

# Lesson 6- Catalysts

Chemistry- Key Stage 3

Energetics

Miss Charlton



**What do we call the minimum amount of energy needed for particles to collide and react?**

**A**

Collision energy

**B**

Activation energy

**C**

Reaction energy

**D**

Particle energy

How do catalysts affect the activation energy?

A

It speeds it up

B

It slows it

C

It lowers it

D

It increases it

## Why do you only need a small amount of catalysts?

**A**

Because it isn't used up  
in the reaction

**C**

Because it is only used  
for lowering the energy  
of the particles

**B**

Because there are  
enough catalysts already  
in the reactants

**D**

Because too much would  
always cause an  
explosion

## Why do catalytic converters use oxygen?

A

So the car produces oxygen for us to breathe

C

To stop poisonous gases escaping into the atmosphere

B

To stop the flammable gases from catching fire

D

To reduce a car emissions

## When will a catalytic converters not work?

A

When too much oxygen is present

C

When they aren't allowing a fuel through

B

When flammable gases are present

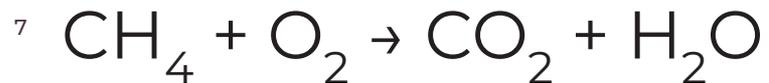
D

When carbon or another element is blocking the oxygen supply.



# Balancing Combustion Equations

- Complete combustion:



# Complete the task

**Describe the test for oxygen**

**Keywords to use:**

- **Glowing**
- **Relight**
- **Splint**
- **Presence**



# Answers



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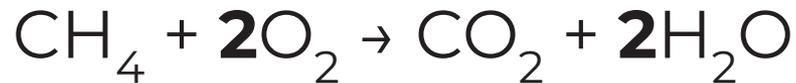
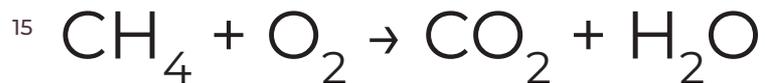
D

When carbon or another element is blocking the oxygen supply.



# Balancing Combustion Equations

- Complete combustion:



# Describe the test for oxygen and the positive result

A glowing splint will **relight** when in the presence of oxygen gas.

