

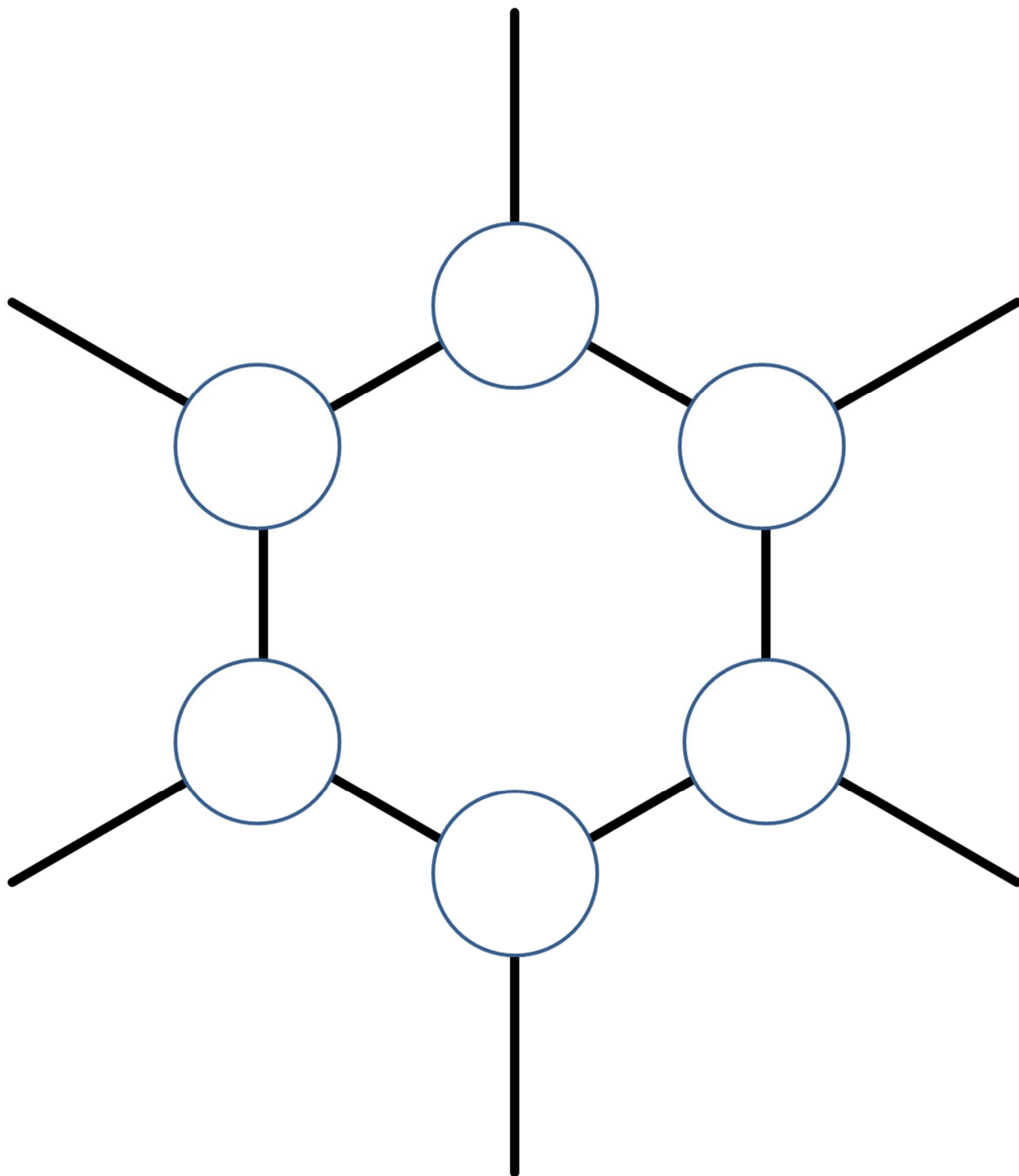
SUPPORTING INFORMATION

CONTENT

1. TEMPLATE TO BUILD THE HEXAGONAL STRUCTURE OF GRAPHITE
2. TEMPLATE OF THE SUPPORT TO BUILD THE TETRAHEDRAL ARRANGEMENT OF DIAMOND STRUCTURE
3. STUDENTS CONSTRUCTIONS OF GRAPHITE AND DIAMOND STRUCTURES
4. EQUIPMENT FOR CONDUCTIVITY
5. PREPARATION OF THE COLUMN AND ADSORPTION EXPERIMENT
6. ALTERNATIVE EQUIPMENT AND ILLUSTRATION FOR EXPLAINING ADSORPTION
7. POSTER OF COAL ACTIVITY

