

General Principles

The majority of students with a visual impairment will require special arrangements for assessment tests. These special arrangements will enable the student to demonstrate their knowledge, skills and understanding on an equal footing with sighted children.



Proof of need has to be established to justify the particular special arrangements requested. A report from the Vision Support Service outlining the student's visual impairment, the implications and arrangements needed for examinations will be provided. This report will be valid for a two year period. If the students visual needs alter or change during this period an additional report will be provided.

Special Arrangements

- Braille, modified large print and enlarged versions of papers available
- Additional time allowed for candidates to complete tests
- Use of technological aids to gain access or respond to the questions
- Use of amanuensis (scribe), reader or practical assistant to gain access or respond to questions
- Early opening



What types of papers will a student with a visual impairment need?

Advice will be given by the Vision Support Service about what type of paper will best suit the student.

The decision will be based on:

- the visual needs of the candidate
- the nature and complexity of the examination paper concerned
- the candidates normal method of working



Papers that the centre can order:

A4 modified enlarged (18 point bold)

This involves the paper being modified on the advice of a specialist subject teacher of the visually impaired to simplify the visual complexity and layout, and where necessary, to reduce the content, while still meeting the same assessment objectives as those tested in the original paper.

Who would benefit from these papers?

Modified enlarged papers are most likely to be suitable for candidates with a severe visual impairment for whom a variety of aspects in the visual presentation of the original print paper may cause difficulties of access.



A4 modified enlarged (24 point bold)

This involves the paper being modified on the advice of a specialist subject teacher of the visually impaired to simplify the visual complexity and layout, and where necessary, to reduce the content, while still meeting the same assessment objectives as those tested in the original paper. If necessary this paper can be enlarged by the centre to 36 point bold, A3 paper size.

Who would benefit from these papers?

This version is most likely to be suitable for candidates who require a modified paper in a larger print size than the standard 18 point.

Braille paper and Tactile Diagrams with Braille Labels.

This involves a similar modification as the modified enlarged papers, with the paper being produced in Braille. These papers are generally accompanied by a print transcription of the Braille exam.

Tactile Diagrams and Print Labels

This may be used with a severely sight impaired candidate who is a print user, but benefits from accessing diagrams and graphs in a tactile format.

Other Adjustments by the centre can include:

A3 unmodified enlarged

This is a standard paper enlarged on a photocopier at the centre from A4 to A3. The paper is enlarged but it retains the original layout and visual presentation

Who would benefit from these papers?

Unmodified enlarged papers are most likely to be suitable for candidates with a moderate visual impairment, for whom increasing the size of text is sufficient in itself to provide access.

Coloured Paper

Some candidates normal method of working may include printed material on coloured paper eg. Yellow. Papers can be photocopied by the centre onto a suitable colour.

Whichever paper is used it is essential that students have the opportunity to become familiar with using the format before the examination.

For advice on past papers please seek further advice from the Vision Support Service.



Why early opening?

There are circumstances when it is advisable that papers are opened early. This could be to ensure that:

- tactile examples can be prepared
- minor modifications to the paper can be made
- correct equipment is available



Are modified exam papers easier?

The exam boards employ subject modifiers. The role of subject modifiers is to advise on changes which may need to be made to the content of an examination paper rather than its presentation. Their work is governed by the key principles that in relation to the original paper any modified paper should:

- assess the same skills, knowledge and concepts
- be at the same level of difficulty
- reflect the same balance of content
- make the same demands in terms of time and effort.

These principles are clearly essential to avoid the danger of modified papers being easier than or testing different things from the original papers on which they are based. Any changes proposed by a modifier have to be approved by the examination board concerned.



How are they modified?

Picture or diagram simplified or shown differently

The purpose of this approach is to reduce visual complexity so that visually impaired pupils can be assessed on their knowledge and understanding of the subject content, without being disadvantaged by their lack of visual efficiency. Examples include representing a single three dimensional diagram as separate two dimensional diagrams or removing unnecessary detail from a picture to leave only the relevant details. Many questions can be modified in this way without changes needing to be made to other aspects of the paper.



Ice Total for this question: 15 marks

(a) Study Figure 10, a field sketch of Mount Andromeda and the Athabasca Glacier in the Rocky Mountains, Canada.

Mount Andromeda and the Athabasca Glacier.

