

# 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. распределвал
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

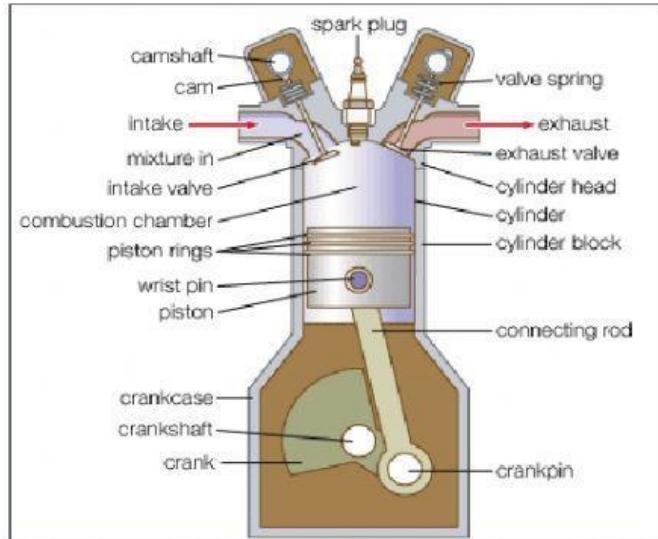


Fig.1 Engine and its components

## WHILE-WATCHING

Watch the video. Do the exercise below.

### 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.  
○ True      ○ False
2. In the internal combustion engine, the fuel is burnt outside the engine cylinder.  
○ True      ○ False
3. The cylinder block is usually made of silver and its alloys.  
○ True      ○ False
4. The cylinder head contains a combustion chamber above each cylinder.  
○ True      ○ False
5. Cylinder liners are made of special alloy (iron containing silicon, manganese, nickel and chromium) to provide the resistance to wear and corrosion.  
○ True      ○ False
6. The spark plug is a cylindrical plug that moves up and down in the cylinder.  
○ True      ○ 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.  
○ True      ○ False
8. The connecting rod is fitted in between the piston and the crankshaft.  
○ True      ○ False
9. The flywheel used in a transmission system of a vehicle.  
○ True      ○ False
10. The materials used for inlet and exhaust valve are generally the same.  
○ True      ○ False

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### 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.