

Light Vehicle Maintenance Level 1

Welcome to the Automotive Department

The Automotive Team have a wealth of knowledge that they want to share with you, we pride ourselves on developing you to be industry ready and have a great adventure while learning the subject of Automotive.

Please find your summer project work enclosed in this booklet.

This work is a pre – requisite for the course, **it is not optional.**

Please bring your completed work with you on your first day of College.

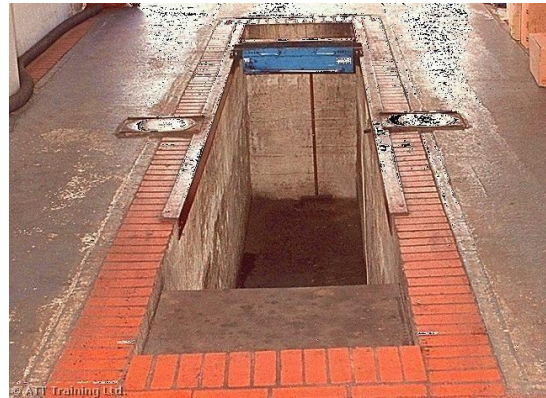
Pass mark 60%

1. An automotive technician wears overalls as part of their personal protective equipment (PPE). (10 marks) Name an item of additional PPE required **and** state **the task it would be used on** to protect each of the following;
 - a. the head
 - b. the feet
 - c. the hands
 - d. the eyes
 - e. the ears
2. What item of PPE is it essential to wear in order to alert others of the presence of repair or recovery operations by the roadside? (2 marks)
3. Name **THREE** items of equipment used to protect customers' transport when carrying out repairs, recovery or maintenance. (6 marks)
4. Many accidents in the automotive environment are caused by slips, trips and falls. List **THREE** different causes of these. (6 marks)
5. Name **TWO** utilities and **THREE** consumables used within the automotive environment that should not be wasted unnecessarily. (10 marks)
6. List the equipment and cleaning agent(s) which would be used when dealing with minor oil leaks / spillages in an automotive environment. (6 marks)
7. State **ONE** duty imposed on the **employee** by the Health & Safety at Work Act 1974. (2 marks)
8. State **ONE** duty imposed on the **employer** by the Health & Safety at Work Act 1974. (2 marks)
9. List **TWO** reasons for recycling waste materials where possible. (4 marks)

10. Describe the main potential hazard when using the equipment shown below. (4 marks)



11. State a potential hazard when working in the area shown below. (4 marks)

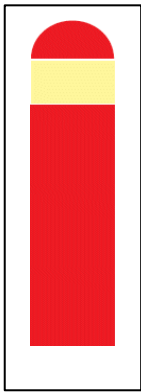


12. State **where** and **why** barrier cream would be used in an automotive environment. (4 marks)

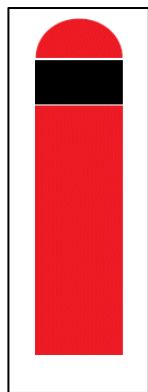
13. State the name of the regulations that relate to the piece of equipment shown below,
with regard to Health and Safety. (4 marks)



14. List **FOUR** things that an employer should provide in order to comply with modern safety legislation. (12 marks)
15. State **TWO** types of fire that it would be extremely dangerous to use the extinguisher A (Foam) on. (4 marks)
16. State **TWO** types of fire that extinguisher B (Carbon Dioxide) should be used on. (4 marks)



A



B

17. State the TYPE of safety sign shown below. (4 marks)



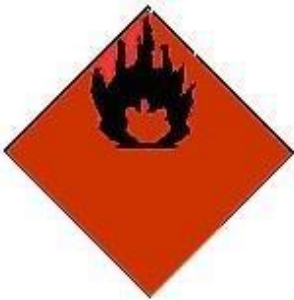
18. State the TYPE of sign shown **and** what it means. (4 marks)



19. State the TYPE of sign shown **and** what it means. (4 marks)








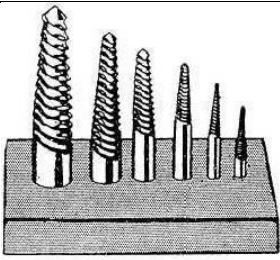




20. State the meaning of the following product warning signs. (4 marks)





UNIT REF: G4K
**WRITTEN ASSESSMENTS
KNOWLEDGE OF MATERIALS, FABRICATION, TOOLS AND MEASURING
DEVICES USED IN THE AUTOMOTIVE ENVIRONMENT**

1. Name the hand tools and measuring devices shown below. (12 marks)

Pass mark 60%

A		B	
C		D	
E		F	
G		H	
I		J	

K		L	
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- Hacksaw blades are classified by length, type and number of teeth on the blade. What determines the number of teeth to use? (4 marks)
- What would the following tool be used for? (4 marks)



- What is the smallest accurate measurement that can be made on a standard metric 25-50 mm. micrometer? (4 marks)
- What is the smallest accurate measurement that can be made on an engineers rule? (4 marks)
- When inspecting a vehicle braking system, which component could be checked for serviceability by measuring with a micrometer? (4 marks)
- Why is it important that hand tools and measuring devices are wiped down and lubricated after use? (4 marks)
- Name the test instrument shown below. (4 marks)



9. Explain what checks should be done to an electrical measuring device before attempting to measure electrical resistance. (6 marks)

10. The abbreviation S.W.L. is found on a vehicle hoist. What does this stand for? (6 marks)

11. What name is given to a material which returns to its' original shape after being deformed? (4 marks)

12. If a material can be permanently deformed without breaking, it is said to be p_____? (4 marks)

13. Hardness is normally recognised as the ability of a material to resist certain things. Name **two** of them. (4 marks)

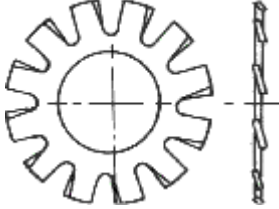
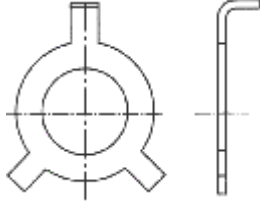
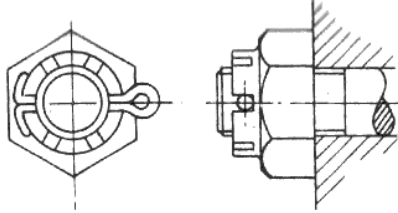
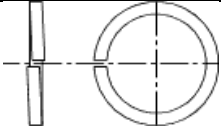
14. List **three** properties of mild steel which make it suitable for use on a vehicle. (6 marks)

15. This material is used for many crankcases, cylinder blocks and inlet manifolds. It is light and can conduct heat well. What is it? (4 marks)

16. PVC is used for many gaiters, seals and electrical cable insulation. What does PVC stand for? (6 marks)

17. What type of metal would need a hacksaw blade which uses 32 teeth per inch. (t.p.i.) (4 marks)

18. Name the locking devices A ,B, C, and D shown below. (2 marks each)

A	
B	
C	
D	

19. When filing metal it is often common practice to rub chalk into the teeth of a clean file before starting work. Why is this done? (4 marks)

20. Name the type of fastening device shown. (4 marks)

