Not for General Distribution

ADAPT On-line Candidate Handbook

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Figures

Introduction

Symbiotics Ltd has developed ADAPT Online as a unique assessment tool that can support various training systems. The purpose of this tool is to find out if you are right for a job and then to offer guidance to help you develop your skills to match those that are needed. Our aims are to get the best from you and make sure that you get the most out of your training.

There a number of elements that can make up the ADAPT Online package and you will be required to complete a combination of the following elements:

ADAPT Personality Questionnaire (APQ)
Cognitive
Maths
Physics
Physical Assessment Stage (FAST)

Please contact the organization that has requested you complete the assessment for any further details.

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Data Protection

Symbiotics Ltd will only collect and store personnel information relating to and pertaining to you for 24 months, as requested by Symbiotics Ltd. At the end of this period Symbiotics Ltd will delete all record of you and either delete the data you supplied or will anonymise it. Either way no data in our system will be attributable to you after the retention period defined other than a copy of this introduction and your response.

The reason Symbiotics Ltd keeps data in an anonymised form is for verification purposes. Firstly, it allows Symbiotics Ltd to verify that the assessments are fair to all groups of people, and this is why we ask some questions about your background. This information is not used in the assessment but allows us to determine that the assessment is not prejudicial to a particular group of people. Secondly, it allows Symbiotics Ltd to confirm that the comparisons made within the system against the general population remain up to date.

The data you provide through the assessment process will be stored on Symbiotics Ltd secure computers located on our premises in the UK. The data will be used via determinist algorithms to provide Symbiotics Ltd with a report on how you have performed in the assessment tests

No other third party (other than if demanded by a UK court of law order) will have access to this report or the raw data you supply. Additionally, within Symbiotics Ltd only staff with a valid reason to process will have access to your data and this will be kept to a minimum number of people.

Updating and removal of your information

You have the right for incorrect, out of date or misleading information relating to you to be corrected.

You should email DataController@SymbioticsLtd.co.uk with your request and it will be actioned provided it is a legitimate request.

Right to be forgotten

You have the right to "be forgotten", the right to request that we stop processing your data and the right to object to the method by which we are processing your data.

All these requests should be made to DataController@SymbioticsLtd.co.uk who will inform Symbiotics Ltd of the request. These requests will be actioned provided a) we do not have a legal requirement to retain your data or b) Symbiotics Ltd has a contractual agreement with you that requires that we retain the data for the specified retention period.

If either of these are the case you will be notified of the reason why we cannot remove your data at this time.

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1. Assessment: What Should I Expect?

1.1 Link to the ADAPT On-line Website

If you are to complete any element of the ADAPT On-line Assessment at home, you will be provided, by email, with your link to the ADAPT Website and a series of instructions that will enable you to access the ADAPT Login Screen.

1.2 Log In Screen

You will also be provided with a 20 digit alpha numeric licence number; this will either be provided to you directly or will be given to the Organisation to input on your behalf, depending on whether you are completing any elements at home prior to further invigilated tests. If you are provided with the code, please keep a note of this licence in case you should need to log in again.

To log in to the Assessment Tool, please click the link below or paste it into your browser:

<div align="center">

https://adapt2.symbioticsltd.co.uk/login

</div>

We recommend you use Google Chrome and a std PC or laptop to access the assessments.
If your assessment includes the FAST test you will need a separate keyboard

The link will take you to the below screen. Please click on the "Got a licence code? Register here" link shown in below screenshot.
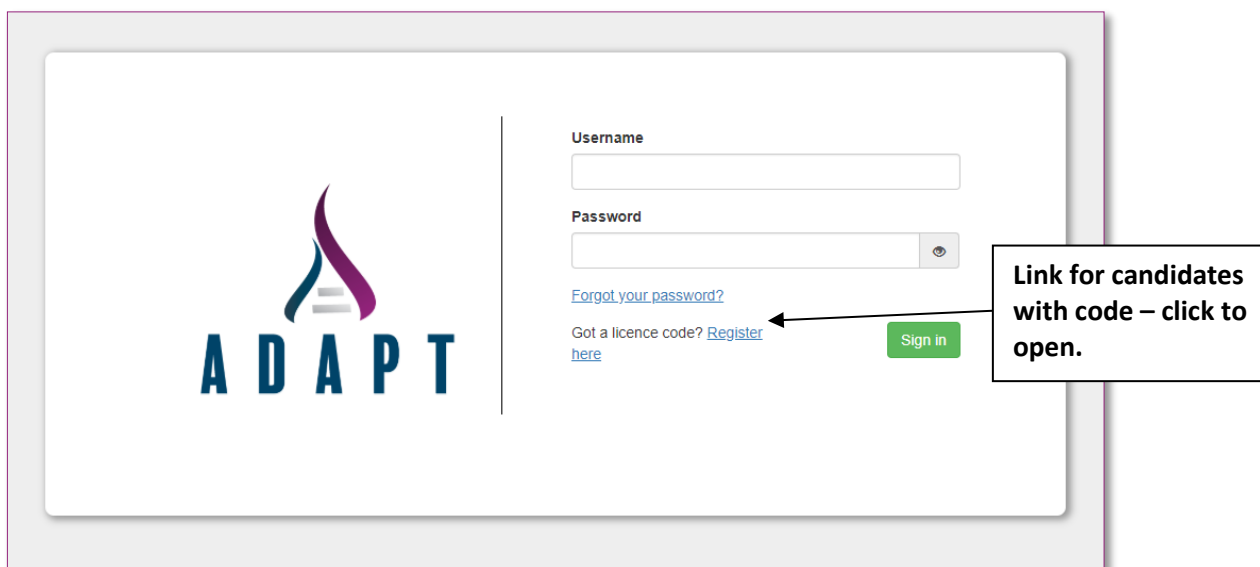

Figure 1: Adapt 2 Login Screen

Once you enter the registration area you will be required to enter you Licence code which we recommend you copy and paste in if possible and then follow the instructions as provided on each page.
As part of the process when you enter your e-mail address you may separately be mailed with an additional activation code that you will need to enter at step 6 to confirm your acceptance of our data

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protection policy or you will just be asked to confirm acceptance via a check box. If you are required to have an activation code to do this, you will require access to your e-mail to retrieve this additional code.
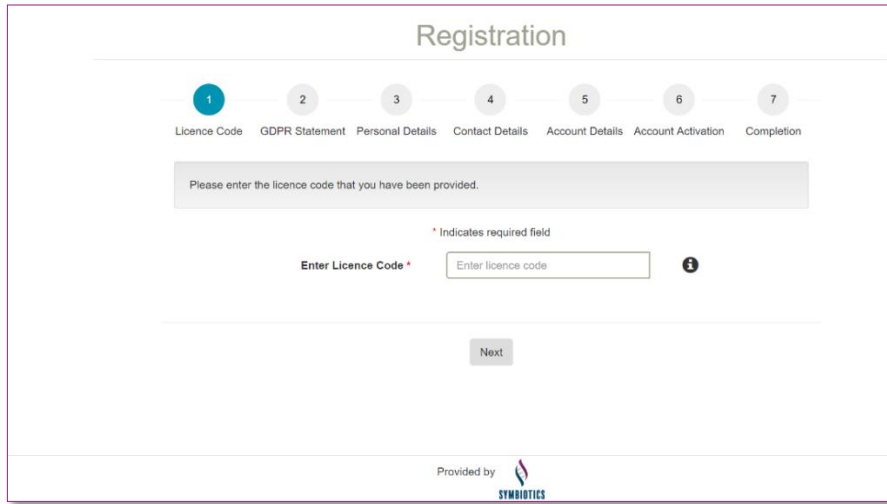

