

Unit Standard **30478**

Demonstrate knowledge of automotive lubricants

Level 2 Credit 2 v1

Student Name:

School:

Date:

Marked By: _____ **Mark** _____ **%**

Feedback: **Excellent work**
 Good work

Please attempt all questions
Please resubmit

USEFUL WEBLINKS

Friction

<http://youtu.be/3U0hemKQomQ>

Lubrication

<http://youtu.be/WwvLvgwSpT4>

<http://youtu.be/2qRm4IVby8k>

<http://youtu.be/u5RA3zHLIdM>

<http://youtu.be/mmmcj53TNic>

http://youtu.be/RUd_2E1kyxc

Viscosity

<http://youtu.be/KHtyCVr-HKo>

Engine Oil

http://youtu.be/Ct_kSinwtKw

http://youtu.be/YrTG_uxa8y4

http://youtu.be/U_AnRyIxDhs

<http://youtu.be/ZmD1zkE03KY>

<http://youtu.be/kSGZcvyE2mY>

Gear Oil

<http://youtu.be/tpDuQQPONQI>

Using a Grease Gun

<http://youtu.be/bB2RiRKDQ9k>

Fluid Level Checks

<http://youtu.be/uvUPsk2bN0A>

<http://youtu.be/zmwLj1pnreg>

<http://youtu.be/-jU8JIfDwIU>

<http://youtu.be/vEdtHZwLKZ8>

<http://youtu.be/CVEmn4KKLsM>

<http://youtu.be/BR5lZkRuSt4>

<http://youtu.be/42lGSISsKys>

<http://youtu.be/NS6phSxHIC0>

<http://youtu.be/4v6QtCIRhFE>

REVIEW QUESTIONS ONE

- Q1 Name six functions of lubricating oil.
- Q2 What is the main difference between a low viscosity oil and a high viscosity oil?
- Q3 Explain the term hydrodynamic lubrication.
- Q4 List the three main kinds of base oils.
- Q5 Describe how speed affects oil selection .

Q6 Explain the relationship between viscosity and temperature.

Q7 Explain the term flash point.

Q8 Explain the term pour point.

Q9 Describe the major difference between mineral and synthetic oil.

Q10 Name five functions of additives in lubricating oil.

Q11 Explain the term oxidation.

Q12 Describe the purpose of foam inhibitors.

Q13 Describe three ways in which dirt and dust can enter the lubricating system.

Q14 Describe one symptom of lubricant incompatibility.

Q15 What does the SAE rating of an oil indicate?

Q16 What does the API rating of an oil indicate?

REVIEW QUESTIONS TWO

Q17 Name three primary functions of engine oil.

Q18 Describe how at low operating temperatures moisture can be formed in the engine.

Q19 Explain the differences between SAE 20 rated oil and SAE 50 rated oil.

Q20 Explain the following SAE rating.

SAE 20 – 50

Q21 Name three functions of anti-rust engine oil additive.

Q22 Why do gear oils need extreme pressure protection?

Q23 Name three functions of gear oils.

Q24 Explain why gear oils should not be mixed.

Q25 Explain why anti-oxidants are added to hydraulic fluids.

Q26 Name the most common type of automatic transmission fluid used today.

Q26 Name the most common type of automatic transmission fluid used today.

Q27 Explain the term consistency in relation to grease.