

**Презентация к уроку по теме
«Двигатель внутреннего сгорания»
для студентов 2 курса специальности
«Автомеханик»**

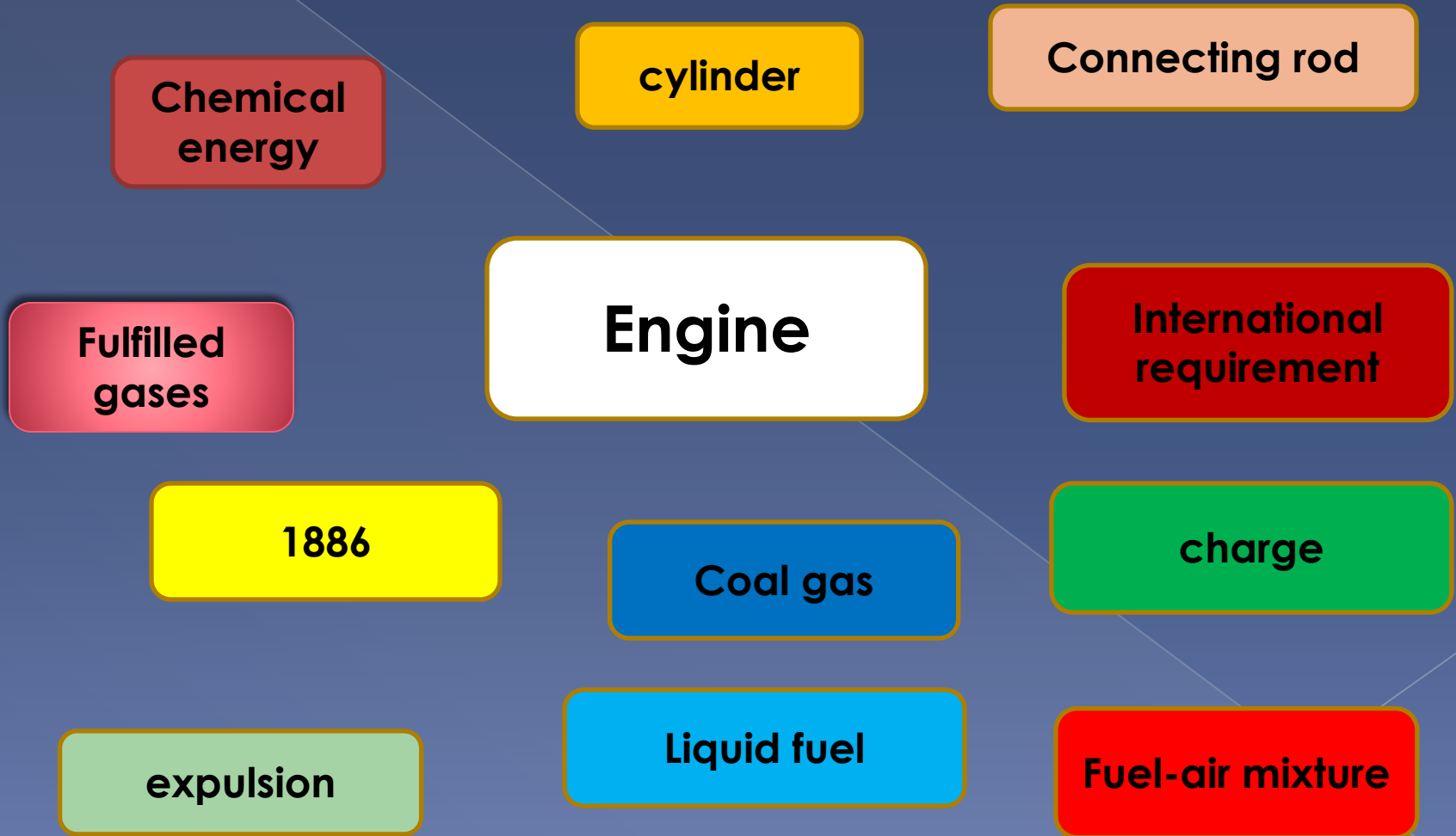
**Выполнено преподавателем английского языка
ГБПОУ РО «НАТТ» Калужиной М.В.**

Internal combustion engine-
Двигатель внутреннего
сгорания (ICE – ДВС).

*The engine is the
power plant of the
vehicle - Двигатель -
это сердце
транспортного
средства.*



“Cluster”



The main units of lesson

- ⦿ Engine.
- ⦿ Classification of engines.
- ⦿ Requirements shown to engines.
- ⦿ The history of engine creation
- ⦿ Working cycle of engine
- ⦿ The main components of cylinder.