Figure 2: Opening Online Registration Screen

You will then proceed to a screen where you will read our General Data Protection policy and have to accept it.
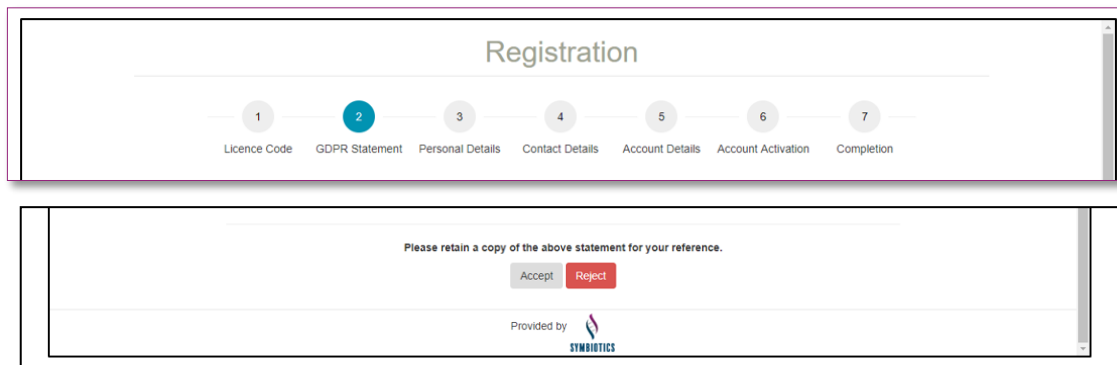

Figure 3: GDPR Acceptance

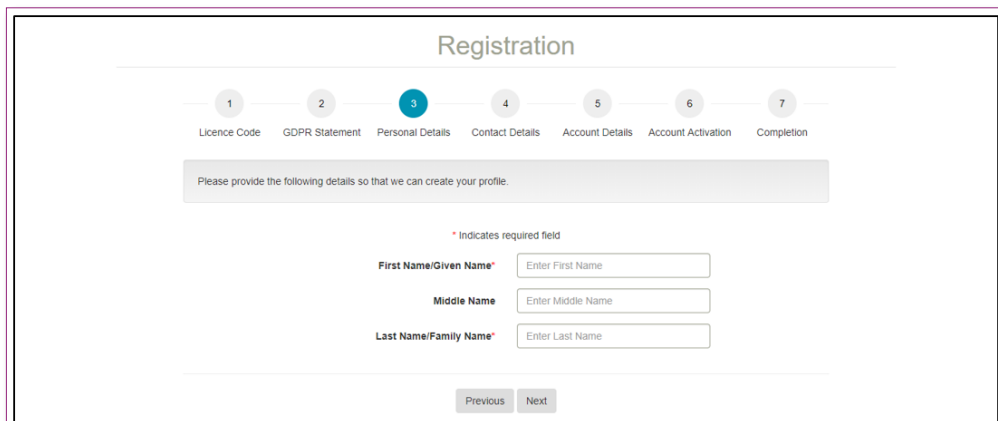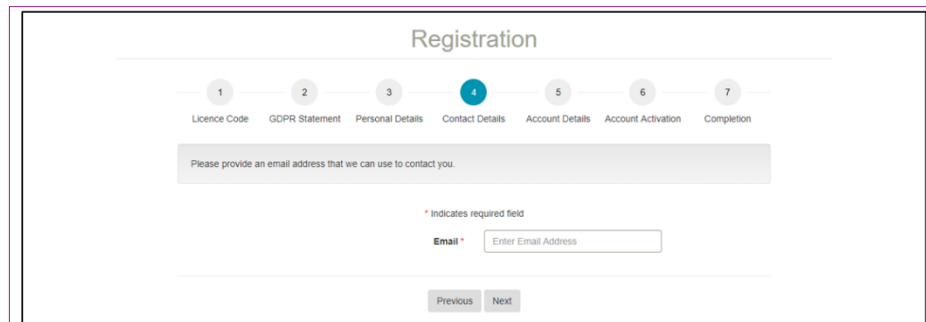This will follow on to you needing to enter your personal details

Figure 4: Personal Details Entry

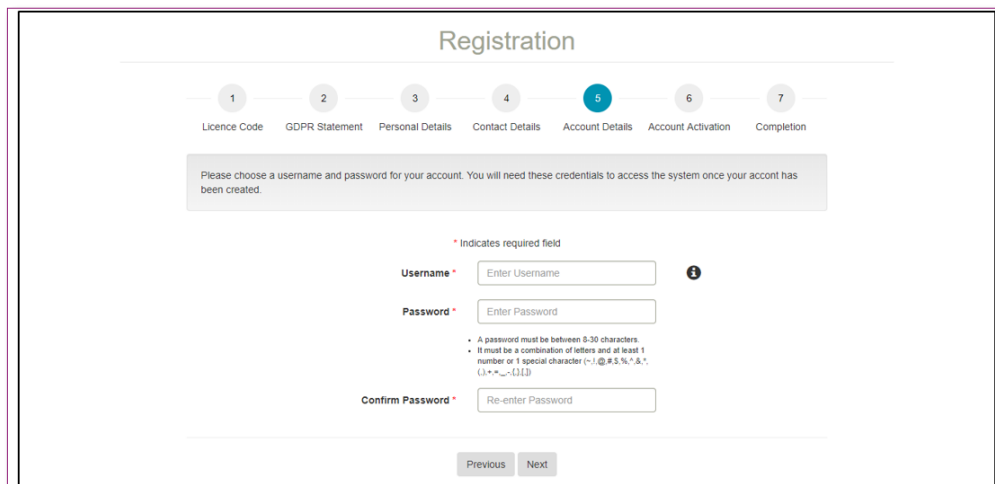Which will lead on to a screen for you to enter your contact details

Figure 5: Contact Details Entry
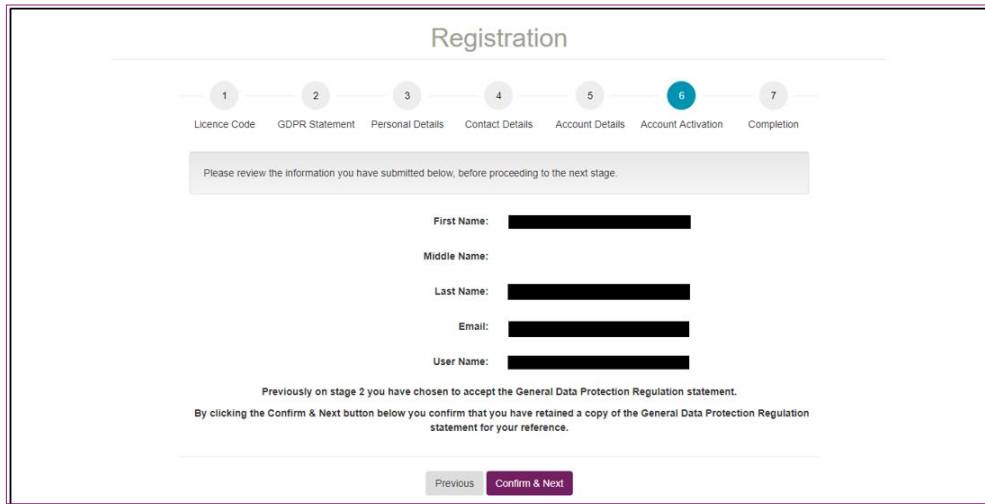
This will lead on to a screen where you set your account login information

Figure 6: Your Account Details Entry

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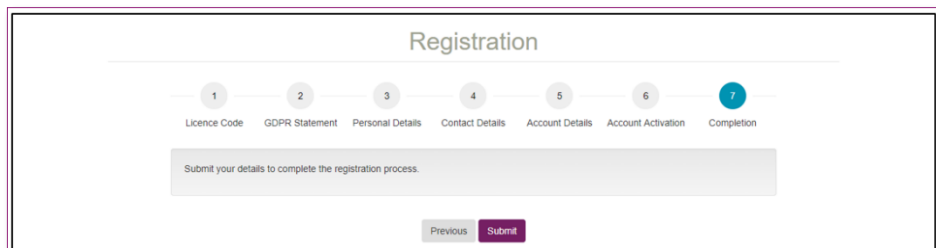
Then on to the account activation screen

Figure 7: Activation of Your Account
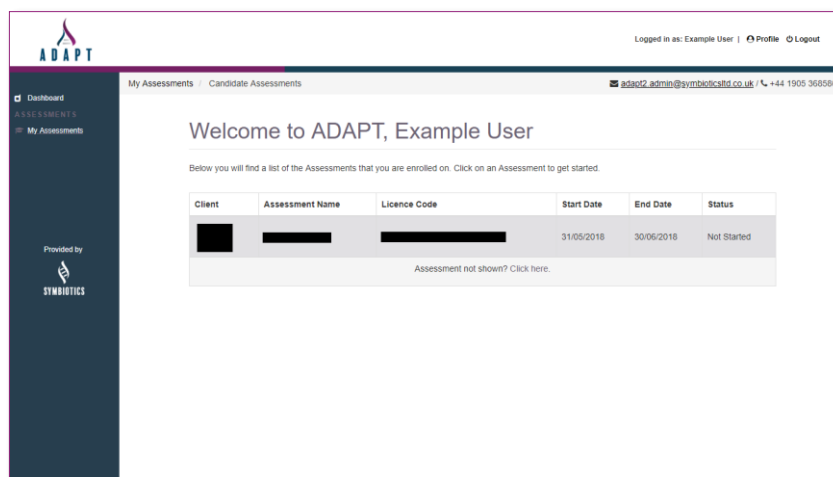
When you have completed all details click 'Submit' to continue.