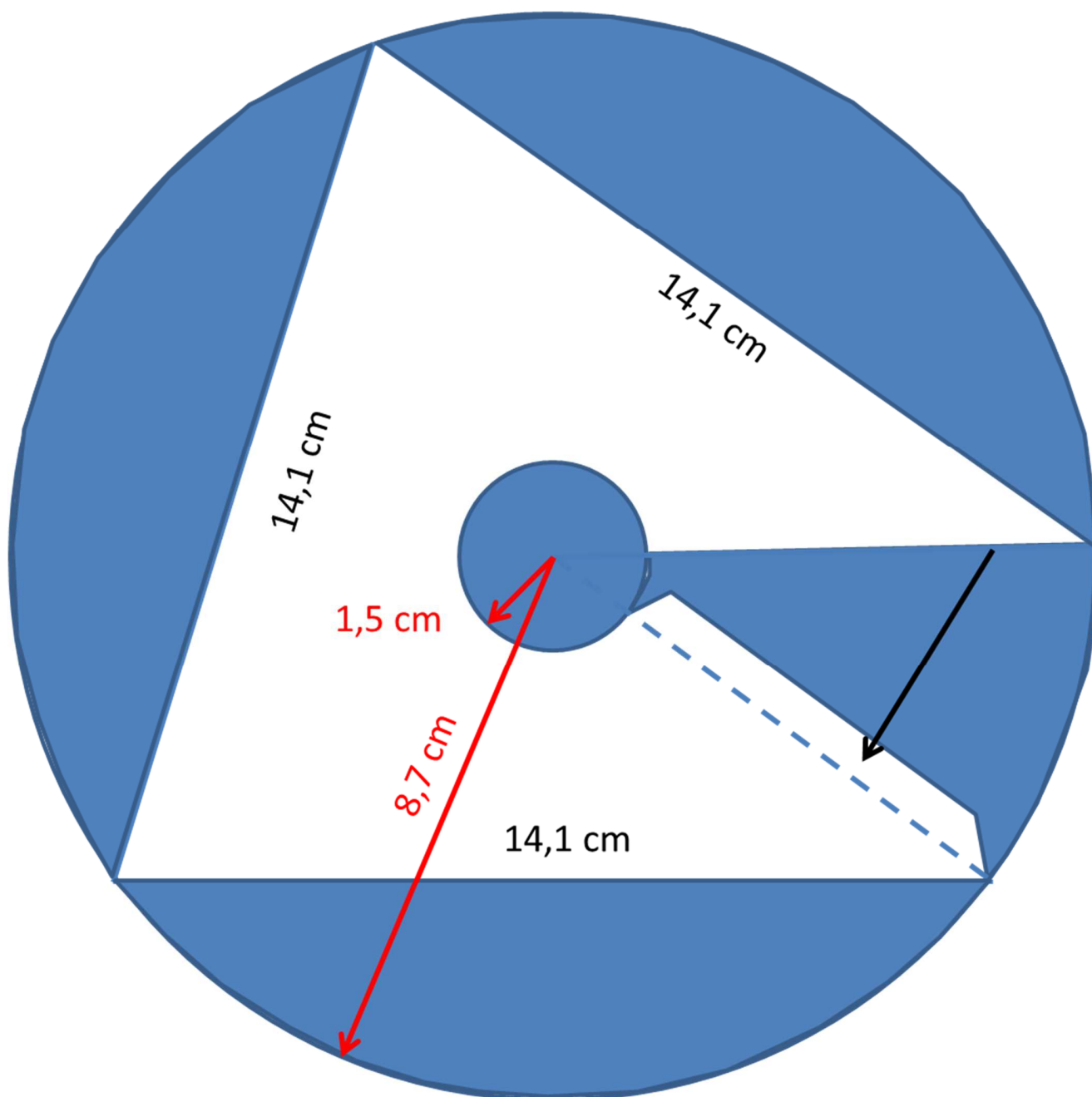
TEMPLATE TO BUILD THE HEXAGONAL STRUCTURE OF GRAPHITE

Use this template to assemble polystyrene balls with toothpicks.