What is the engine?

Engine is ...

- a) *...mechanism converting the electric energy into the mechanical work.*
- b) *...mechanism converting the thermal energy into mechanical work.*
- c) *...converting chemical energy of fuel into mechanical work.*

New words:

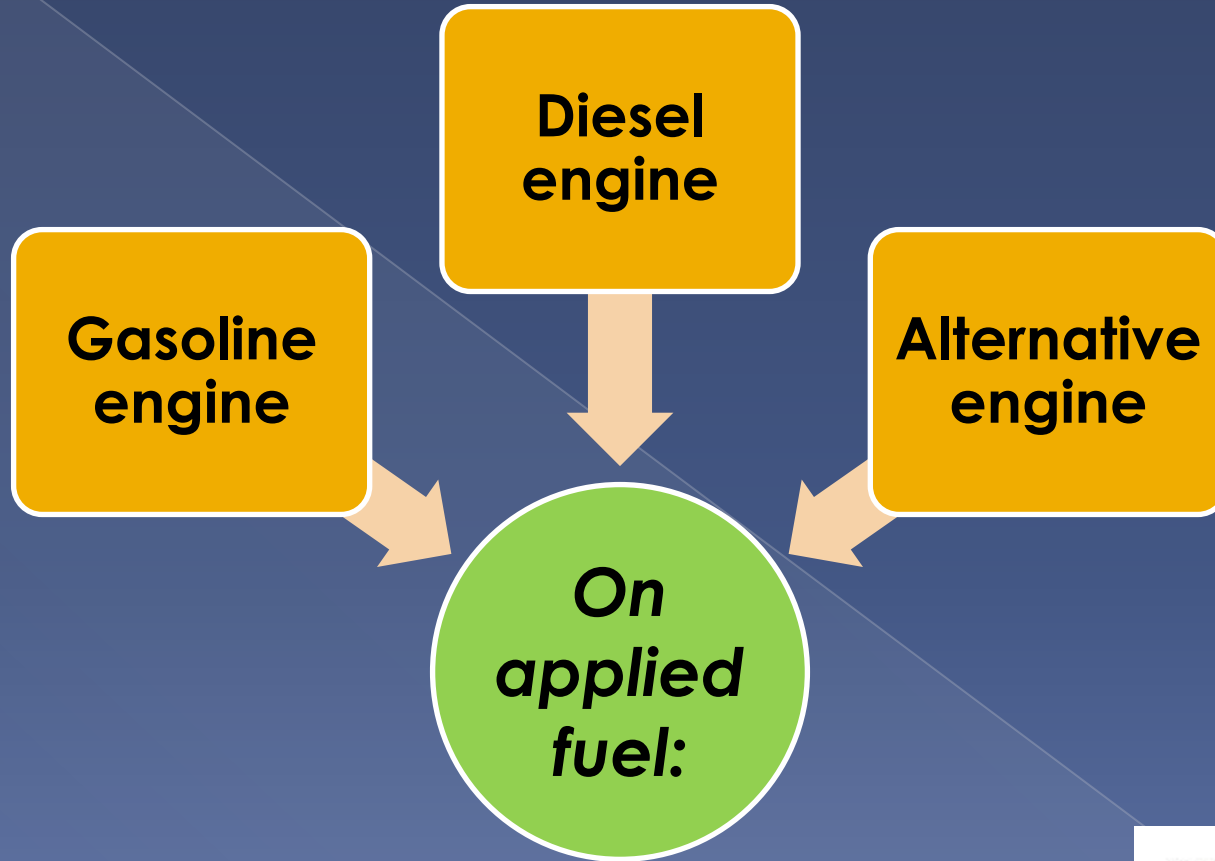
To convert –
преобразовывать

Thermal –
тепловой

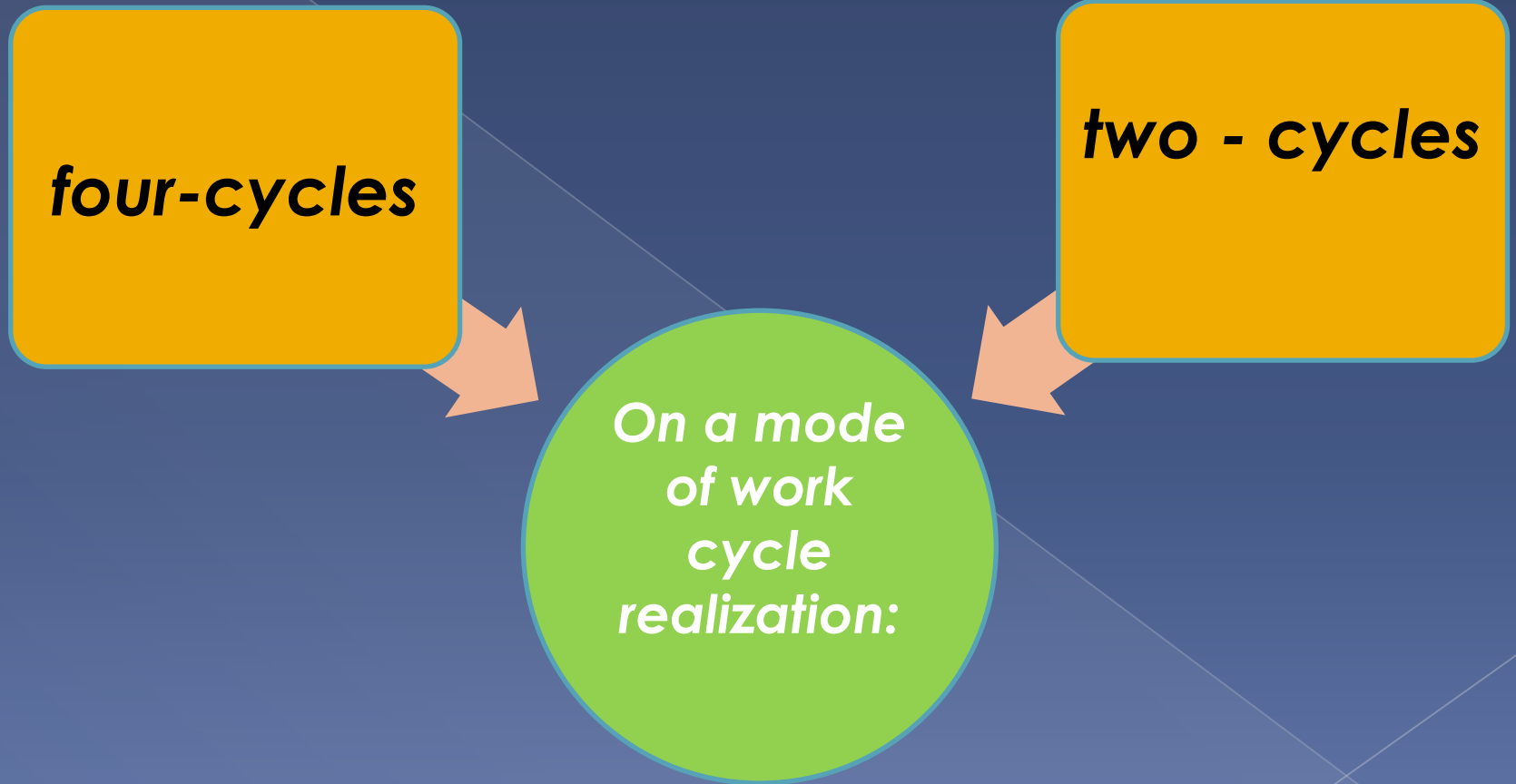
Chemical –
химический

Mechanical –
механический