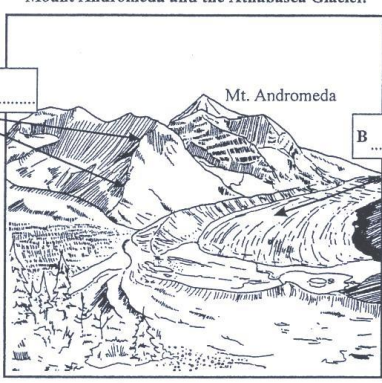


Figure 10

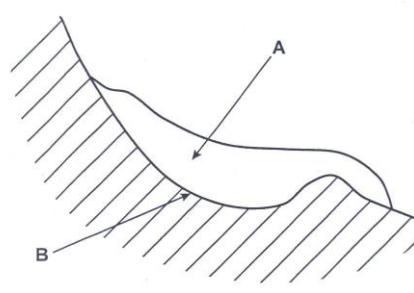
(i) On Figure 10, label the features marked A and B. (2 marks)

Original Question

ICE
TOTAL FOR THIS QUESTION: 15 MARKS

(a) Study FIGURE 10 below, a field sketch of a landform found in the Rocky Mountains, Canada.

FIGURE 10



(i) What are the features marked A and B?

A [1 mark]

.....

B [1 mark]

.....

Diagram simplified in modified paper

Picture or diagram replaced with written description

In some questions a picture or diagram may be replaced in its entirety by a written description. The modifier's job is to make the description as neutral as possible, so that it tells a visually impaired candidate as much as the original picture but no more.



13. (a) Jasmine was trying to find out how much air she breathed out in one breath. She poured water into a bell-jar and placed it upside down in a trough of water. The bell-jar had a scale marked in cm^3 .

before Jasmine breathed into the bell-jar

after Jasmine breathed into the bell-jar

(i) How much air did Jasmine breathe out?
_____ cm^3 1 mark

(ii) Air contains carbon dioxide, nitrogen, noble gases, oxygen and water vapour.

Original Question

Diagram replaced with written description

(a) Jasmine was trying to find out how much air she breathed out in one breath.

She poured water into a bell-jar and placed it upside down in a trough of water.

Before Jasmine breathed into the bell-jar it contained 200 cm^3 of air.

She inserted a rubber tube into the bell-jar and breathed through it.

After Jasmine breathed into the bell-jar it contained 700 cm^3 of air.

(i) How much air did Jasmine breathe out?
[1 mark]

_____ cm^3

Picture or diagram supplemented by written explanation



Some questions may require some additional written explanation to ensure that a visually impaired candidate grasps what is happening in a picture or diagram, even if this has also been simplified.

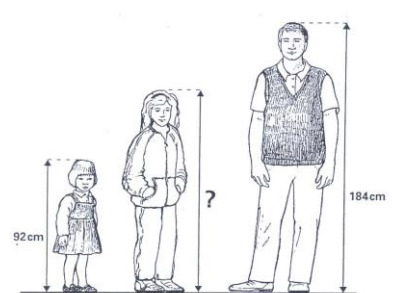
Picture or diagram replaced with a real item or model

Some questions involve pictures or diagrams that can be readily presented as real 3D objects or models. This is especially true in mathematics questions that require pupils, for example, to show spatial understanding or to calculate volumes.

Unnecessary picture or diagram removed

Many questions include pictures simply to illustrate the text without adding any new information. In such cases, the modifier may simply recommend the complete removal of these illustrations on the basis that a visually impaired candidate may waste time looking at them to gain useful information.

16 Here is a picture of three people.



Julie is 92cm tall Lisa Tom is 184cm tall

Lisa's height is half-way between Julie's height and Tom's height.

Calculate Lisa's height.

Show your method. You may get a mark.

_____ cm

2 marks

Original Question

16. Three people have their heights measured.

Julie is 92 cm tall, Tom is 184 cm tall and Lisa's height is halfway between Julie's height and Tom's height.

Calculate Lisa's height.

Show your method. You may get a mark.

_____ cm

Question with unnecessary picture removed

Amount of information reduced

Some questions require candidates to scan tables, graphs or text in order to obtain information. Such tasks present visually impaired candidates with a much greater challenge than their sighted counterparts, because one of their main difficulties lies in locating specific information quickly and accurately. Questions of this kind may therefore be modified to reduce the amount of information so that the task remains equivalent in time and effort to the original.



13 Here is a table of the pets owned by six children.

Name of child	Cat	Dog	Bird	Rabbit
David	3	1	0	0
Julie	0	0	1	2
Carl	2	0	0	1
Terry	0	1	0	1
Mary	0	2	0	0
Hawa	1	0	1	1

Here is a graph of the pets of five of the children.

