KEY COMPONENTS OF A 4-STROKE ENGINE



This page includes interactive exercises to help you learn about main components of a four-stroke internal combustion engine and improve your listening skills

PREPARATION TASK

Look at the picture and do the matching-up.

1. cylinder	a. поршень
2. spark plug	b. свеча зажигания
3. piston	c. распредвал
4. combustion chamber	d. цилиндр
5. intake valve	e. выпускной клапан
6. exhaust valve	f. коленчатый вал
7. crankshaft	g. пружина клапана
8. connecting rod	h. впускной клапан
9. valve spring	i. камера сгорания
10. cylinder block	j. поршневое кольцо
11. piston ring	k. шатун
12. camshaft	l. блок цилиндра

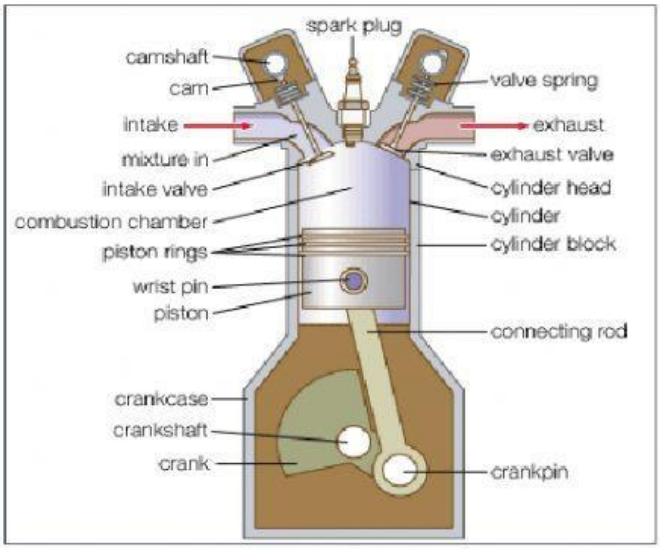


Fig.1 Engine and its components

WHILE-WATCHING

Watch the video. Do the exercise below.

LIVEWORKSHEETS

Mark the statements as True or False.

1. The engine has two types: one is the internal combustion engine and another one is external combustion engine.
   - o True o False
2. In the internal combustion engine, the fuel is burnt outside the engine cylinder.
   - o True o False
3. The cylinder block is usually made of silver and its alloys.
   - o True o False
4. The cylinder head contains a combustion chamber above each cylinder.
   - o True o False
5. Cylinder liners are made of special alloy (iron containing silicon, manganese, nickel and chromium) to provide the resistance to wear and corrosion.
   - o True o False
6. The spark plug is a cylindrical plug that moves up and down in the cylinder.
   - o True o False
7. The highest position of the piston reaches in the cylinder is called the Bottom Dead Centre and the lowest position it reaches is called the Top Dead Centre.
   - o True o False
8. The connecting rod is fitted in between the piston and the crankshaft.
   - o True o False
9. The flywheel used in a transmission system of a vehicle.
   - o True o False
10. The materials used for inlet and exhaust valve are generally the same.
    - o True o False

SPEAKING

Explain the function of these parts of engine. Speak the missing words.

1. A _____ ignites the mixture of petrol, vapour and compressed air.

2. The _____ connects the piston to the crankshaft.

3. The _____ serves as a reservoir for the storage and cooling of engine lubricating oil.

4. The _____ moves up and down in the cylinder and helps to convert pressure energy obtained by the combustion of fuel into useful mechanical power.

5. The _____ is to convert the reciprocating motion of the piston into the rotary motion of the crankshaft.

6. The _____ is responsible for the opening of the valves.

7. The _____ is essential to control the timing of air-fuel mixture entry into the cylinder.

8. The _____ controls the timing of combustion products out of the cylinders.

LIVEWORKSHEETS