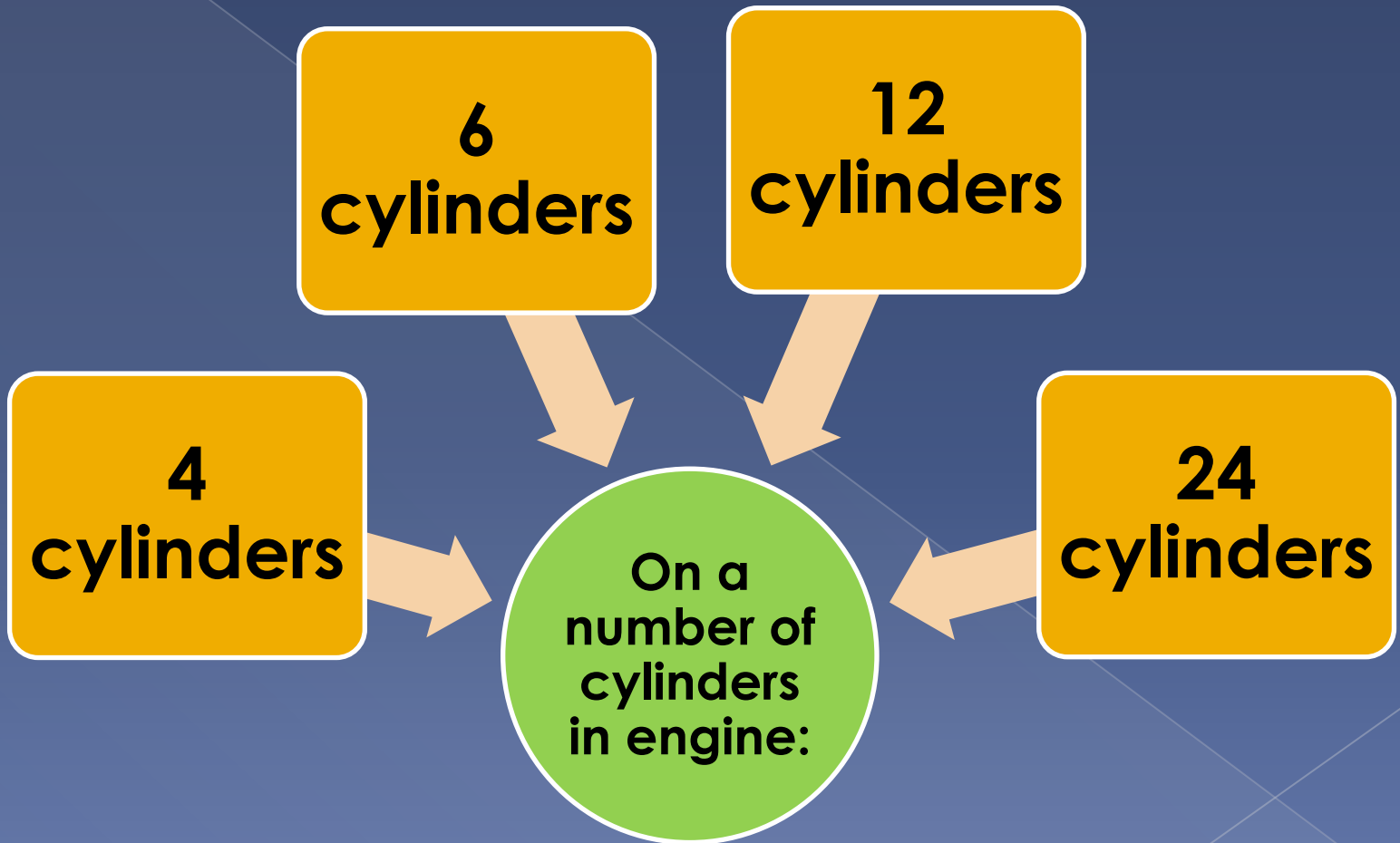
Internal combustion engines can be classified to following types:



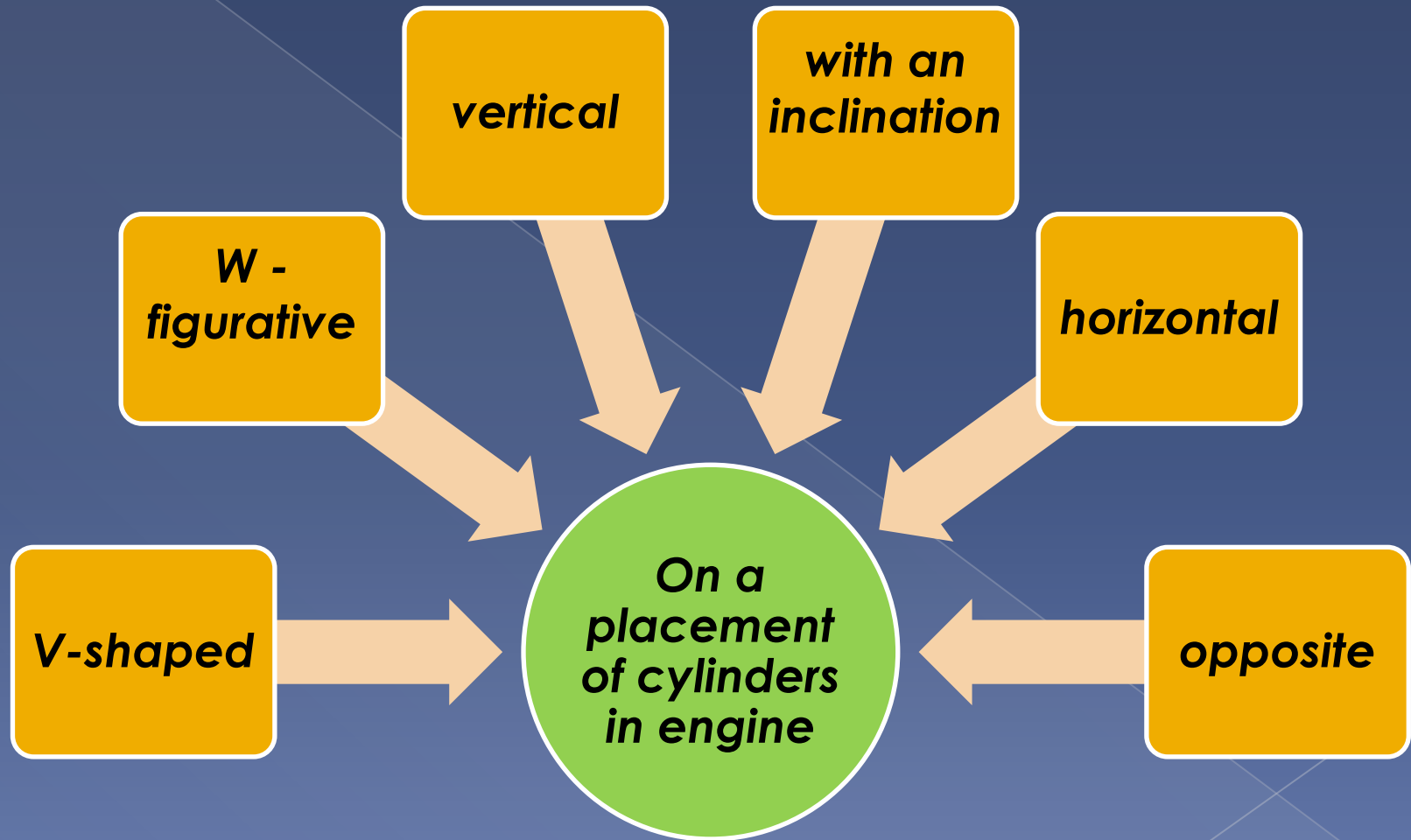
Internal combustion engines can be classified to following types:



Internal combustion engines can be classified to following types:



Internal combustion engines can be classified to following types:



The main components of cylinder

A- inlet valve

B- cap

C-Intake manifold\pipe

D- head of cylinder

E- cooling liquid

F- body\shell

G-oil pan

H-oil gasket

I - camshaft

J - exhaust valve

K- plug

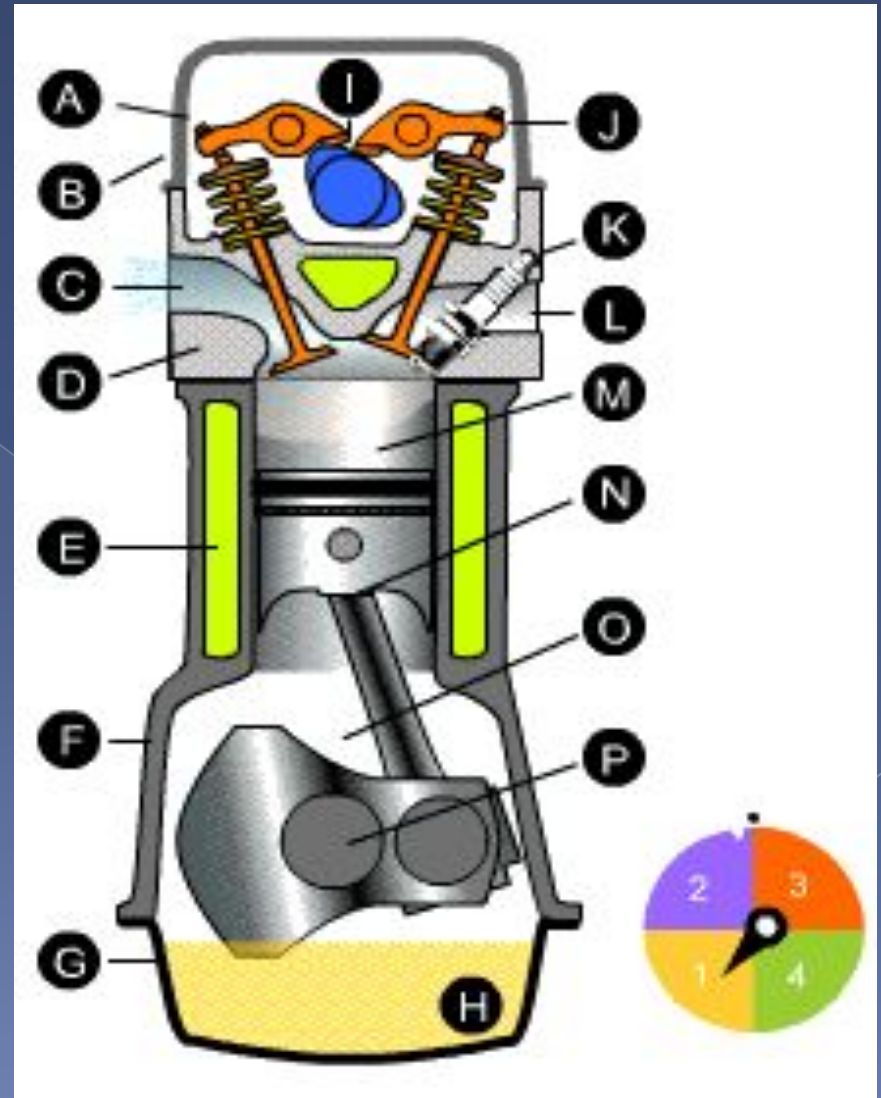
L-exhaust manifold\ / pipe

M-piston

N-connecting rod

O-bearing

P- crankshaft



Four working cycles of engine

Work cycle is a sequence of the processes periodically repeating in the engine. The cycle can be carried out for two cycles or for four (four-cycles) periods.

New words:

Sequence –
последовательность

