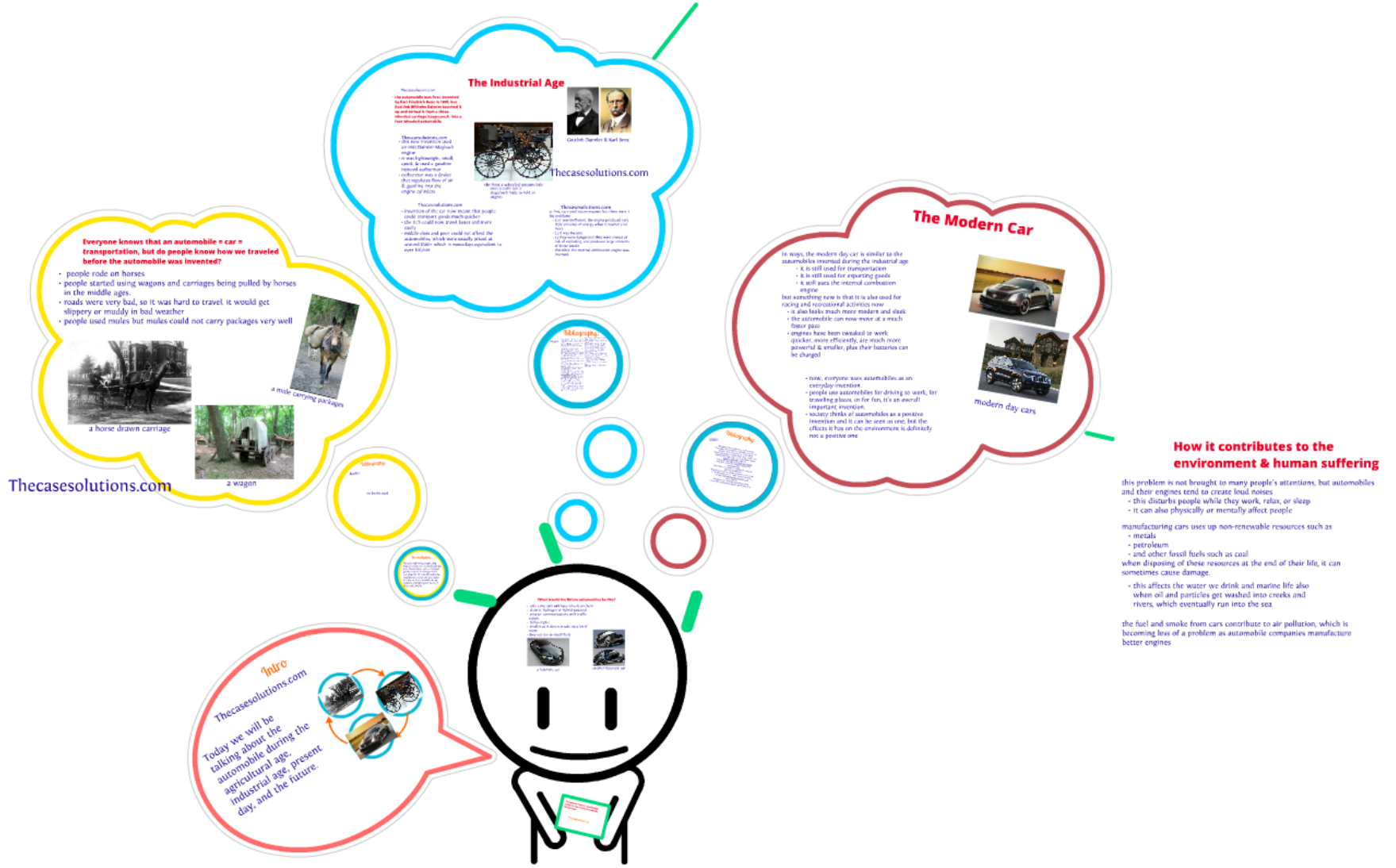


The 4 stroke internal combustion engine.



the point of this 4 stroke cycle is to put gasoline into motion.



