

# PAT Online Assessments

Accessibility guidance



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July 2022

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# Introduction

This document provides general advice for classroom teachers and support staff administering online PAT assessments with students who require additional support. This guidance is provided in addition to the test administration instructions available for those who do not require additional support.

This document also provides information about the 'accessible' versions of *PAT Reading Adaptive* and *PAT Maths Adaptive*, which have been developed to meet [Web Content Accessibility Guidelines \(WCAG\) 2.1 AA](#) standards.

## Accessibility and fairness

PAT assessments are intended to assist teachers in understanding the abilities, achievement, and needs of every student. Many students face challenges to accessing and responding to test content and may require additional support, adjustments, or accommodations when completing PAT tests. Although it is not possible to meet the needs of students with all types of accessibility challenges, the goal should be to create a 'level playing field' that allows every student an opportunity to demonstrate their abilities in a learning area.

### Students with disabilities

Students with various types, degrees, and combinations of disability, including visual, auditory, physical, speech, cognitive, language, learning, and neurological disabilities, may find it difficult to access – that is, perceive, understand, and respond to – PAT test content.

### Students with varied language or cultural backgrounds

The specific language and cultural background of each student may also affect how and to what degree they are able to access the test content. First Nations students, students from non-English speaking backgrounds, and students who speak English as an additional language may have difficulty demonstrating their abilities without additional support or adjustments, due to the language, content, and cultural context of the test items.

## The role of teachers' professional knowledge

The classroom teacher, in consultation with school leaders and parents, is best qualified to determine whether it is appropriate to administer each PAT assessment with students who require additional support. Teachers may also decide it is appropriate for students who require additional support to only complete particular test items and choose to assess other areas through normal classroom practice. Test items can be skipped and will appear in the online reports as 'No response'.

When administering PAT tests, the classroom teacher is also best placed to judge the nature and level of support that is most appropriate for students. The existing tools and strategies employed with students who require additional support in day-to-day classroom practice should be employed for PAT. This extends to the use of support staff, who already know how to assist students and are well positioned to offer them support during the assessments.

# Choosing an appropriate assessment

There is often a wide range of ability within the classroom, so it is not necessary to provide all students in a class with the same test. Instead, the focus should always be on each student's ability at the time of the assessment.

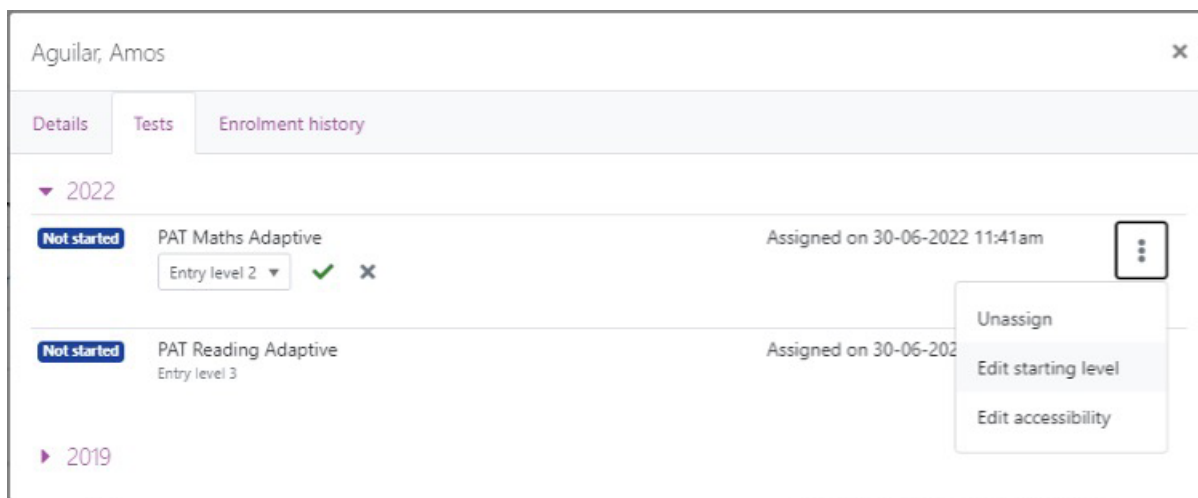
Choosing the right test is necessary to ensure that students' results provide useful information about their current ability in the learning area. The difficulty of a test and the teacher's knowledge of a student should be taken into consideration when selecting an appropriate test level. Curriculum appropriateness and the context of the classroom also need to be considered when making this decision. This is the case generally, and when the student has been identified as having additional support needs.