Period – период

to repeat – повторять

To carry out –
осуществлять

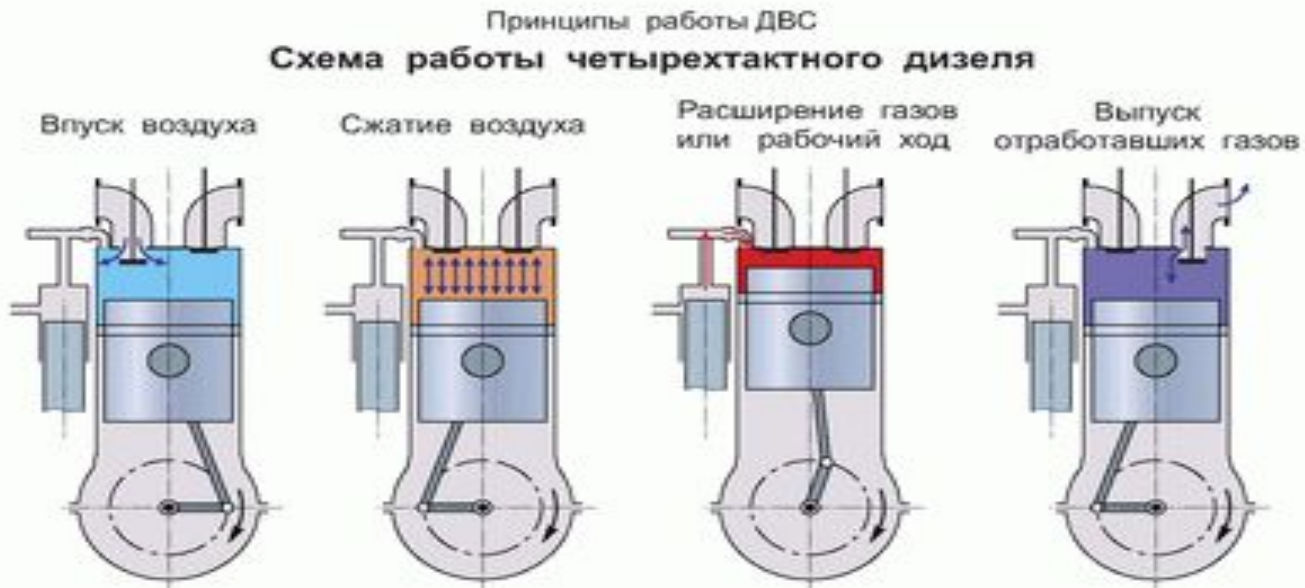
Four working cycles

Admission

Compression

Expansion

Release



Practice

Task 2. Выберите правильный вариант перевод слова.

- ◎ Ring, piston, race - поршень
- ◎ Camshaft, crankshaft, shaft – коленвал
- ◎ Light, wire, valve – клапан
- ◎ Tapet, rod, pipe – коллектор
- ◎ Rod, top, roof – шатун
- ◎ Lamp, sparking-plug, light – свеча зажигания
- ◎ Chamber, engine, cylinder – двигатель
- ◎ Base of chamber, base of engine – картер двигателя
- ◎ Alcohol, petrol, turpentine – бензин
- ◎ Trunk, cycle, vehicle - автомобиль

Practice

Task 3. Из следующих букв составьте слова:

- ⦿ **Notpis** – _____
- ⦿ **Fathksnrac** – _____
- ⦿ **Asuthex** – _____
- ⦿ **Icylnerd** – _____
- ⦿ **Inegen** – _____
- ⦿ **Tejakc** – _____
- ⦿ **Estrko** – _____
- ⦿ **Lpug** – _____
- ⦿ **Flue** – _____
- ⦿ **Wrope** – _____

Practice

Task 4. Переведите на английский язык следующие слова:

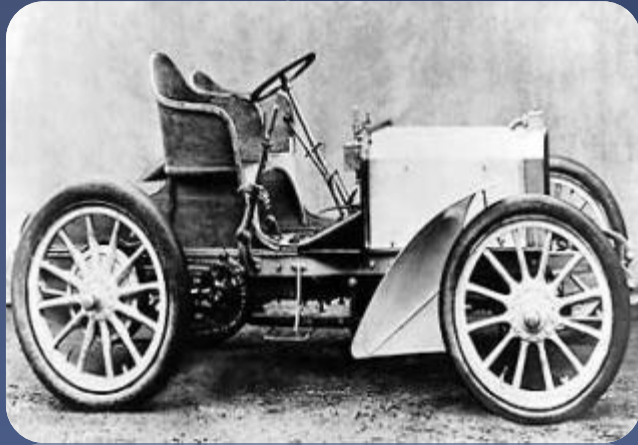
Карбюратор, продукт, цикл, фаза, цилиндр, компрессор, мотор, энергия.

Practice

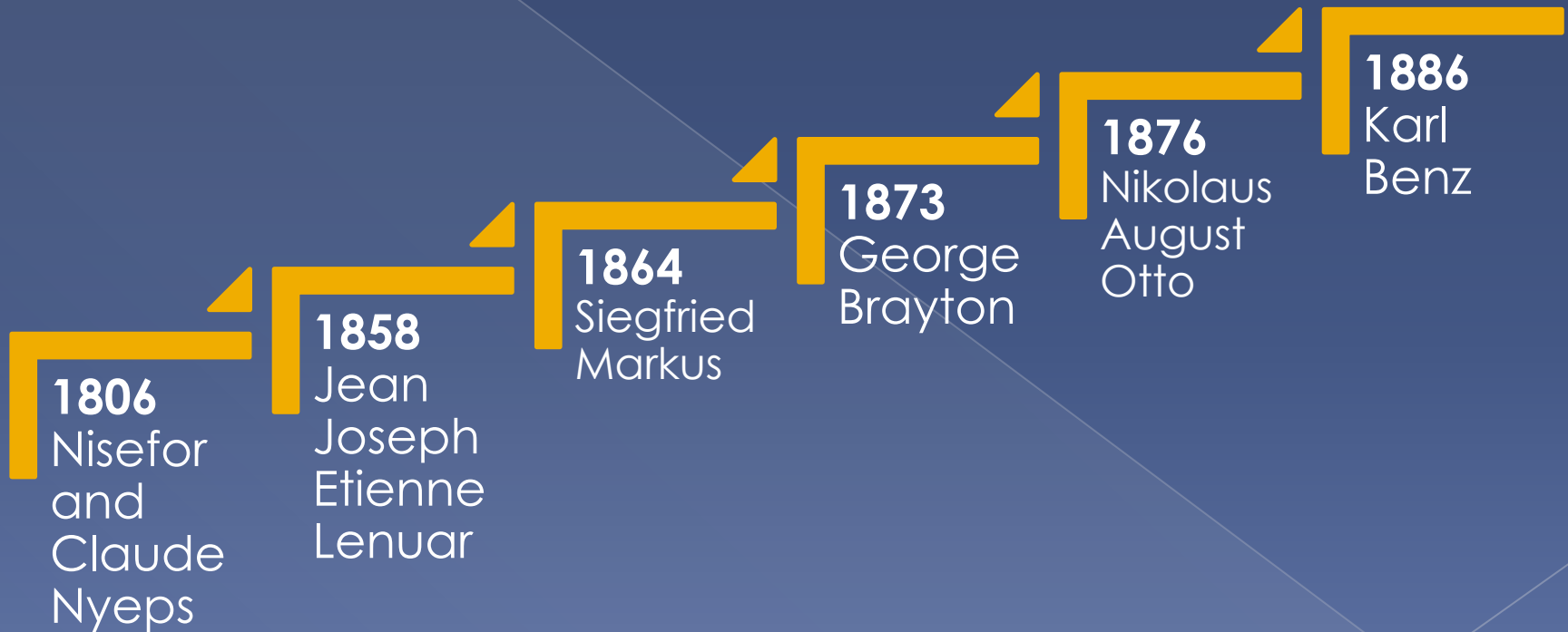
Task 5. Вставьте пропущенные буквы и переведите слова на русский язык:

- ⊙ **Comp...ssion** _____
- ⊙ **Cylind...r** _____
- ⊙ **Liq...id** _____
- ⊙ **Exh...st** _____
- ⊙ **Dev...ce** _____
- ⊙ **Re...ase** _____
- ⊙ **Mechani...m** _____
- ⊙ **Ro...ate** _____
- ⊙ **Vapor...se** _____
- ⊙ **Carb...rator** _____

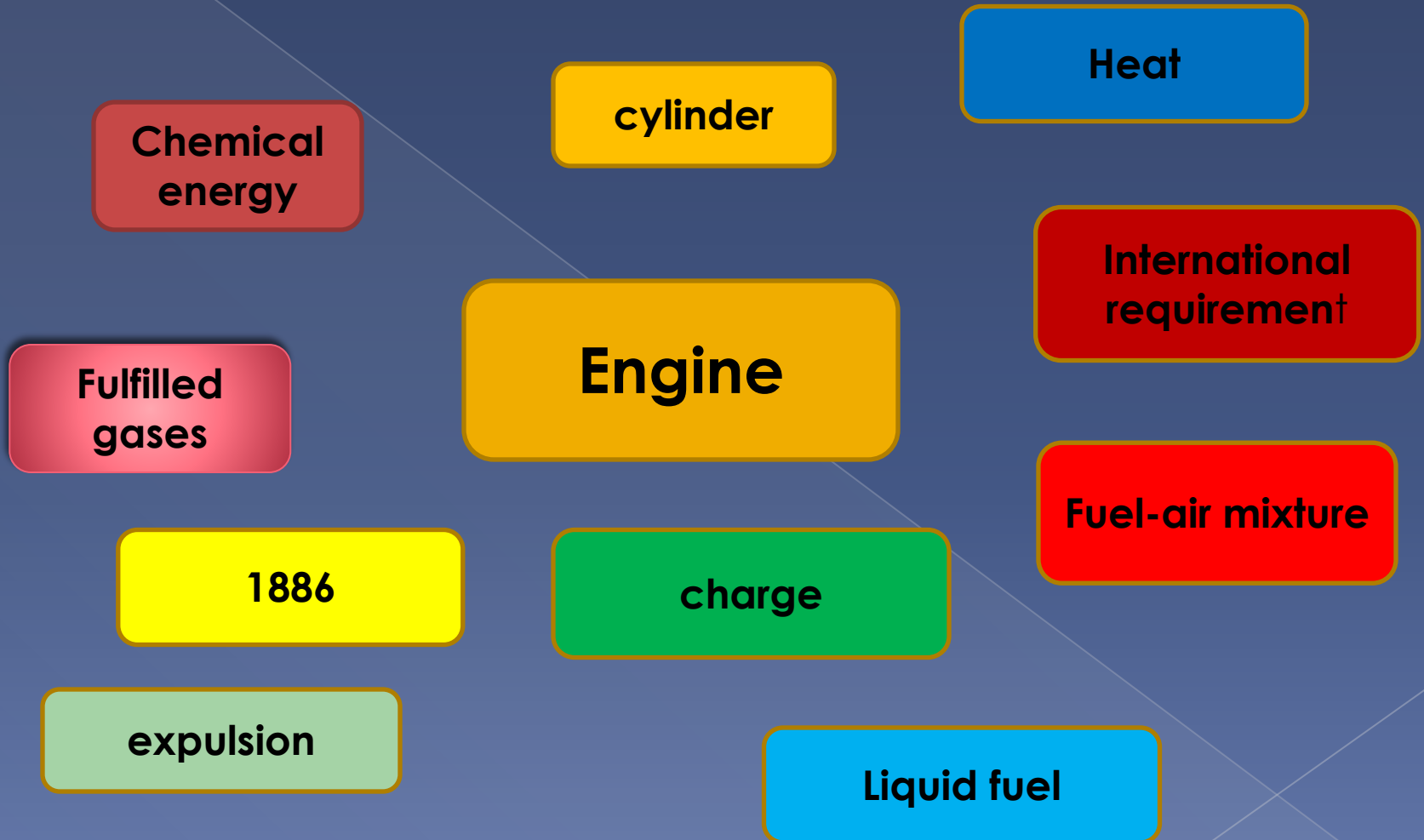
History of engine creation



The main dates of engine creation



“Cluster”



cylinder

Heat

Chemical energy

International requirement

Engine

Fulfilled gases

Fuel-air mixture

1886

charge

Liquid fuel

expulsion