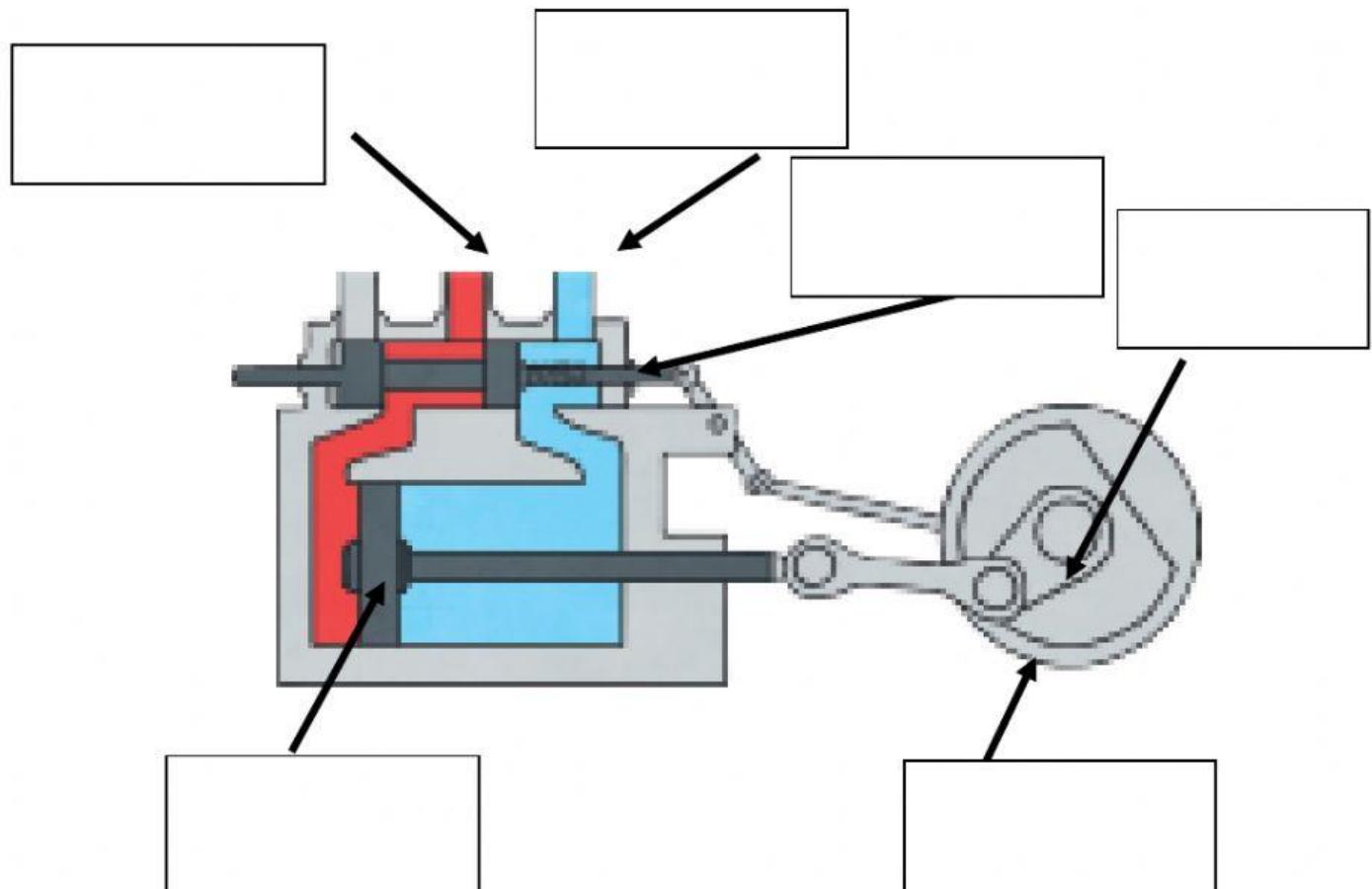


# The Steam Engine

There are different types of steam engine and this is one common type. The key thing to know is that a steam engine is an **external combustion engine**. This means that the fire/burning that makes the heat, happens outside of the engine. This is different from internal combustion engines (like in cars), where the heat is made inside the engine itself.



**The Flywheel:** This is turned by connecting rods through the movement of the piston.

**The Piston:** This is moved forwards and backwards (or up and down in some engines) by the steam. This then moves the flywheel.

**The Exhaust Steam:** This is where the cooler steam escapes. This can go straight to an exhaust pipe or to help air move through the firebox or boiler (where the steam is made).

**The Crank Shaft:** This is looking at the end of the crank shaft, which is an axle (turning rod), that turns the pushing and pulling movement of the piston rod into a turning motion that can move wheels or machinery.

**The Steam Inlet:** This is where the steam from the boiler arrives and is directed to one side of the piston and then the other by the valve.

**The Valve:** This is moved by the flywheel in order to direct the steam from one side of the piston to the other. It also enables the release of the cooler steam out through the exhaust, allowing the piston to move.