Figure 8: Registration Completion

A candidate assessment menu will appear.
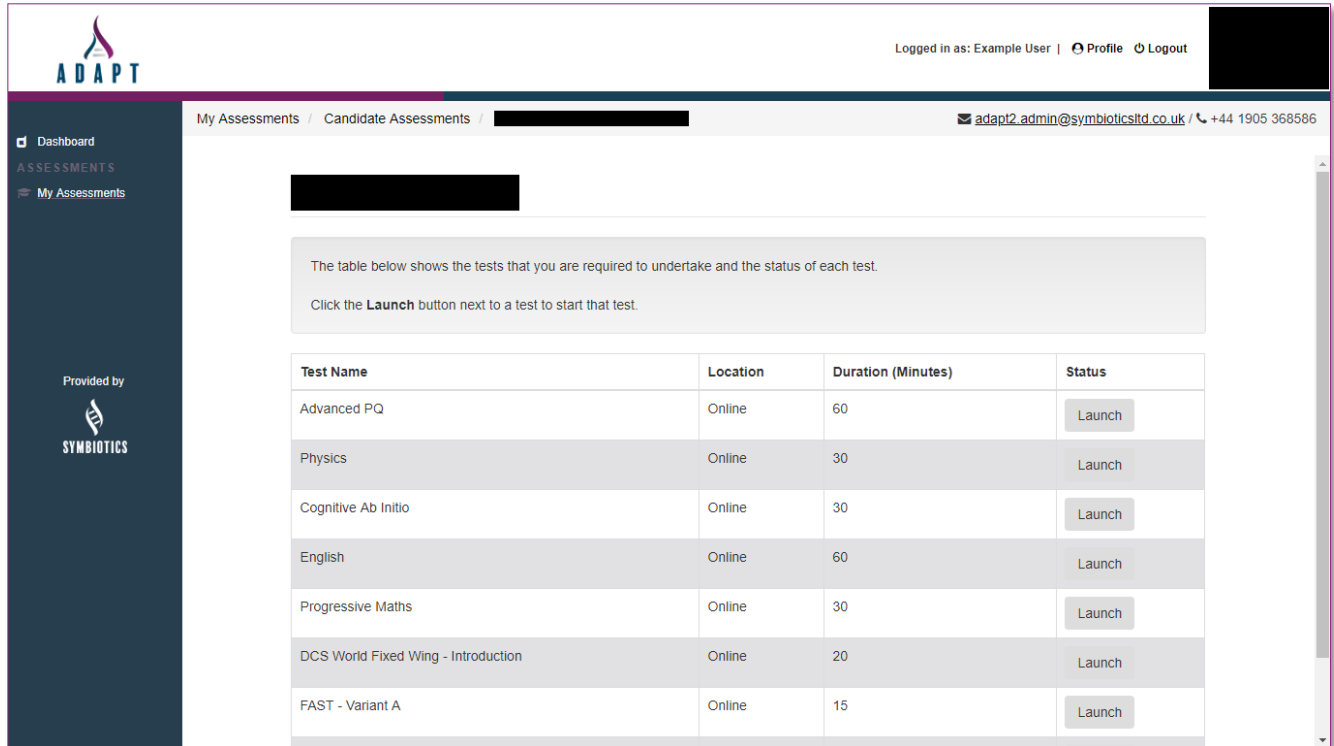
Figure 9: Candidate Assessments Menu

The tests that you have been allocated will load. Click 'Launch' to receive the instructions for your first test.

Figure 10: List of Allocated Tests

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2. ADAPT Personality Questionnaire (APQ)

2.1 Instructions

There is 1 personality questionnaire that must be completed – the ADAPT Personality Questionnaire (APQ). This looks at your personality, values, behaviour and attitude. The questionnaire can either be completed at the test centre, or before/after you attend the test centre. If you are not at the assessment centre you should do the APQ in a comfortable, quiet area with no distractions or interruptions. This stage has no time limit, but you should try to finish within 40-60 minutes, in 1 attempt.
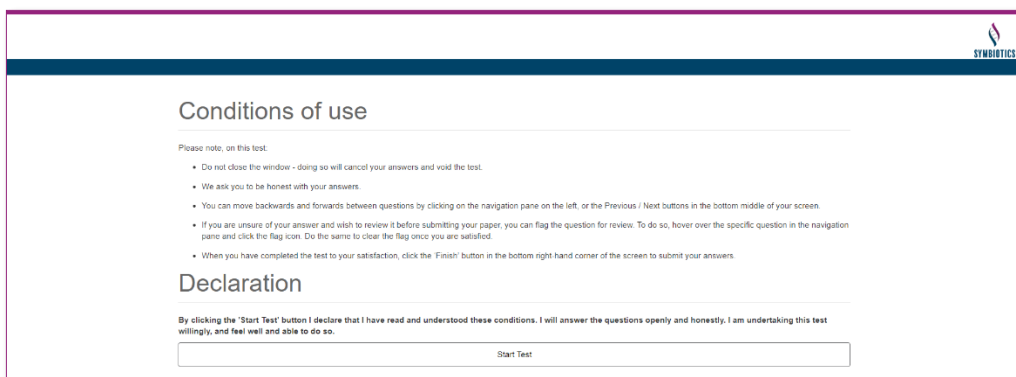
Figure 11: Conditions of use

A declaration is presented at the beginning of every test. Upon reading the conditions of use, click 'start test' to progress.
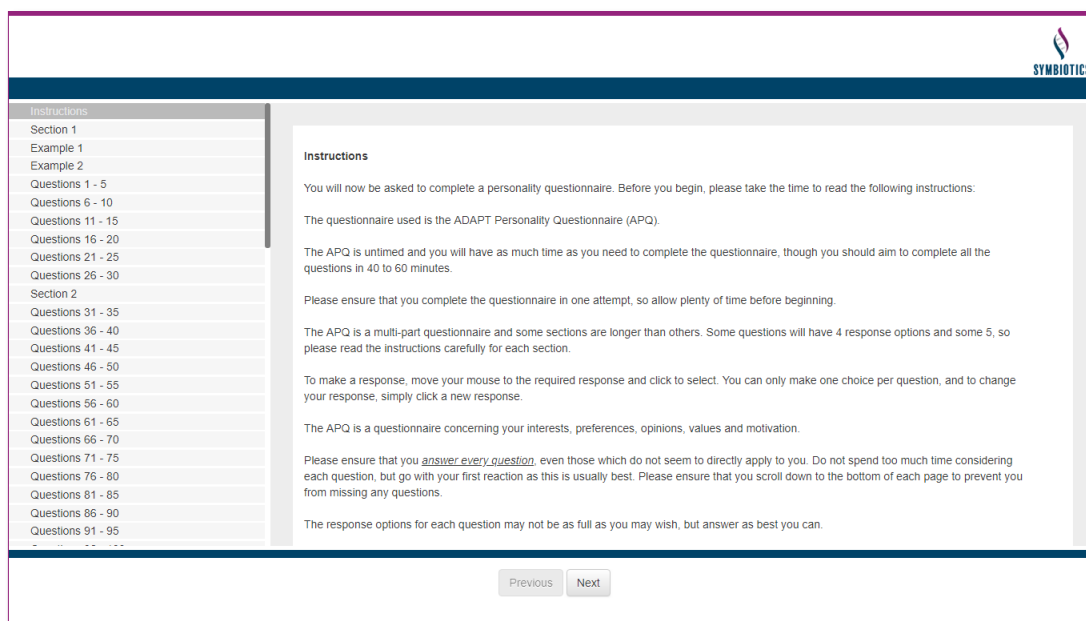
Figure 12: APQ Instruction Screen

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The questionnaire is split in to 11 sections. The questions will change in length and there are 3 different question types, all of which have 4 multiple choice options:

2.1.1   Question Type 1

Read the question carefully and decide which of the two options most closely describes your opinion or preference - i.e. which option is 'more like me'. Then select the option that most accurately describes how strong this preference is - a moderate preference or a strong preference.
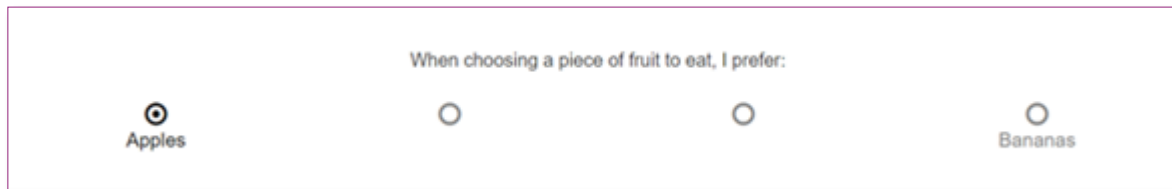
Figure 13: APQ Question Type 1

2.1.2   Question Type 2

Read the question carefully and then select the option that most accurately describes your opinion or preference – strongly agree, agree, disagree or strongly disagree:
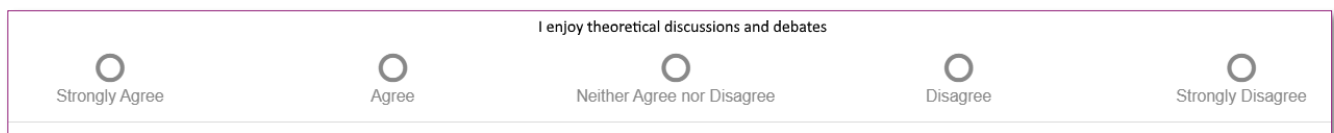
Figure 14: APQ Question Type 2

2.1.3   Question Type 3

Read the question carefully and then select the one option that most accurately describes your opinion or preference:
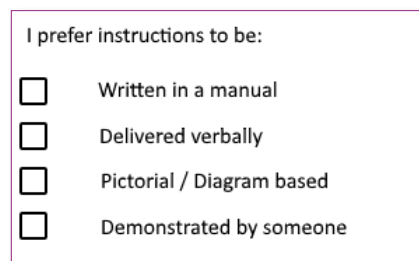
Figure 15: APQ Question Type 3

You will answer questions on a range of topics, including your interests, preferences and opinions. There are no right or wrong answers. To assess your personality to the highest standard, we need to get the correct information about you. Therefore, you should be totally honest when answering the questionnaire.

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Do not spend too long thinking about each question – your first reaction is usually the best. The information given may not be as detailed as you want, but answer the best you can. Be as honest and truthful as you can. Do not give an answer just because it seems like the right thing to say.

Please ask the assessor or examiner if you do not understand any of the words used in the questions.

An example of the layout of the APQ questions is shown below:
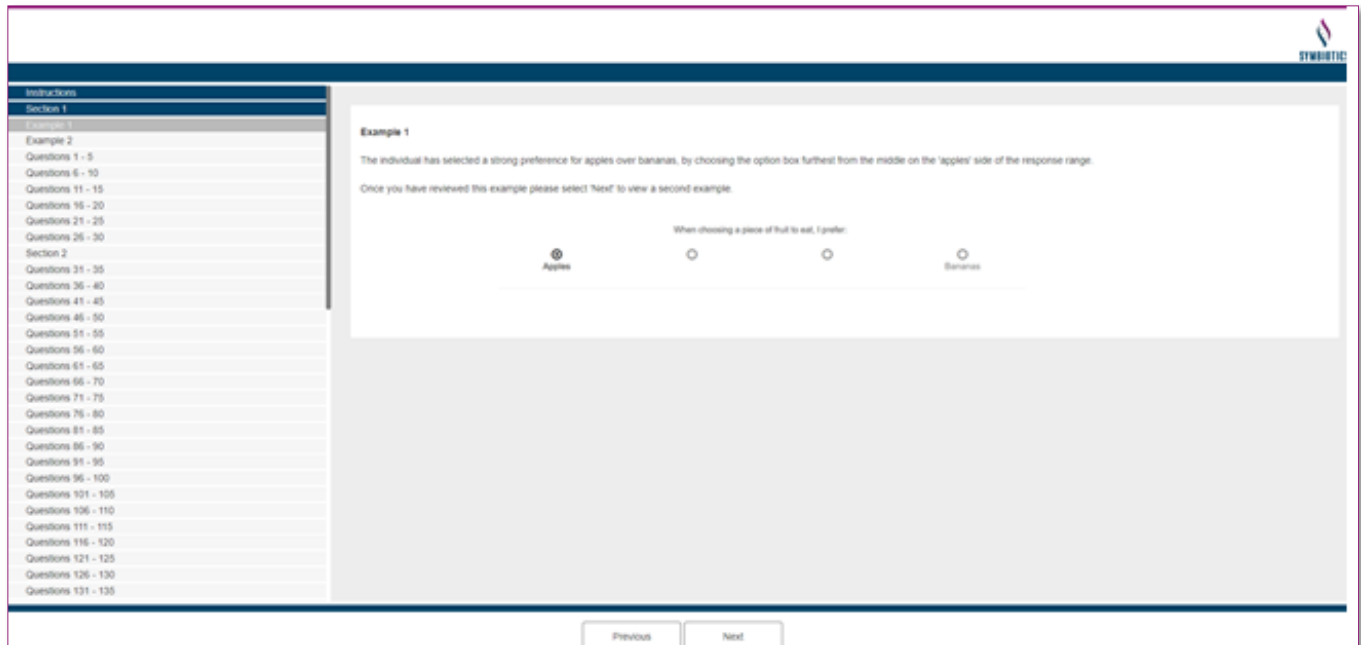
Figure 16: Example of APQ Question Layout

Your answers will be saved at the end of each page, so you can come back and carry on with the questionnaire if you get disconnected. You can go back and change any answers once you have pressed 'next'. You need to answer all questions in all sections. You will not be allowed to finish the questionnaire until all the questions are answered. The left hand bar on the screen will show you how many questions are still to be answered on the page and how many pages are left to complete as well as the number of answers required to complete the page.

The 'finish' button will **only** activate once all questions on all pages have been answered.

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3. Mathematics Stage

3.1 Instructions
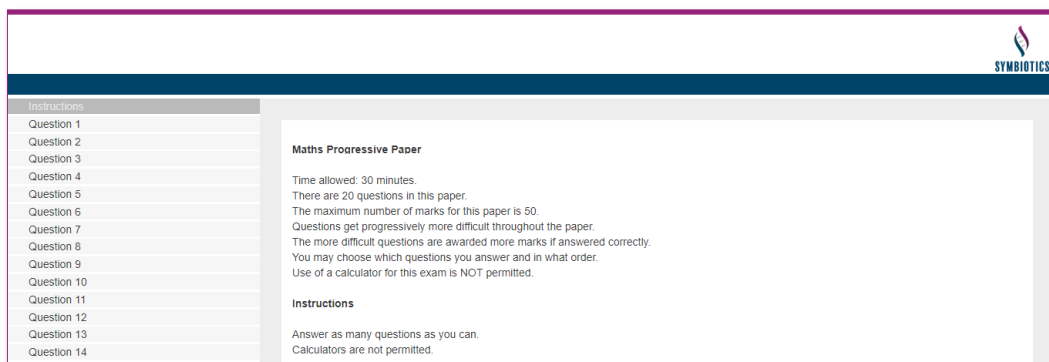
Figure 17: Mathematics Instructions Screen

Read the instructions carefully before you click 'next' to start the test. The test is 30 minutes long and the timer will commence when you start the test. Click 'next' to move on to the next page of the test. You may use the 'next' and 'previous' buttons to scroll through the pages of the test.

The test will automatically finish after 30 minutes whether or not you have answered all the questions. You will be logged out of the test and your data uploaded. If you finish the assessment within 30 minutes you may click 'finish' to exit the test. Your data will be uploaded – you will not be able to return to the assessment.

3.2 Maths Paper

3.2.1 Progressive

If you are taking the 'Progressive Maths Paper' the questions get progressively more difficult throughout the paper:

>Questions 1-5 are at foundation level and worth 1 mark each
>Questions 6-15 are at intermediate level and worth 2 marks each
>Questions 16-20 are at advanced level and worth 5 marks each

You may choose which questions you answer and in what order.