Children's pets

The pets of **one** of the children are not on the graph.
Whose pets are **not** on the graph? 1 mark

Explain how you know. 1 mark

Original Question

13. Here is a table of the pets owned by FIVE children.

Name of child	Cat	Dog	Bird	Rabbit
David	3	1	0	0
Julie	0	0	1	2
Carl	2	0	0	1
Terry	0	1	0	1
Mary	0	2	0	0

Here is a graph of the pets of FOUR of the children.

Children's pets

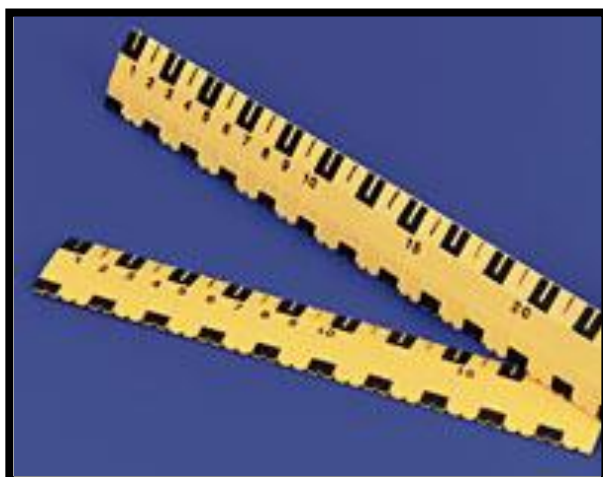
Question with information reduced

Measurements altered

It is inappropriate to expect a visually impaired candidate to measure with the same degree of accuracy as sighted pupils. The degree of accuracy expected of sighted candidates is plus or minus 0.1 cm (or 2 degrees). The degree of accuracy expected of candidates with a visual impairment should not be greater than plus or minus 0.5 cm (or 5 degrees).



Questions which involve accurate measurement may be dealt with in several ways. Firstly, the question may be modified so that a visually impaired candidate can achieve the correct answer from a less accurate measurement. Alternatively, the question may be left unmodified and the mark scheme amended instead.



Inherently visual material replaced with equivalent non-visual material

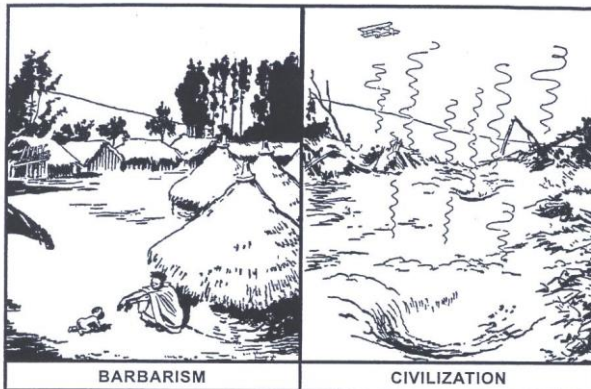
Some questions rely on visual understanding or experience in such a way that the original material needs to be replaced in its entirety in the modified version. This is commonly the case where candidates are required to comment upon the linguistic use of visual imagery or to respond to a visual stimulus such as a picture or photograph e.g. History source material.

Where this is the case, the replacement material should be chosen to test the same skills and meet the same assessment objectives as the original. This can sometimes be difficult to achieve.

2. Failures of the League of Nations

Study Source A and then answer all parts of Question 2.

Source A: Abyssinia before and after Italy's attack in 1935



a cartoon by Low from a British newspaper, (12 October 1935)

Question 2

- (a) Explain what the cartoon (Source A) is saying about Italy's invasion of Abyssinia. (4 marks)
- (b) Describe Italy's invasion of Abyssinia (1935–36) and what the League of Nations did about it. (8 marks)
- (c) Did the League of Nations fail in the 1930s because it was a weak organisation or because of the actions of dictators? Explain your answer. (8 marks)

TURN OVER FOR THE NEXT QUESTION

Original Question

Question with equivalent non-visual material

2. FAILURES OF THE LEAGUE OF NATIONS

Study Source A opposite and then answer ALL parts of the question which follows.