When a student can answer around 50% of the questions correctly, the test is well targeted and provides considerable information about the skills a student is demonstrating, and those she or he is still developing.

*PAT Maths Adaptive* and *PAT Reading Adaptive* feature an automatic test assign model, which uses each student's most recent PAT scale score to estimate the most appropriate entry level. If a student has not previously completed a PAT test in the learning area, and the student has been identified as having an additional support need, it may be appropriate to manually override the default entry level assigned to the student.

Steps to change the entry level for a student's PAT Adaptive test:

1. Select the student's name from the **Students** page
2. Click **Tests**
3. Select **Edit starting level** next to the assigned test
4. Select a new entry level from the dropdown menu
5. Click the check mark (tick) to confirm



## Using the results

In cases where standard test administration conditions are altered, it is important to maintain a record so that results can be understood in context. Detailing specific classroom support practices on a student's record may be sufficient, or if conditions are altered while administering tests only on certain occasions, it may be preferable to note the details of the changes elsewhere. Teachers and school leaders should consider any changes in test administration conditions when interpreting the results.

# Supporting students during testing

This section provides information and suggestions about support for students completing online PAT assessments. There may be other strategies that students use as standard classroom practice, which could be beneficial.

For some curriculum areas and item types, there is no single recommendation for how to present items in an alternative way to make them more accessible. We therefore recommend that you use standard classroom approaches to assess these areas.

Some children who have trouble accessing content presented visually may best be able to access some items with the support of concrete objects and teacher support, for example, for items that include images of countable objects. The teacher may make decisions regarding the items where such resources could be beneficial.

As a guide, any support and assistance should bring the child or young person requiring additional support onto a 'level playing field' to achieve equity with other children and young people. It should ensure learners can complete the assessments as independently as possible with the least intrusive support required. Tools, strategies, or support staff used in day-to-day classroom practice should also be used for the assessment. For example:

- familiarising learners (such as those with communication difficulty) with visual images or symbols that may be used within the assessment;
- using cubes, counters, or other aids for learners with visual impairment;
- working in a quiet location;
- using augmentative and alternative communication (AAC) techniques;
- reading items out loud or signing in Auslan; and
- using assistive technologies to read the items or to assist the child or young person to enter their responses.

## Time management

There is no in-built timer and students will not be locked out of the assessment after the recommended time for each assessment. Additional time may be provided according to each student's needs.

Assessments may be completed in multiple sessions, if required. A student who finds the assessment tiring may take a break at any stage. The student may close the browser window at any time and their progress will be saved. Students may log in and continue the assessment later.

## Reading items aloud

The purpose of reading the items aloud, or signing in Auslan, is to ensure that the student's disability is not a barrier to them understanding and responding to an item. Only read or sign the minimum information required to understand and respond to the item. You should avoid inadvertently cueing students to the correct response through voice volume, tone, or body language.

