COMBUSTION PROCESS IN A GASOLINE ENGINE

AES 1.1

Do you know why a car is moving?
There are cars, who have a built-in gas engine. Now we would like to discover how this engine and consequently the car, works.



Experiment:

- Horizontally hold the ignition cylinder

- Press the atomizer on the bottle 2 or 3 times (more often is not necessary)



- Swing the cylinder headfirst to the bottom (for mixturing gas and air)

- Set up the soft cover (do not press it inside deeper as approx. 1 cm)

- Test the lighter, to be sure that the ignition is working properly

- Put the lighter at least 5cm in the hole of the floor plate



- Position the cylinder into the open space

- Ignite the lighter

Result:
The Gas-Air mixture explosively ignites and the soft cover shots away a few meters.

- Collect the soft cover
- Blow off the remaining gas mixture in the cylinder

Conclusion:
In a gas engine a gas-air mixture explosively gets ignited through an ignition spark. As a result the piston (in our experiment: the soft cover) is forced into motion very quickly. Chemical energy
(stored in the gas) gets converted into kinetic energy (by-product: heat).

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