S.E.C.T.T.

Pre - Selection Assessment Guide

You have been given this Pre-Selection Assessment Guide to help you to prepare for the SECTT assessment session.

It has been designed to give you an idea of:

- **what to expect**
- **how to prepare yourself**
- **what the assessments are like**

It may answer many of your questions, but you can still ask questions on the day of assessment.

The guide starts on the following pages with - typical questions which candidates ask, format of assessment and example questions.

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Why am I being asked to do these assessments?

A. *The assessments are designed to give specific information relevant to job performance. This, along with your school and work qualifications will help employers to select those candidates who are best suited to become electrical installation apprentices.*

Since those people who are most likely to be successful in the job are selected, both employers and employees get what they want.

Q. How long do they take?

A. *The complete process will last slightly more than 1 hour. If you need to use the toilet you should do so before the assessment session or between assessments if necessary. You will not be allowed to leave the room during assessments.*

Q. What is involved?

A. *When you arrive, you will normally be asked to take a seat at a desk in a classroom. Then the SECTT Training Officer will introduce him/herself, explain the procedure, and ask you to complete your personal details and other information e.g. date, etc on answer booklet provided.*

You are expected to keep quiet during the assessment session. This is so that you don't disturb other people.

There will be opportunities to ask questions before you start each assessment.

Q. How do assessments work?

A. *Employers have decided the skills and abilities needed in the job and for success in training. The assessments have been carefully designed to reflect the work of the installation electrician and the apprenticeship.*

This guide gives you a chance to practice similar questions to ensure you understand how to do them. If you're not sure please ask a parent, teacher or friend who does know how to do the questions. Remember you will also have the chance to ask questions on the day of assessment.

The assessments are carefully timed. You should work as fast as you can and follow the instructions carefully. However, you may not finish all the questions - people rarely do.

The answers are scored, and you will be notified in writing whether you have been successful or unsuccessful.

Q. What is the next stage?

A. *You will already have completed an application form. If you have been successful in the assessment, you will be entered onto the SECTT list of successful candidates that is circulated to local employers.*

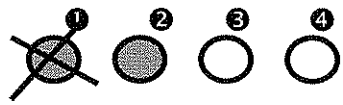
You may be contacted by an employer to attend an interview via this list, however, using your written confirmation of success issued by SECTT after the assessment, you can also apply to employers directly.

If you do attend an interview, the employer will decide whether or not to offer you a job as soon as possible after the interview.

At the Assessment Session

You will be given an **ANSWER BOOK** and a **QUESTION BOOK**. The answer book will contain a page asking for details such as name, address and date of birth.

The **question book** will have the same layout as the practice questions below. There will be **two answer sheets** - one for the **Numeracy Assessment** and one for the **Technical Assessment**. The questions are all multiple choice. You indicate your answer by filling in the circle under the number corresponding to your chosen answer. If you make a mistake or want to change your mind, then put a cross through your first answer and fill in the circle for your new answer.



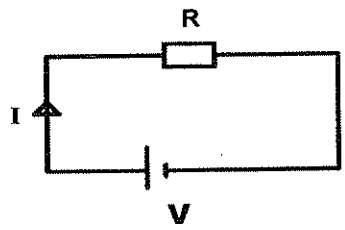
PRACTICE QUESTIONS - Numeracy

Q1	15 + 10 + 25 =	❶ 50	❷ 55	❸ 60	❹ 45
Q2	144 + 132 + 225 =	❶ 401	❷ 511	❸ 501	❹ 491
Q3	2164 - 1055 =	❶ 1109	❷ 1099	❸ 1108	❹ 1019
Q4	725 ÷ 5 =	❶ 235	❷ 145	❸ 175	❹ 315
Q5	3146 x 6 =	❶ 19876	❷ 18866	❸ 18876	❹ 18886
Q6	15^2 =	❶ 225	❷ 30	❸ 45	❹ 125
Q7	$\sqrt{36}$ =	❶ 9	❷ 6	❸ 3	❹ 18
Q8	1/4 + 3/8 =	❶ 7/8	❷ 4/12	❸ 5/8	❹ 3/4
Q9	A = 5b + 4c A = 76, b = 8, c = ?	❶ 18	❷ 3	❸ 6	❹ 9
Q10	7.5% of 150 =	❶ 11.25	❷ 10.75	❸ 14.5	❹ 20

PRACTICE QUESTIONS - Technical

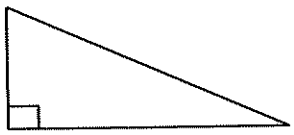
Q1

Ohm's law states $I = \frac{V}{R}$



If V = 100 volts and R = 10Ω,
then I = ? amps

❶ 5a ❷ 3a ❸ 1a ❹ 10a



Pythagoras theorem states *"in a right-angled triangle the square of the length of the hypotenuse is equal to the sum of the squares of the lengths of the other two sides".*

Q2

You are bringing a cable from the road to a house. The house has a ramp outside the front door. You have been asked to run a supply cable from the road to the front door, going inside the ramp, on the underside of the sloping surface to the front door.