## Responding to test items

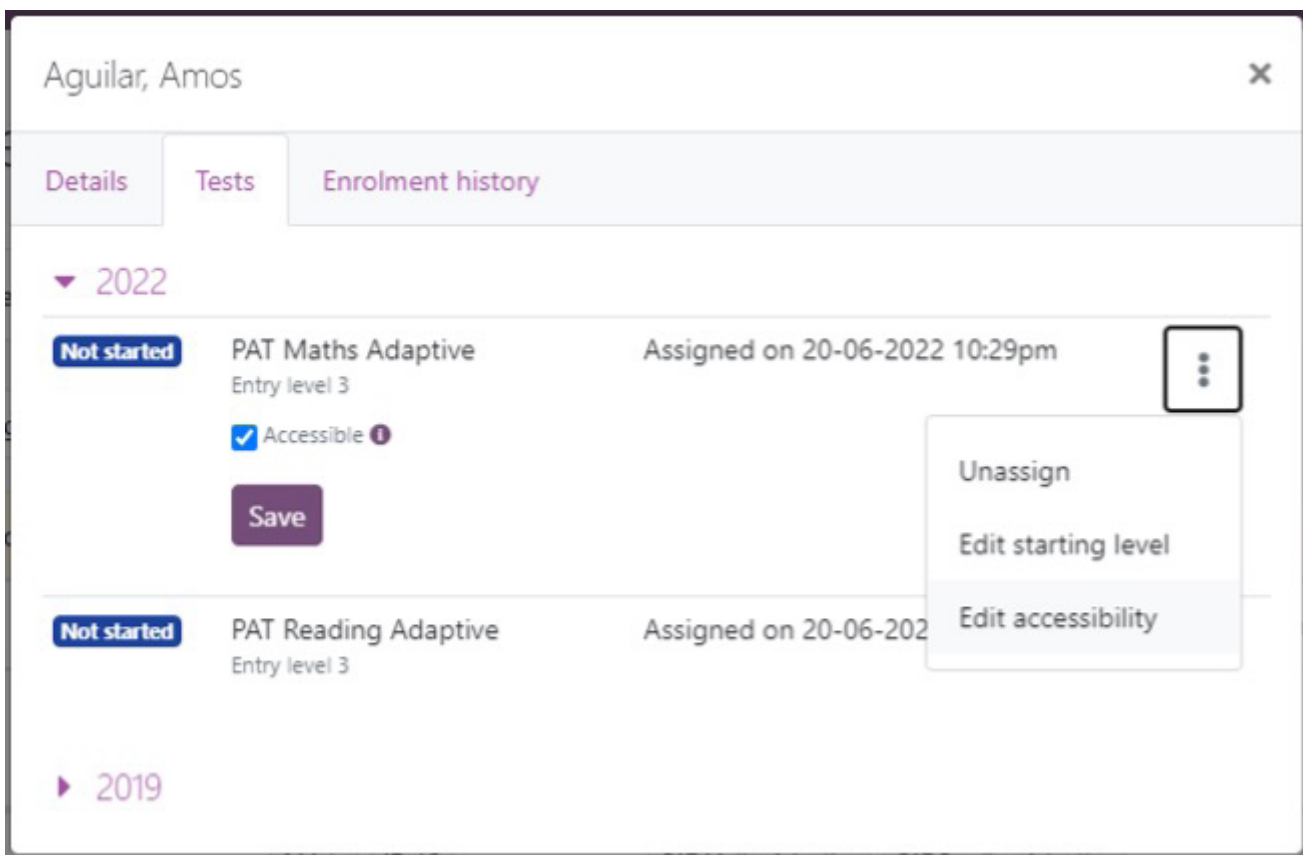
If a student struggles to use the online tests but can demonstrate their understanding, you can record responses at the student's direction.

# PAT Adaptive

For students using *PAT Maths Adaptive* and *PAT Reading Adaptive*, a dedicated 'accessible' option is available. Selecting this option after assigning the test will ensure that all content presented to the student meets WCAG 2.1 AA standards. There is no change in the way results from these tests are reported within the online system.