- (a) Explain what the historian (SOURCE A) is saying about Italy's invasion of Abyssinia. [4 marks]
- (b) Describe Italy's invasion of Abyssinia (1935–36) and what the League of Nations did about it. [8 marks]
- (c) Did the League of Nations fail in the 1930s because it was a weak organisation or because of the actions of dictators? Explain your answer. [8 marks]

Source A: Abyssinia before and after Italy's attack in 1935

The Italian representative went to the League determined to boast of his country's success in bringing civilization to the barbarous tribesmen of Abyssinia. In order to achieve their civilizing mission, the Italians had not only bombed towns and hospitals, but they had also used aircraft to spray mustard gas over wide areas, with the result that they killed women, children and warriors.

from 'The Rise and Fall of the League of Nations,' (1973) by G. Scott

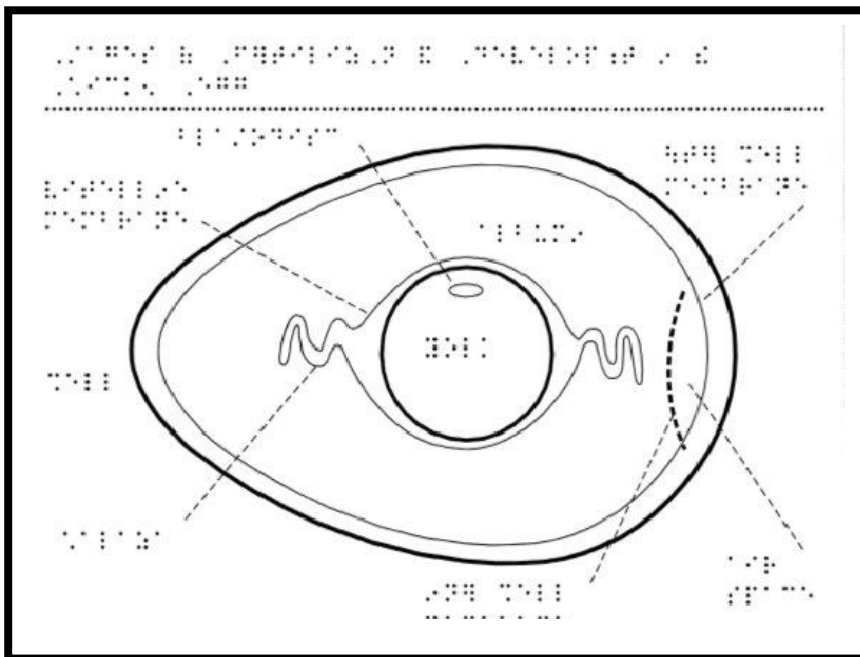
Are there any other differences with the Braille/Large Print papers?

The exam paper may be split into separate 'booklets' e.g

- question booklet
- diagram booklet
- data booklet etc.



Students may initially need additional support to ensure that they find the right diagram linked to the question etc.



Tactile diagram
from Science
diagram booklet

Where should the exams take place?

Consideration should be given as to where a student with a visual impairment undertakes an exam. Several factors need to be taken into consideration.

Students with a visual impairment will benefit from having a separate room to take the examination in.

Students with a visual impairment have up to 100% additional time allowance – this could mean some exams may last over 4 hours.

- Will the room you allocate the student be free from disruption at lesson change over and/or break and dinner times?

Some students with a visual impairment are particularly sensitive to light.

- Are there blinds/curtains in good working order in the room you have allocated

This is particularly important if the student is using a computer ensure that glare is kept to a minimum.

Other factors to take into consideration are:

- proximity to toilets
- good ventilation

The room also needs to be large enough:

- for an invigilator and/or scribe
- desk space for equipment

Proximity to electrical sockets is also important for:

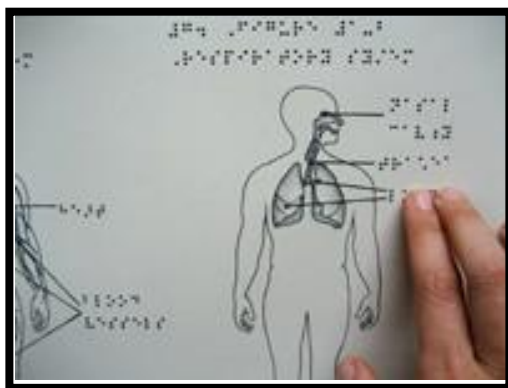
- task lighting as required
- laptop
- brailnote
- other electronic equipment e.g. scientific calculator

Why do students with a visual impairment need extra time?