3.3 Topics Covered

3.3.1 Progressive

- (a) Speed/Distance/Time
- (b) Calculating Fuel Rate
- (c) Basic Pythagoras

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3.4   Formulas

Below is not an all-inclusive list; familiarising yourself with the topics outlined above should ensure you are aware of all the relevant formulas, including:

- (a)   Speed = Distance / Time
- (b)   Cosine and Sine rules
- (c)   Pythagoras's theorem: $c^2 = a^2 + b^2$
- (d)   Angles in a triangle add up to 180°
- (e)   Trigonometry ratios

3.5   Example Questions

Examples of typical questions you can expect in the Advanced paper (or the final section of the paper if you are completing the Progressive paper) can be found below:

1. From a boat, the angle of elevation of the foot of a lighthouse on the edge of a cliff is 34°. If the cliff is 150 m high, how far from the base of the cliff is the boat.

2. If you are flying on a heading of 037° and make a left turn of 45°, what will be your new heading?

3. A letter is to be chosen at random from this set of letter-cards. What is the probability that the letter is an 'S'?

$$S \quad T \quad A \quad T \quad I \quad S \quad T \quad I \quad C \quad S$$

4.   Look at the diagram of this cuboid. Calculate the length BG.

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5. An aircraft has an airspeed of 275 km/h, and flies on a bearing of 295. The wind is blowing at a speed of 225 km/h from West to East. What is the head wind and what is the cross wind?
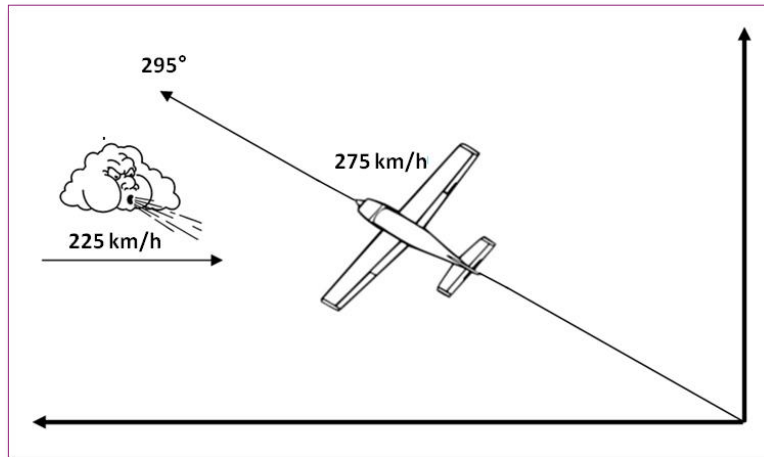
3.5.1 Example Math Questions – Answers:

1)   222 m
2)   352°
3)   3
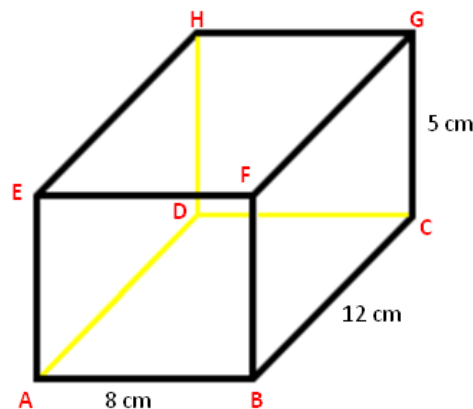   10
4)   13 cm
5)   Head wind = 204 km/h
      Cross wind = 95 km/h

4   Physics Stage

4.1   Instructions

Read the instructions carefully before you click 'next' to start the test. The test is 30 minutes long and the timer will commence when you start the test. Click 'next' to move on to the next page of the test. You may use the 'next' and 'previous' buttons to scroll through the pages of the test.

The test will automatically finish after 30 minutes whether or not you have answered all the questions. You will be logged out of the test and your data uploaded.

If you finish the assessment within 30 minutes you may click 'finish' to exit the test. Your data will be uploaded – you will not be able to return to the assessment.
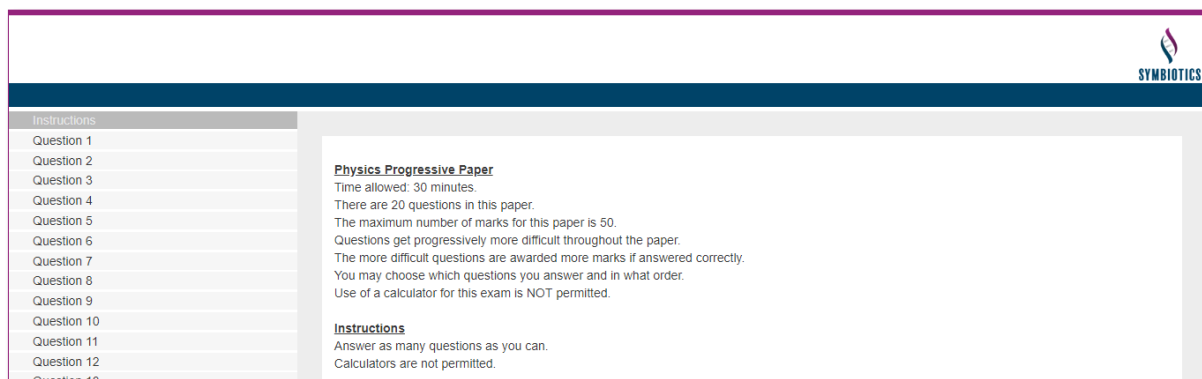

Figure 18: Physics Instructions Screen

4.2   Physics Papers

4.2.1   Progressive

You will be informed if you are taking the 'Progressive Physics Paper'. In this case the questions get progressively more difficult throughout the paper:

> Questions 1-5 are at foundation level and worth 1 mark each
> Questions 6-15 are at intermediate level and worth 2 marks each
> Questions 16-20 are at advanced level and worth 5 marks each

You may choose which questions you answer and in what order.

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4.3   Topics Covered

4.3.1   Progressive
- (a)   Properties of solids, liquids and gases
- (b)   Magnets
- (c)   Energy
- (d)   Mass and weight
- (e)   Waves – mechanical and electromagnetic
- (f)   Basic circuitry
- (g)   Units of measurement
- (h)   The universe
- (i)   Pressure
- (j)   Acceleration
- (k)   Force
- (l)   Circuitry – current and resistors
- (m)   Velocity
- (n)   Levers
- (o)   Springs
- (p)   Balancing weights

4.4   Formulas

Below is not an all-inclusive list; familiarising yourself with the topics outlined above should ensure you are aware of all the relevant formulas, including:
- (a)
- (b)   Speed = Distance/Time
- (c)   Gas laws – Boyle-Mariotte law, Gay-Lussac law, Dalton's law
- (d)   Newton's equations of motion
- (e)   Hooke's Law
- (f)   Bernoulli's Theorem
- (g)   Ohm's Law

4.5   Example Questions
Examples of typical questions you can expect in the Advanced paper (or the final section of the paper if you are completing the Progressive paper) can be found below:

1. In an emergency stop, a driver applies the brakes in a car travelling at 24 ms-1. The car stops after travelling 19.2m while braking. Calculate the average acceleration of the car during braking?

2. Calculate the current passing through a 6.8 Ω resistor when it is connected to a 9V battery:
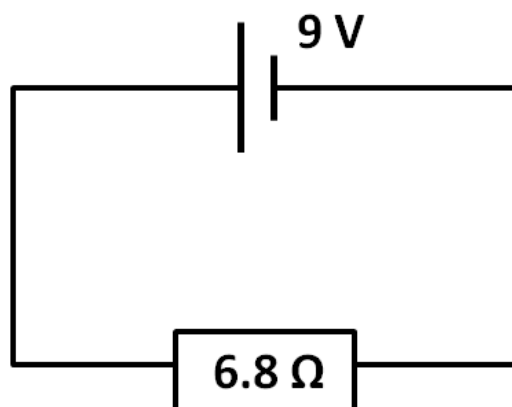
3. A sample of ideal gas has a volume of 1.50 x 10-4 m3 at a temperature of 22°C and a pressure of 1.20 x 105 Pa. If the volume of the gas remains constant, calculate the temperature (in Kelvin not °C) at which the pressure of the gas is 2.00 x 105 Pa.

4. In a game of cricket, a ball leaves a bat in a horizontal direction from a height of 0.39 m above the ground. The speed of the ball is 35 ms-1. The ball takes 0.28 seconds to reach the ground again. What horizontal distance has the ball travelled in this time?