Steps to select the 'accessible' option for a student's PAT Adaptive test:

1. Select the student's name from the **Students** page
2. Click **Tests**
3. Select **Edit accessibility** next to the assigned test
4. Select **Accessible**
5. Click **Save**



The screenshot shows the user interface for a student named Amos Aguilar. The 'Tests' tab is active, displaying a list of tests for the year 2022. The first test is 'PAT Maths Adaptive' (Entry level 3), assigned on 20-06-2022 at 10:29pm. It is marked as 'Not started' and has the 'Accessible' checkbox checked. A 'Save' button is visible below the checkbox. The second test is 'PAT Reading Adaptive' (Entry level 3), also assigned on 20-06-2022. A dropdown menu is open for the Maths test, showing options: 'Unassign', 'Edit starting level', and 'Edit accessibility' (which is highlighted). The interface also shows a '2019' section at the bottom.

# Accessibility of test content

All PAT Adaptive 'accessible' test content has been audited against WCAG 2.1 AA standards and amended accordingly. The following is a non-exhaustive list of key considerations:

- ensuring semantic use of HTML markup, to allow compatibility with a variety of assistive technologies
- providing descriptions of the content of all non-decorative images
- ensuring adequate contrast of non-decorative graphical elements
- reviewing the use of colour in items, and ensuring colour is not the sole method of communicating information
- using responsive web design techniques to allow content reflow when browser zoom is adjusted

Images are used throughout the PAT assessments. For students who have trouble accessing images and use screen reader software, alternative text is available for the screen reader that describes the image. Alternative text is not included for purely decorative images or for images that are already described in the item text.

Some Reading texts and Maths items may include tables, which have been set up to be navigable with screen readers. Students who are confident users of screen readers will be able to navigate across rows and up or down columns to find the information that they need.

## Colours

All colours used in the accessible versions of *PAT Maths Adaptive* and *PAT Reading Adaptive* meet WCAG 2.1 AA standards related to contrast and visibility. This ensures that buttons, labels, and page text are adequately readable, even on low-resolution displays. Additionally, the assessments can be delivered in high contrast mode by adjusting internet browser settings.

## Shortcut keys

Students may use keyboard shortcut keys, which may be beneficial for learners who find it difficult to complete the assessments using a mouse or touchscreen device. Use of keyboard shortcuts may differ when using a screen reader (see below).

Students using a keyboard may interact with the assessments as follows:

- the Tab key moves between the different page elements;
- using the Up and Down Arrow keys enables the student to select their chosen response;
- once they have selected their response, they can use the Tab key to navigate to the **Next** button; and
- while focus is on the **Next** button, pressing the Spacebar or Enter key will take the student to the next item.

## Screen reader technologies

PAT Adaptive 'accessible' test content is designed to be compatible with a wide range of assistive technologies, to support a variety of student needs.

## WAI-ARIA support

The assessment and administration applications apply WAI-ARIA accessibility metadata tags throughout the HTML code, to maximise compatibility with the various screen reader and accessibility tools that schools may be using. These tags help screen readers delineate page regions, comprehend progress bars and site navigation, and be aware of the parts of the page that change dynamically.

## Using keyboard shortcuts with screen readers

Students using screen readers will have slightly different functionality for keyboard navigation to that used by other students. This section provides guidance that reflects standard approaches to supporting learners using a JAWS screen reader. PAT Adaptive is designed to be compatible with all screen reader programs, but please note that the keys used for the actions described below may differ between programs.

Key elements ('landmarks') in item pages have been set up as headings, to enable screen reader users to navigate easily between them using the H key. The main landmark is the item number, which provides context to the page and is focused immediately. Using the H key, students can navigate from the item stimulus material to the actual item, to the item response region, and back again, to get a sense of the structure of the page. Using the Shift and H keys will return the student to the previous landmark.

At each stage, students can press the Down Arrow key to read out a line of text (for example, in the item stimulus material or the item itself) or click Insert and the Down Arrow key for the screen reader to read to the end of the page.

