

Light Vehicle Maintenance Year 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 with 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.

UNIT REF: G0102K	WRITTEN ASSESSMENT KNOWLEDGE OF HEALTH, SAFETY AND GOOD HOUSEKEEPING IN THE AUTOMOTIVE ENVIRONMENT
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Pass mark 60%

1. An automotive technician wears overalls as part of their personal protective equipment (PPE). 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

(10 marks)
2. What item of PPE is it essential to wear in order to alert others of the presences 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, regarding Health & 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)*








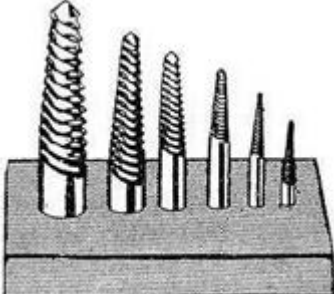


20. State the meaning of the following product warning signs. *(4 marks)*



UNIT REF: G4K	WRITTEN ASSESSMENTS KNOWLEDGE OF MATERIALS, FABRICATION, TOOLS AND MEASURING DEVICES USED IN THE AUTOMOTIVE ENVIRONMENT
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Pass mark 60%

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

A		B	
C		D	
E		F	
G		H	

I		J	
K		L	

- 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)**



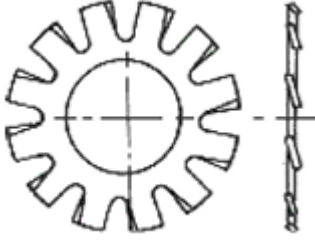
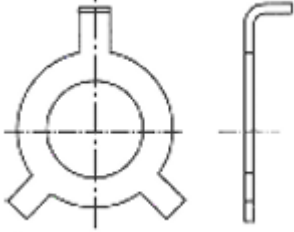
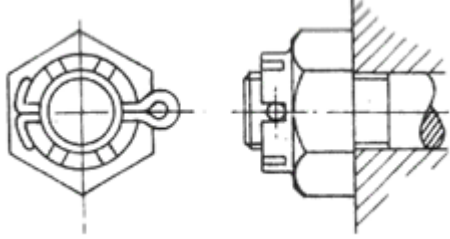

- What is the smallest accurate measurement that can be made on a standard metric 25-50mm micrometer? **(4 marks)**
- What is the smallest accurate measurement that can be made on an engineer's ruler? **(4 marks)**
- When inspecting a vehicle braking system, which component could be checked for serviceability 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)**

8. 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 abbreviations 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 recognized as the ability of a material to resist certain things. Name **TWO** of them. **(4 marks)**
14. List **THREE** properties of mild steel which makes 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 below. **(4 marks)**