5. In the diagram below, Aircraft A is flying East and maintaining a groundspeed of 340 kt (a kt = speed of 1 NM / hr). Aircraft B is flying in the same direction as aircraft A but 210 NM ahead, maintaining a ground speed of 280 kt. Aircraft A will catch Aircraft B at Point 'X'. What distance will Aircraft B have travelled when this event occurs?
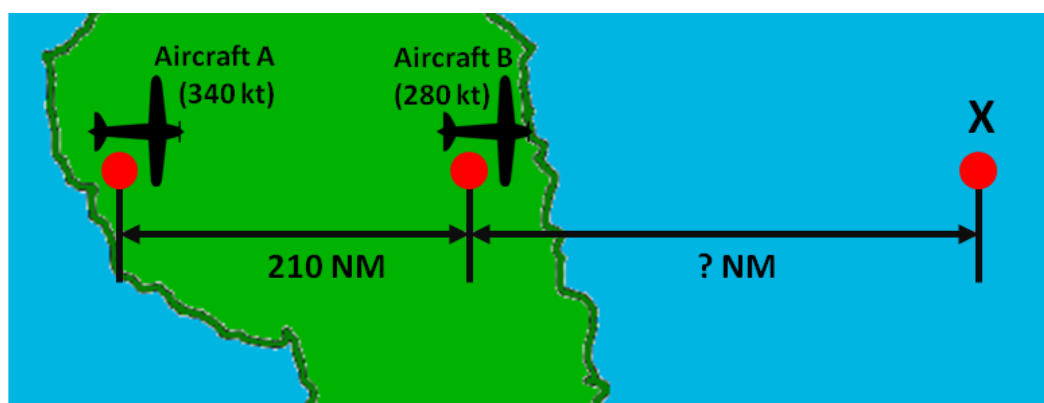
4.5.1 Example Physics Questions - Answers

1) -15 ms-2
2) 1.32 A
3) 492 K
4) 9.9 m
5) 980 NM

5.   FAST

Figure 19: FAST Assessment Screen

The FAST assessment stage is an online screening tool that takes approximately 15 minutes to complete. You will be required to:

- Follow verbal and written instructions

- Monitor a cockpit view and flight path

- Fly a 'crash' course

- Answer cognitive questions. The types of cognitive questions you will be asked are:
(a)   Numerical Reasoning
(b)   Verbal Reasoning
(c)   Abstract Reasoning
(d)   Perceptual Speed and Accuracy
(e)   Spatial Relationship Reasoning
(f)   Working Memory
    (Note: Examples of these types of questions can be found online)

- Provide self-analysis in the form of a mini-debrief

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5.2   Step by Step Guide to FAST

5.2.1   Information on System Configuration and Requirements

Before you get started you must ensure that you have the necessary hardware to complete the assessment.
Close down all other web and desktop applications
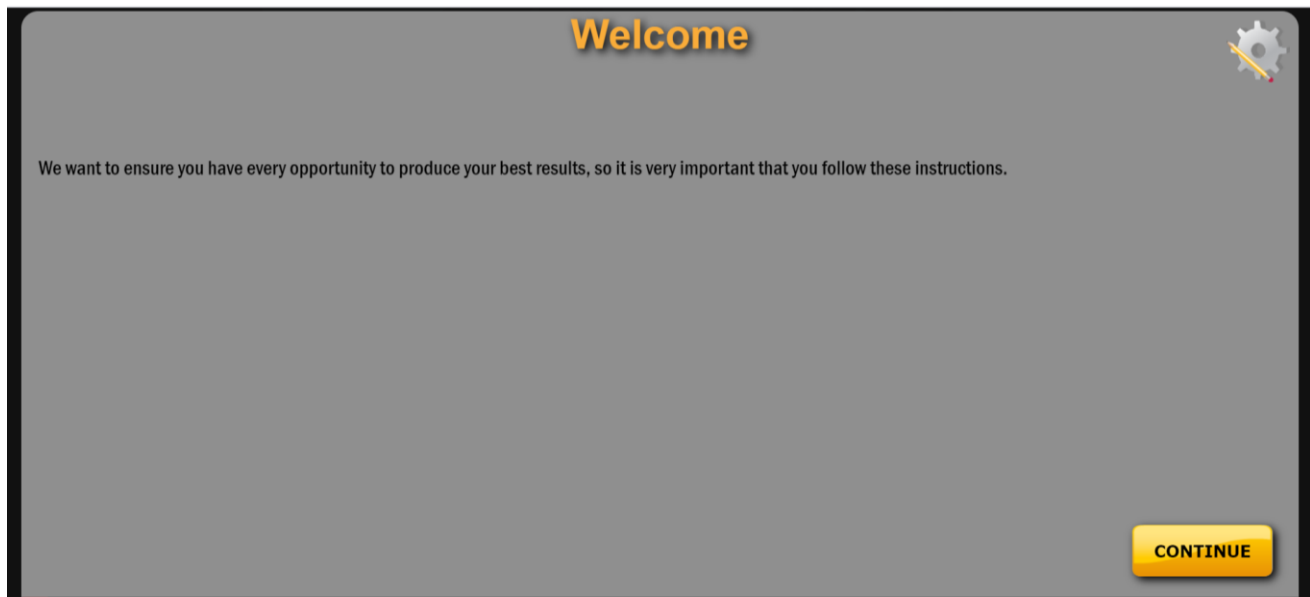Find a quiet location free from distractions.
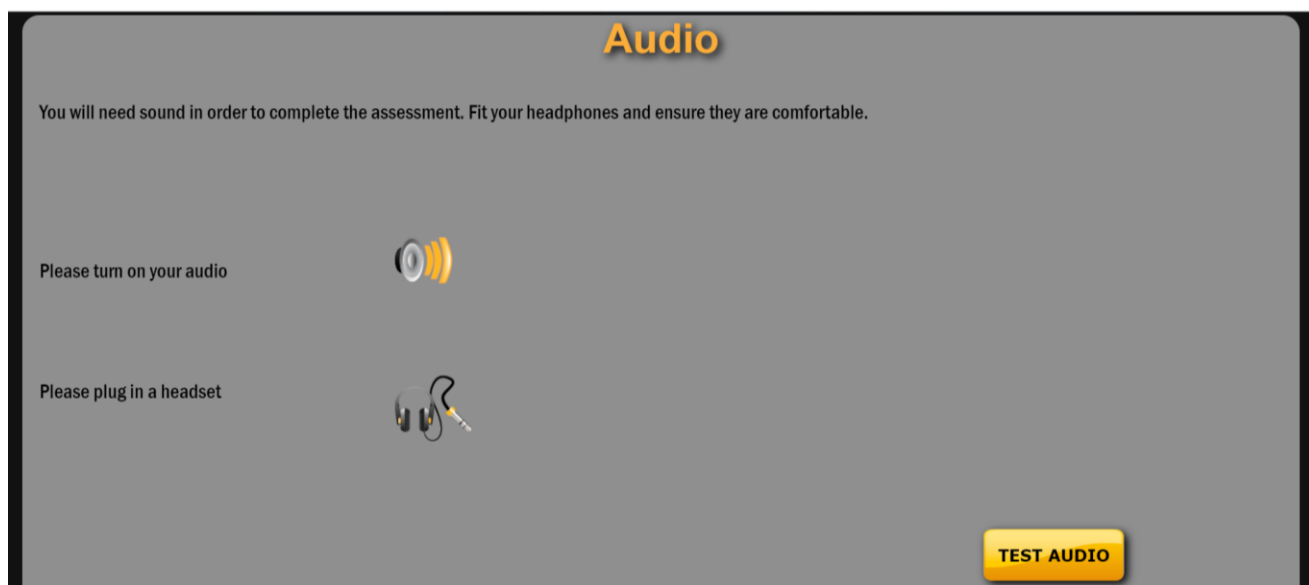