Distance from road to beginning of ramp = 10 metres

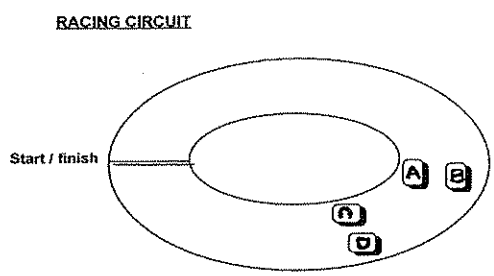
Distance from the beginning of the ramp to the wall beneath the front door = 4 metres

Distance from the ground to the bottom of the front door = 3 metres

What length of cable do you need?

❶ 14m ❷ 26m ❸ 15m ❹ 13m

Q3



Which car is most likely to win the race if they all keep to a speed of 80 mph?

❶ Car A ❷ Car B ❸ Car C ❹ Car D

MANUAL HANDLING

Safe manual handling is a requirement when lifting any load. The following is a description of a good handling technique.

1. Think before lifting or handling
   Plan the lift, can a handling aid, machine, hoist etc be used? Will help be needed? Remove any obstructions, rest in between long lifts.

2. Keep the load close to the waist
   Keep the heaviest side of the load close to the waist.

3. Adopt a stable position
   The feet should be apart with one leg slightly forward to maintain balance.

4. Get a good hold
   Where possible the load should be hugged as close as possible to the body.

5. Start in a good posture
   At the start of the lift, a slight bending of the back, hips and knees is preferable to fully flexing the back (stooping).

6. Don't flex the back any further while lifting
   Keep your back in the same position when starting to lift with the legs.

7. Avoid twisting the back or leaning sideways
   Keep the shoulders level and facing the same direction as the hips.

8. Keep the head up when handling
   Look ahead not down at the load.

9. Move smoothly
   The load should not be jerked or snatched.

10. Don't lift or handle more than can be easily managed
    Don't lift anything that's too heavy or too awkward, i.e. too long or too big.

11. Put down, then adjust
    Where precise positioning is required, put it down first then slide it into position.

Q4	If you had a very large and heavy load to move what would be the best solution?	❶ Break the load down into smaller parts	❷ Use a handling aid, hoist, pallet truck, etc.	❸ Push the load into its new position	❹ Use ropes to lift the load

Q5	A bundle of conduit pipes measuring 3.75M long and weighing 20kg is to be moved through a building site to the stores, how would you organise the move?	❶ Cut the pipes in half before moving so as to reduce danger	❷ Carry the items vertically	❸ Carry the pipes one at a time	❹ Arrange for two people to carry the load

Q6	A medium load has to be moved to another area of a busy and congested work shop, what would be your method of carrying the load?	❶ Clear the route of any obstructions before lifting and carrying the load	❷ Wait until the workshop is clear	❸ Get someone to guide you through the area	❹ Use a wheeled hoist to negotiate the route

Q7	When a load is unbalanced what should your lifting technique be?	❶ Use a handling aid	❷ Keep the lightest side close to your waist	❸ Keep the load balanced throughout the whole lift	❹ Keep the heaviest side close to your waist

Q8	When starting to lift a load you should always?	❶ Keep your back completely straight	❷ Use your back to start the lift movement	❸ Adopt a stable position	❹ Test the weight of the load

PRACTICE QUESTIONS – Answer sheet

With your pencil please fill in circle corresponding to your answer. If you make a mistake or want to change your mind, then put a cross through your first answer and fill in the circle for your new answer as shown on page 3.

NUMERACY

1. 1 2 3 4 ○ ○ ○ ○	**2.** 1 2 3 4 ○ ○ ○ ○	**3.** 1 2 3 4 ○ ○ ○ ○	**4.** 1 2 3 4 ○ ○ ○ ○
5. 1 2 3 4 ○ ○ ○ ○	**6.** 1 2 3 4 ○ ○ ○ ○	**7.** 1 2 3 4 ○ ○ ○ ○	**8.** 1 2 3 4 ○ ○ ○ ○
9. 1 2 3 4 ○ ○ ○ ○	**10.** 1 2 3 4 ○ ○ ○ ○		

TECHNICAL

1. 1 2 3 4 ○ ○ ○ ○	**2.** 1 2 3 4 ○ ○ ○ ○	**3.** 1 2 3 4 ○ ○ ○ ○	**4.** 1 2 3 4 ○ ○ ○ ○
5. 1 2 3 4 ○ ○ ○ ○	**6.** 1 2 3 4 ○ ○ ○ ○	**7.** 1 2 3 4 ○ ○ ○ ○	**8.** 1 2 3 4 ○ ○ ○ ○

PRACTICE QUESTIONS - Answers

Numeracy

Q1 = No.1 - 50

Q2 = No.3 - 501

Q3 = No.1 - 1109

Q4 = No.2 - 145

Q5 = No.3 - 18876

Q6 = No.1 - 225

Q7 = No.2 - 6

Q8 = No.3 - 5/8

Q9 = No.4 - 9

Q10 = No.1 - 11.25

Technical

Q1 = No.4 - 10 amps

Q2 = No.3 - 15 metres

Q3 = No.1 - Car A

Q4 = No.2 - Use a handling aid, hoist, pallet truck, etc.

Q5 = No.4 - Arrange for two people to carry the load

Q6 = No.1 - Clear the route of any obstructions before lifting and carrying the load

Q7 = No.4 - Keep the heaviest side close to your waist

Q8 = No.3 - Adopt a stable position
