Step 1

The burning coal will heat up the boiler and create steams. This will release heat energy and change the pressure in the boiler.

Step 2

The steam keeps going up. The boiler switch will turn on, allowing steam to pass through.

Step 3

The steam will go into the cylinder and push up the piston.

Step 4

When the piston is pushed to the top, part of the steam will go into the side tube that connects to a water tank.

Step 5

The steam will trigger the water tank switch to turn on and release cold water.

Step 6

When cold water enters the cylinder, the temperature and pressure go down, which makes the piston goes down as well.

Step 7

This one cycle triggered by steam will create an up-down motion and transfer it to the right part of the engine.

Step 8

On the right side, a stick connecting with a crankshaft starts to move because of the up-down motion. The crankshaft transfers the up-down motion to rotational motion.

Step 9

The wheel which is connected with the crankshaft will start doing the rotational motion. That’s how propellers work. This is the process of how a basic steam engine works.