**The InnoCar Project - Developing
a Chip for the Future Automobile
(E): Epilogue**

Thecasesolutions.com

Intro

Thecasesolutions.com

Today we will be talking about the automobile during the agricultural age, industrial age, present day, and the future.



Everyone knows that an automobile = car = transportation, but do people know how we traveled before the automobile was invented?

- people rode on horses
- people started using wagons and carriages being pulled by horses in the middle ages.
- roads were very bad, so it was hard to travel. it would get slippery or muddy in bad weather
- people used mules but mules could not carry packages very well



a horse drawn carriage



a mule carrying packages



a wagon

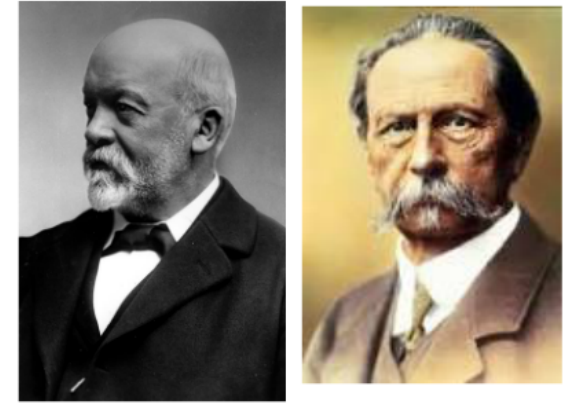
The Industrial Age

Thecasesolutions.com

- **the automobile was first invented by Karl Friedrich Benz in 1885, but Gottlieb Wilhelm Daimler touched it up and turned it from a three wheeled carriage/stagecoach into a four wheeled automobile**



the first 4 wheeled automobile
(was actually just a stagecoach made to hold an engine)



Gottlieb Daimler & Karl Benz

Thecasesolutions.com

- this new invention used an 1885 Daimler-Maybach engine
- it was lightweight, small, quick, & used a gasoline injected carburetor
- carburetor was a device that regulates flow of air & gasoline into the engine cylinders

Thecasesolutions.com

- invention of the car now meant that people could transport goods much quicker
- the rich could now travel faster and more easily
- middle class and poor could not afford the automobiles, which were usually priced at around \$500+ which is nowadays equivalent to over \$16,000

Thecasesolutions.com

Thecasesolutions.com

at first, cars used steam engines, but there were 3 big problems

- 1.) it was inefficient, the engine produced very little amounts of energy when it needed a lot more
- 2.) it was massive
- 3.) they were dangerous! they were always at risk of exploding, and produced large amounts of dense smoke
- therefore, the internal combustion engine was invented.

Thecasesolutions.com

- **the automobile was first invented by Karl Friedrich Benz in 1885, but Gottlieb Wilhelm Daimler touched it up and turned it from a three wheeled carriage/stagecoach into a four wheeled automobile**

Thecasesolutions.com

- this new invention used

Thecasesolutions.com

- this new invention used an 1885 Daimler-Maybach engine
- it was lightweight, small, quick, & used a gasoline injected carburetor
- carburetor was a device that regulates flow of air & gasoline into the engine cylinders

& gasoline into the
engine cylinders

the first 4 wheeled
(was actually just a
stagecoach made with
engine)

Thecasesolutions.com

- invention of the car now meant that people could transport goods much quicker
- the rich could now travel faster and more easily
- middle class and poor could not afford the automobiles, which were usually priced at around \$500+ which is nowadays equivalent to over \$16,000

Thecasesolutions.com

at first, cars used steam engines, but there were 3 big problems

- 1.) it was inefficient, the engine produced very little amounts of energy when it needed a lot more
- 2.) it was massive
- 3.) they were dangerous! they were always at risk of exploding, and produced large amounts of dense smoke
- therefore, the internal combustion engine was invented.