In the item response region, students press the Tab key to access the individual response options and then use the Down Arrow key to read out each option in turn. Response options are marked up as radio buttons. When the student is ready to respond, they press the Enter key and then use the Up and Down Arrow keys to navigate to their chosen response. Once they have selected their chosen response, they press the Tab key to leave the response region and they are then taken directly to the **Next** button. When the student has navigated to the **Next** button, guidance prompts them to press Enter to move to the next item. Should they wish to return to any element of the question before navigating to the next item, they can use the H key.

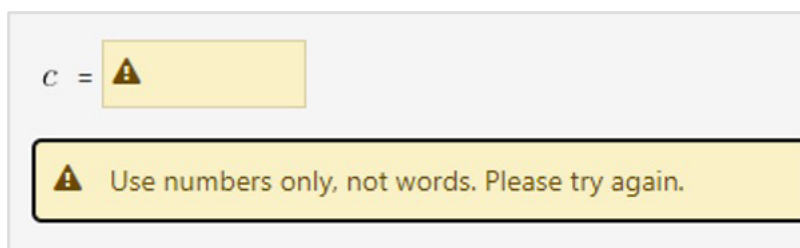
Navigating an assessment via a keyboard in this way allows students to get a quick sense of its structure more easily, by navigating to the important parts of the assessment in the right order, efficiently and consistently.

## PAT Maths items

Most accessible *PAT Maths Adaptive* items use multiple-choice format, which can be navigated via keyboard.

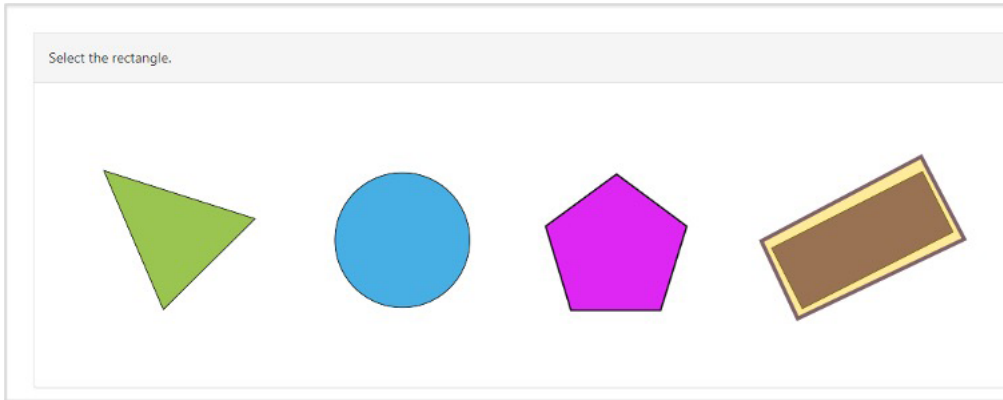
Some mathematical equations and expressions are presented in image format, with alt text provided for each image.

Some items require students to key a response in an input field. For the Maths items, these input fields are restricted to numeric character entry. If students enter non-numeric characters, a warning message will be displayed, advising them to use numeric characters. This warning will also be automatically announced by screen readers.





A small number of items use hotspot format, where one hotspot must be selected to respond. These items can also be navigated via keyboard, and alt text is provided for each hotspot.



For some items containing images of graphs or charts, where it is difficult to give a concise description in alt text, the equivalent information is presented in a screen reader-accessible table immediately following the image.

## PAT Reading items

All accessible *PAT Reading Adaptive* items use multiple-choice format. Some of these items use CMC (complex multiple-choice) format, where the student must select an option from each of several rows. Each row is marked up as a radio group, and one radio button can be selected within each radio group.

Does Mr McLeod say the following statements to his neighbours?  
Select 'Yes' or 'No' for **each** statement.

Statement	Yes	No
He had grown enormous vegetables.	<input type="radio"/>	<input type="radio"/>
The marrows were as big as logs.	<input type="radio"/>	<input type="radio"/>
He loves to eat his vegetables.	<input type="radio"/>	<input type="radio"/>