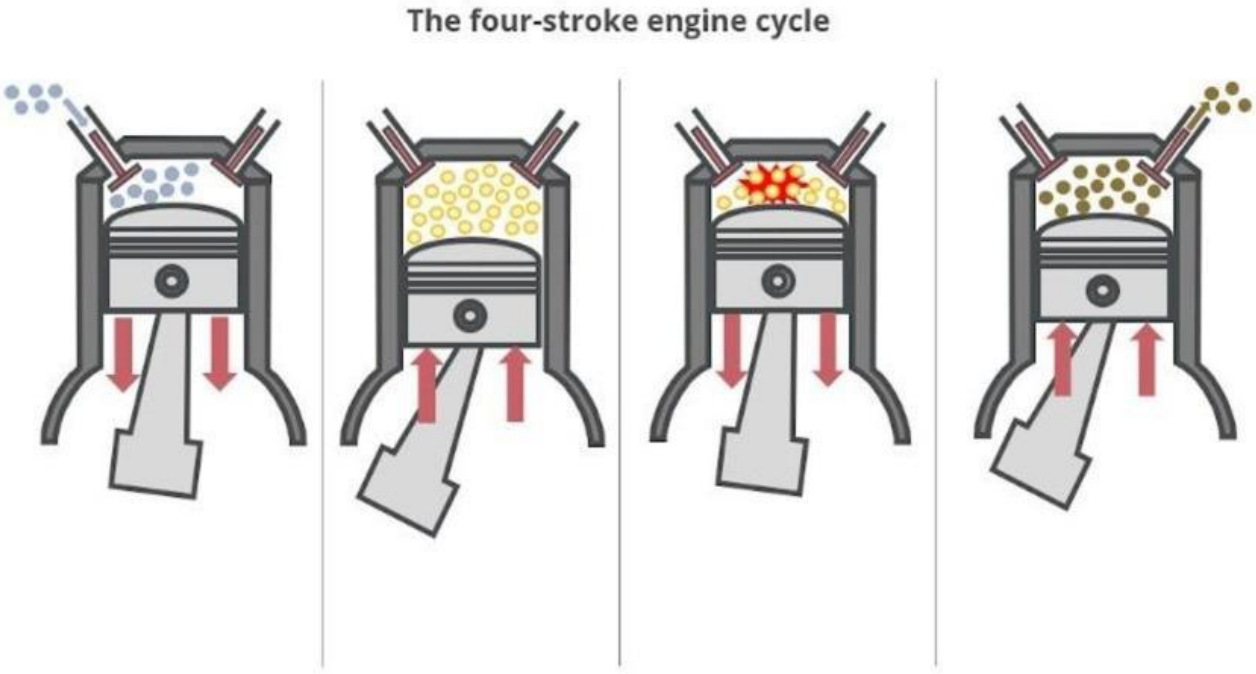
Four-stroke engine

Task 1. Watch the video and read the text.

youtube.com/watch?v=Pu7g3uIG6Zo

Four-stroke engines are one type of internal combustion engine. They go through four stages, or strokes, before repeating. The four strokes are the intake, compression, power, and exhaust strokes. A four-stroke cycle begins with an intake stroke. This stroke lets air and fuel into the cylinder through the intake valve. The intake and exhaust valves are part of the cylinder head. A head gasket forms a tight seal around the cylinder head. The next stroke is the compression stroke. During this stroke, the piston com presses the air and fuel. This makes the pressure in the cylinder very high. A t this point, the spark plug ignites the fuel. The resulting explosion drives the piston back down the cylinder. This creates the power of the power stroke. Finally, during the exhaust stroke, the exhaust valve releases the exhaust. Once the exhaust stroke is complete, the cycle begins again with another intake stroke.

Task 2. Label the cycles of the 4-stroke engine.



Compression **Exhaust Stroke** **Intake Stroke** **Power**

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Task 3. Mark the following statements as true (T) or false (F).

1. The cylinder head includes the intake and exhaust valves.
2. Air and fuel become highly pressurized - during the power stroke.
3. The exhaust stroke is immediately followed by an intake stroke.

Task 4. Match the words or phrases (1-6) with the definitions (A-F).

1. ignite
2. power stroke
3. intake stroke
4. cylinder head
5. exhaust valve
6. four-stroke engine

A) the part of an engine that lets spent fuel out of the cylinder

B) to make something burn or catch on fire

C) the stage in an engine cycle when fuel and air enter the cylinder

D) the stage in an engine cycle when an explosion pushes the piston

E) an engine that cycles through 4 independent phases

F) the part of an engine that holds the valves and transfers excess heat.

Task 5. Choose which word or phrase best fits each blank.

1. exhaust stroke / compression stroke

A) The _____ increased the pressure inside the cylinder.

B) The engine released the burnt fuel during the _____.

2. pressure / exhaust

A) Most cars have tailpipes for releasing _____.

B) Raising the cylinder's _____ make it more efficient.

3. head gasket / intake valve

A) The _____ seals the cylinder head to the engine.

B) The fuel entered the cylinder through the _____.

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