Extra time is allocated to provide students with the opportunity to demonstrate knowledge and ability without giving them any advantage over other candidates. The appropriate amount of extra time should take into consideration:



- The student's preferred method of reading the questions and writing the answers. Reading large print takes longer than reading standard print: handwriting answers may also take longer. Listening to the questions and dictating answers also requires additional time. Sometimes the use of technology to access or answer examinations may create a need for extra time.
- The nature and style of the questions. Long passages of prose may take longer to read and specific sections may be difficult to locate when referring back for information. Tables and numerical information requiring the location and analysis of data may be difficult and time-consuming. Multiple choice questions will take extra time because of the need to re-read them before selecting the answers.



Exams which have a large number of diagrams/graphs etc will take longer to interpret

- Because the factors listed above vary considerably, there is no fixed amount of extra time which will suit every situation. Between 25% and 100% extra time may be appropriate depending on individual needs and the nature of the exam paper concerned. If the total examination time then becomes

unreasonable, breaks should be given (15 minutes) at appropriate and convenient times for the candidate.

- Extra time may create a need for separate accommodation and/or invigilation. It is the responsibility of the centre to provide this.

Do students with a visual impairment have an additional time allowance for all examinations?

Students with a visual impairment are entitled to an additional time allowance in all their examinations.

For listening or mental Maths papers they will need again to sit the papers separately as they will be provided with more time to record their answers. The Exam boards will provide additional tapes to ensure that this can be done.

Timed on line examinations such as Adult Literacy etc can be provided in large print and Braille formats to ensure that students are given their additional time allowance.

Use of amanuensis

Most students with a visual impairment will be able to record their answers independently. However, there may be times that the use of amanuensis is required. This is particularly the case in multiple choice examinations where the computer marked sheet cannot be modified. In these cases the student will require the help and support of amanuensis.

What type of specialist equipment can be used?

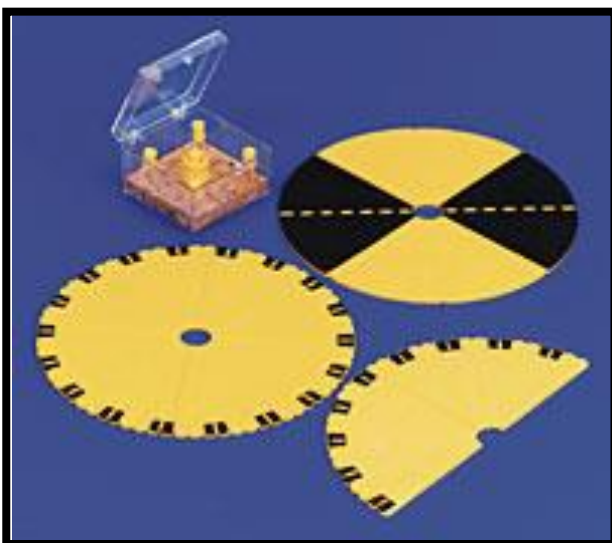
Students with a visual impairment will use a range of specialist equipment. Any equipment used must be what the student normally uses in class e.g. a laptop or Brailnote. Students using electronic equipment to record their answers will have spell check/grammar disabled on their machines.



Student using a Braille note

Much of the equipment used by students with a visual impairment will be on a bigger scale e.g.:

- talking scientific calculators
- large protractors etc



Specialist tactile Maths equipment



Talking scientific calculator

Students may also want to use magnifiers etc and these are permitted.

This is why it is important that students have plenty of room to arrange their papers and equipment.

What arrangements need to be made at the end of the examination?

If the student uses their full time allowance and exam may finish well past the end of the school day. There are a number of considerations:



- Invigilators will need to be made aware that examinations which involves students with a visual impairment will be longer
- If a student has used electronic means of answering their examination an area needs to be made available for printing off the work.
- Examination boards will not accept Braille exam papers which have not been transcribed. Therefore answer papers which have been produced using a manual braille will need to be transcribed. VI staff will transcribe these papers but will need the space and time to complete it.

Students who record their work in Braille will use a manual braille in Maths examinations



What about coursework?

Again students with a visual impairment will have additional time to complete their coursework.

- For Maths, Science or Technology subjects it must be remembered that where the degree of accuracy expected of sighted candidates is plus or minus 0.1 cm (or 2 degrees) then the degree of accuracy expected of candidates with a visual impairment should not be greater than plus or minus 0.5 cm (or 5 degrees).
- All English coursework can be produced electronically if this is the usual means of recording for the student.
- If students have received any additional support in completing their coursework this will be recorded on the cover sheet as with their sighted peers.



Any questions?

If staff have any questions or concerns regarding any of the issues raised they may contact the Vision Support Service at any time.

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