Figure 20: FAST Welcome Screen

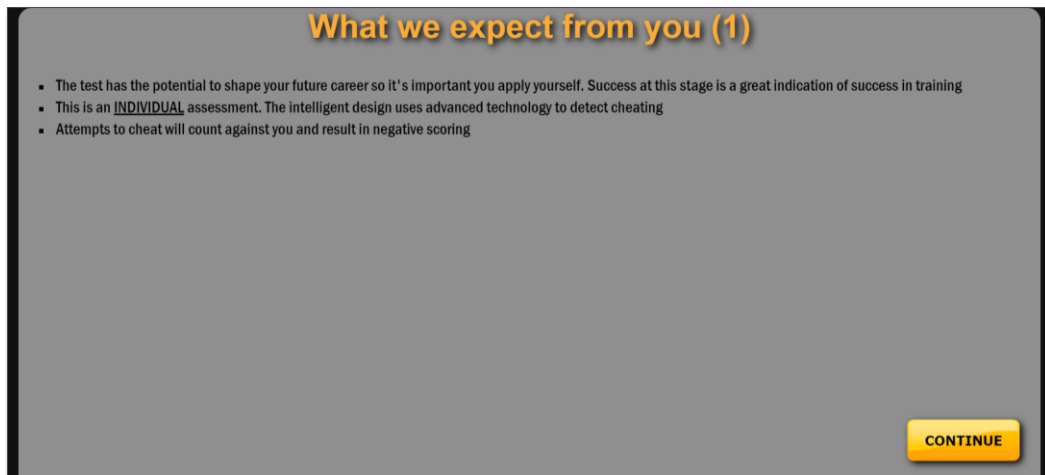**Figure 21: Explanation of Audio Requirements**

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Figure 22: FAST What to expect

Figure 23: FAST What we expect

Figure 24: FAST What we expect

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5.2.2 Information on the FAST System

Look out for the timer on some pages. They will push you through the assessment. When this expires the assessment will progress to the next page.

You will be briefed on all stages of the assessment as you progress. We will help you configure your computer appropriately and ensure that you are ready for take-off.

5.2.3 Information on the FAST Assessment

Figure 25: Information on Physical Assessment

Figure 26: Information on Cockpit Monitoring

Figure 27: Information on Flight Path

Figure 28: Information on Reporting

Figure 29: Information on Questions

The final part of the test is a debrief section.

Figure 30: FAST Test Debrief Instructions

6. Cognitive Testing

Figure 31: Cognitive Reasoning Instruction Page

6.1 Information on Topics Tested

This exam will measure and assess your aptitude some or all of the following areas, and last approximately 30 minutes:

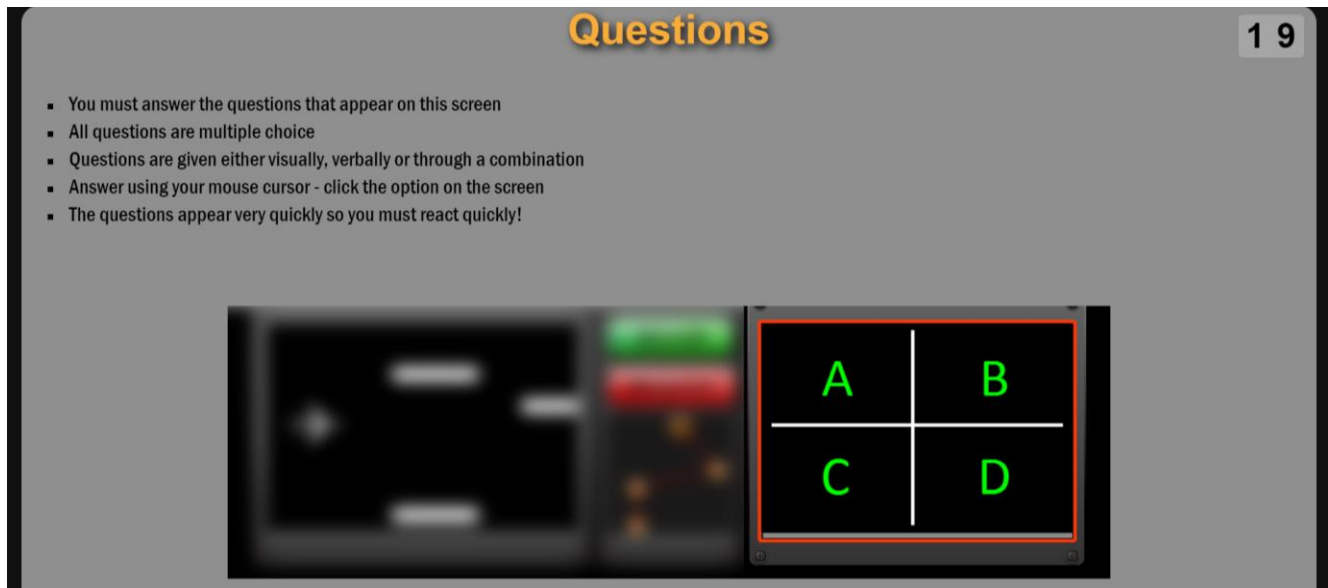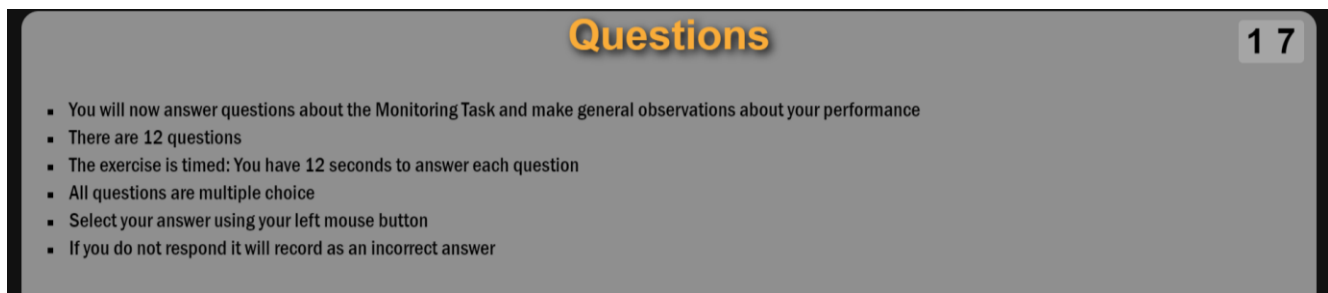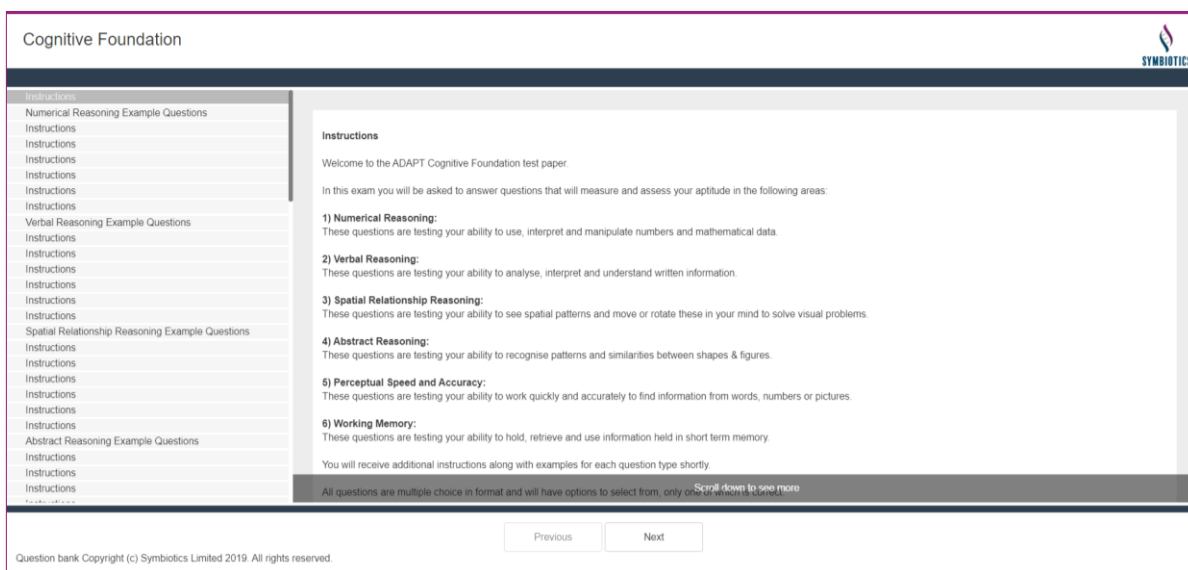|	
Numerical Reasoning	These questions are testing your ability to use, interpret and manipulate numbers and mathematical data.
Verbal Reasoning	These questions are testing your ability to analyse, interpret and understand written information.
Spatial Relationship Reasoning	These questions are testing your ability to see spatial patterns and move or rotate these in your mind to solve visual problems.
Abstract Reasoning	These questions are testing your ability to recognise patterns and similarities between shapes and figures.
Perceptual Speed and Accuracy	These questions are testing your ability to work quickly and accurately to find information from numbers or images.
Working Memory	These questions are testing your ability to hold, retrieve and use information held in short term memory.

