closer up without losing any content.

## SCREEN READER AND BRAILLE TRANSLATION OPTIONS

All instructional prompts and directions that students see in the Zearn Math digital program can be accessed and read by screen reading software. Additionally, all student-facing PDFs are screen-reader accessible. Screen readers enable blind students to read the text that is displayed on the computer screen with a speech synthesizer or braille display. Zearn is in the process of adding alt text to images within its student content.

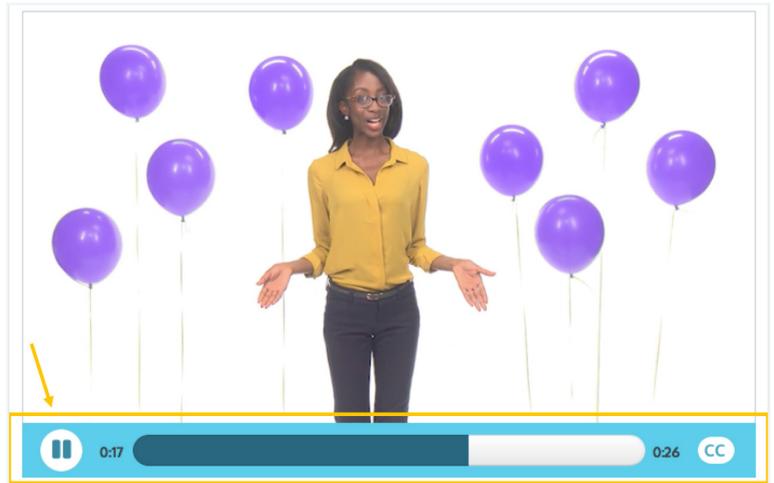
All core student-facing G1-G5 paper-based instructional materials are available in various accessible formats, including large print, Braille, and tactile, from [APH.org \(American Printing House\)](https://www.apr.org/). Educators can search their catalog, called Louis, for Zearn and place orders for the materials they need. These materials are also on file with the [National Instructional Materials Accessibility Center \(NIMAC\)](https://www.nimac.org/). Our non-core student materials (optional Homework and Problem Sets) are derived from Eureka Math, who offers braille and large print for these materials. Educators can search the same APH catalog for Eureka Math. Zearn’s Kindergarten and G6-G8 paper-based materials are in the process of being completed and will also be on file with NIMAC. Educators can find the aligned Illustrative Math versions of G6-G8 student-facing paper-based materials in accessible formats from the APH.

## KEYBOARD ACCESSIBILITY

While Zearn requires the use of a mouse, trackpad, or touchscreen device today, Zearn has made keyboard accessibility a priority. Zearn will be adding features to ensure that all interactive elements in Independent Digital Lessons are keyboard accessible for students. This accessibility feature is particularly important for students with impaired mobility or dexterity or students with low vision.

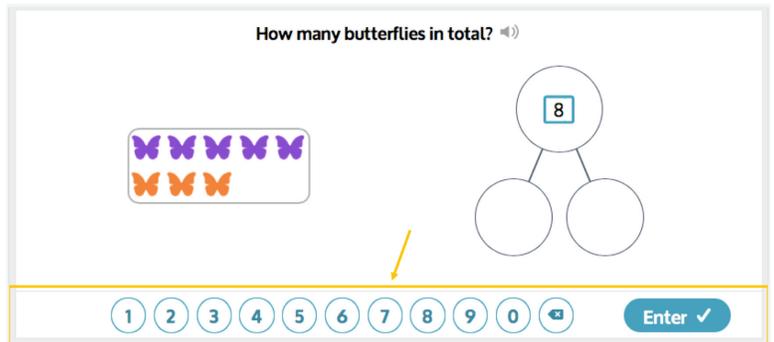
## PAUSING AND REWINDING

The video player in Independent Digital Lessons can be paused or rewound at any time to allow students to return to specific content or repeat a lesson. This accessibility feature is particularly important for students who may need extra time or support or students who may be struggling with a specific concept.



## ON-SCREEN KEYPAD

When students complete questions on Zearn, they have the option to use Zearn’s on-screen keypad, rather than a computer keyboard, to type and submit their answers. This accessibility feature is particularly important for tablet users and young students who may not know how to use a computer keyboard.



## VOLUME CONSISTENCY

In order to provide a consistent and non-disruptive audio experience for students, there are no significant volume changes between video audio and other sound effects during Independent Digital Lessons. Outside of Zearn’s video content, there is no audio that plays automatically for more than 3 seconds. This accessibility feature is particularly important for students who are sensitive to changes in volume, students who have difficulty focusing on visual content (including text) when audio is playing, students on the autism spectrum, or students with any hearing impairments.

## NO VISUAL FLASHES

Zearn does not contain any visual that flashes more than three times in any one second period. This accessibility feature is particularly important for students prone to seizures, as flashing content can trigger seizures.

*Note: A student’s Individualized Education Plan (IEP) should be the first resource teachers use as they look to differentiate instruction for a student with a disability. While Zearn’s accessibility features aim to ensure that all students can learn core content in two ways—Independent Digital Lessons and Small Group Lessons—Zearn realizes that not all children will learn best through digital lessons. For example, due to the visual nature of Zearn’s digital manipulatives, students with severe visual impairments may be better served working with physical manipulatives. Students not able to access digital materials should participate in Whole Group Fluency and Word Problems with the full class and Small Group Lessons with their teacher and smaller group of peers. Rather than complete the digital lesson, students should complete lesson-aligned paper components including Student Notes, Problem Sets, Homework, and Exit Tickets as determined and directed by the teacher.*