You will receive specific instructions along with example questions for each question type shortly.
All questions are multiple choice in format and will either have three or four answer options to select from, only one of which is correct.

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You will need to read each question carefully before responding. You will not be able to go back to change your answers: you will need to work accurately but quickly in order to complete the test within the time limit.

Each question set will have 6 questions, making a maximum total of 42 questions in the paper.

6.2   Foundation Cognitive Test Examples

6.2.1   Numerical Reasoning

All questions will be multiple choice in format and will have 4 answer options available, only 1 of which is correct. Question types include:

1) Basic Algebra
2) Sequences
3) Fractions, Decimals and Percentages
4) Arithmetic
5) Conversions
6) Speed / Distance / Time calculations

For example:
Calculate how many miles there are in 64 km.

a) 40 miles
b) 48 miles
c) 45 miles
d) 50 miles

Answer = A

6.2.2   Verbal Reasoning

All questions will be multiple choice in format and will have 3 answer options available, only 1 of which is correct. Question types include:

1) Anagrams
2) Aviation Acronyms
3) Connections
4) Synonyms
5) Antonyms
6) Logic

For example:
Select the word most opposite in meaning to regular.

a) Normal
b) Usual

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c) Unusual

Answer = C

6.2.3 Spatial Relationship Reasoning

For these questions, a question image will be displayed for 5 seconds only.
This image will then be replaced with 4 answer option images.
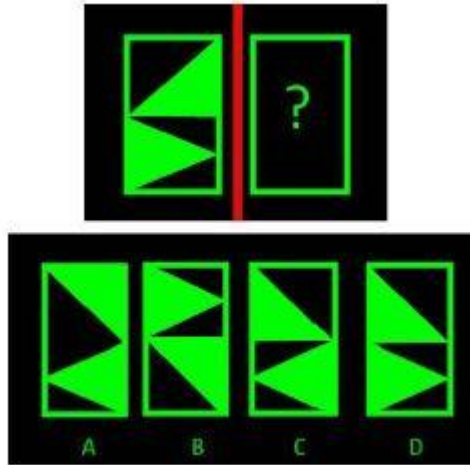Only 1 of these 4 images correctly answers the question.
You will not be able to view the original question image after the initial 5 seconds.
Question types include:

1) Reflection
2) Rotation
3) Cubes
4) Directions
5) Map
6) Radars meet

For example:

Select the option that shows a reflection of this image in the red line:
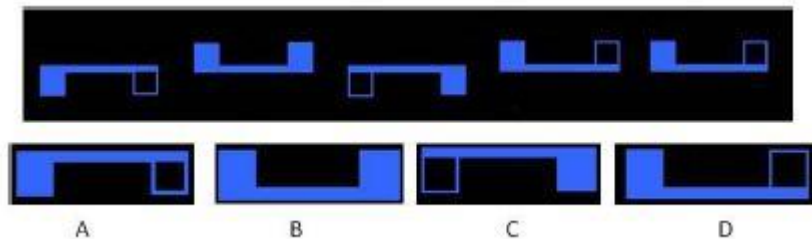

Answer = C

6.2.4   Abstract Reasoning

All questions will be multiple choice and will have 4 answer options available, only 1 of which is correct. Question types include:

1) Select the odd image
2) Complete the sequence
3) Complete the statement
4) Complete the grid

For example:

Select the odd image that does not fit with the other images:
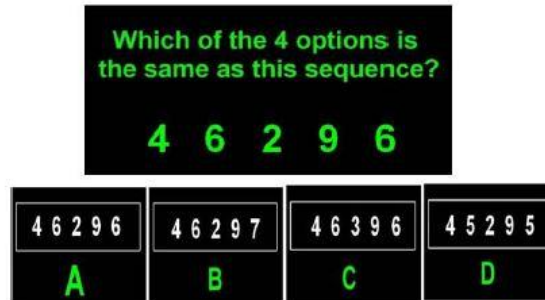

Answer = B

6.2.5 Perceptual Speed and Accuracy

For these questions, you need to respond as quickly as possible – your reaction times to complete each question will be recorded by the system. Question types include:

1) Match sequence - numbers
2) Match sequence - letters
3) Cockpit dials
4) Sorting data
5) Scanning
6) Matrix

For example:

Select the sequence that exactly matches the one below:

Answer = A

6.2.6 Working Memory

For these questions, a question image will be displayed for 5 seconds only.
This image will then be replaced with 4 answer option images.
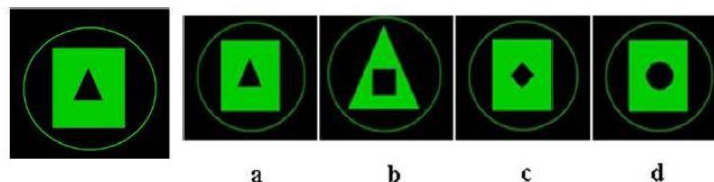Only 1 of these 4 images correctly answers the question.
You will not be able to view the original question image after the initial 5 seconds.
Question types include:

1) Counting task
2) Memory span
3) Dot memory
4) Match sequence
5) Match image
6) Radar location

For example:

Select the sequence that exactly matches the one below:

Answer = A

7.   Finishing the Assessment

When you have finished each of the tests you will see a screen displaying the specific list of tests that you are undertaking, highlighting which ones are complete:
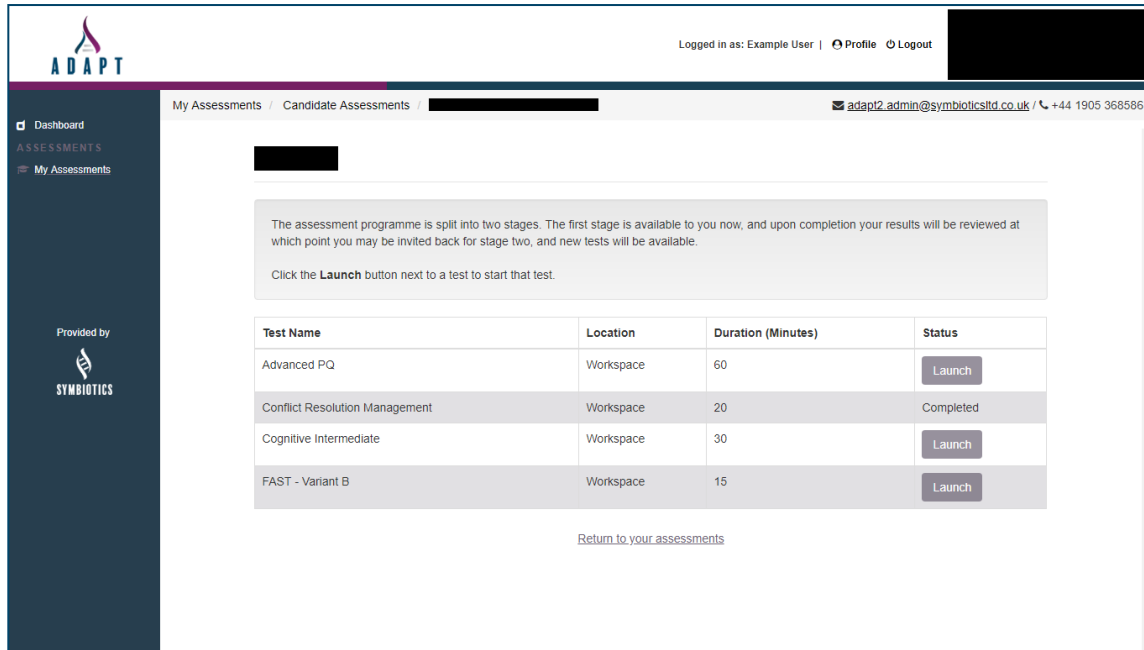

Figure 32: Central Screen.

Once a test has been completed click on the "Return to your assessments" link to access your next test. When you have completed all the tests please click on "Logout" at the top of the web page. This will upload your results to Symbiotics Ltd. Your results report will be generated and sent to the Academy.

Figure 33: Sample Assessment End Screen

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