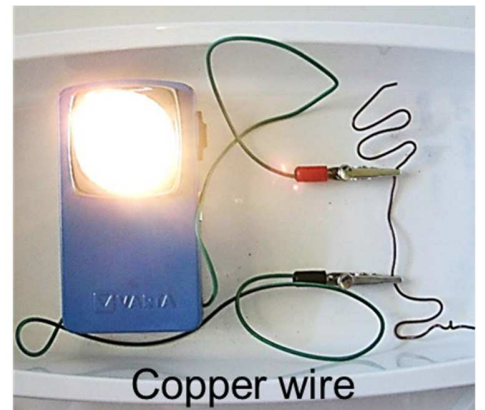
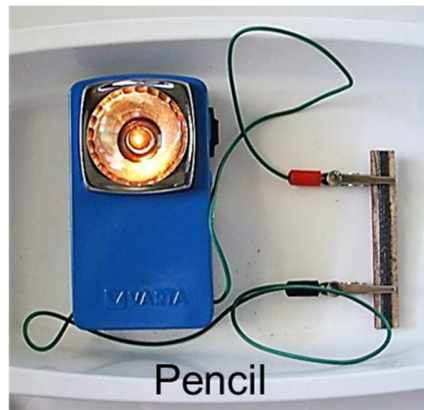
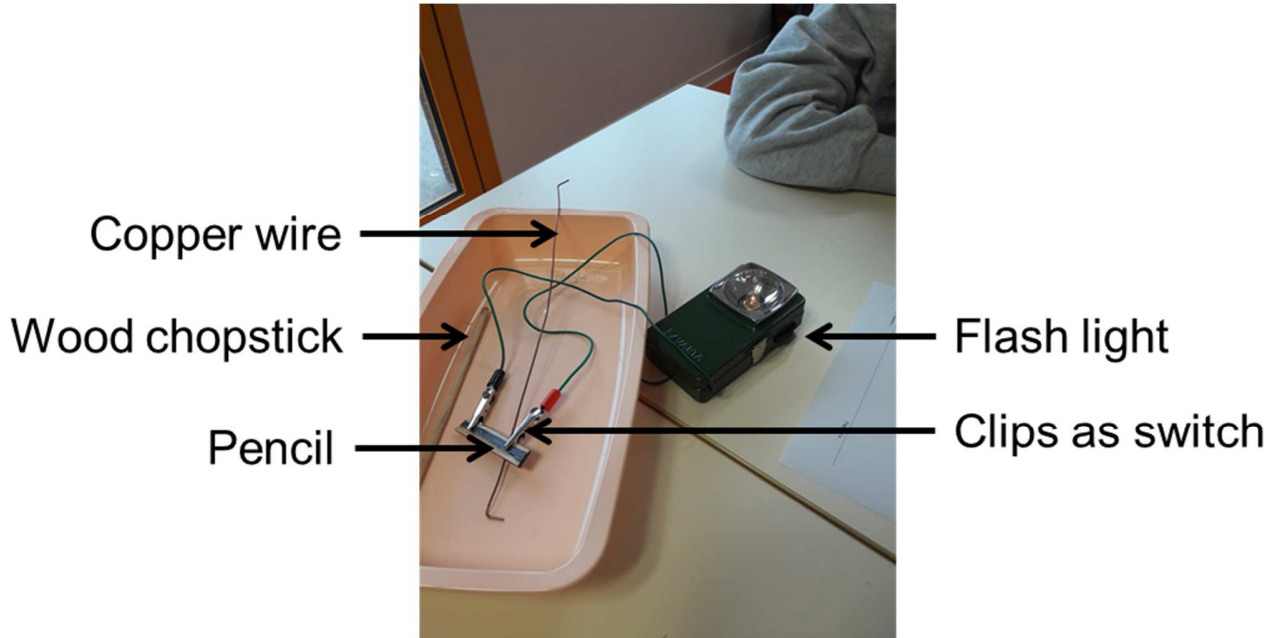


TEMPLATE OF THE SUPPORT TO BUILD THE TETRAHEDRAL ARRANGEMENT OF DIAMOND STRUCTURE

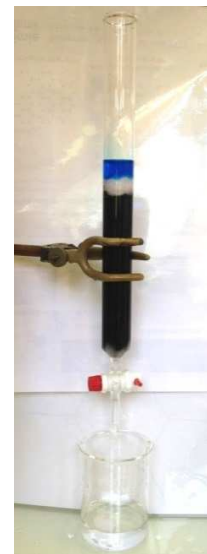
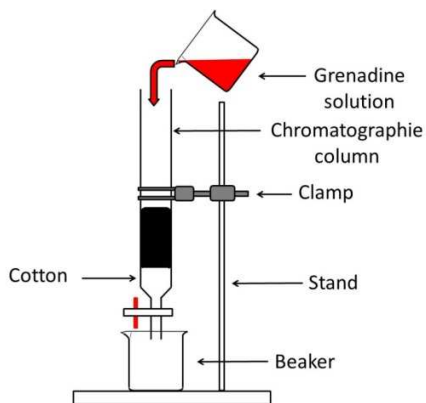
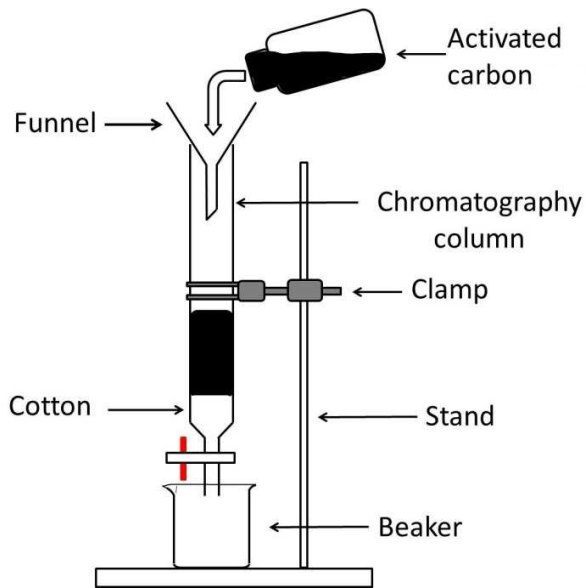
The size of the support is designed for 3 cm polystyrene balls and allows respecting the angle of $109^{\circ}28'$ between each bond.



EQUIPMENT FOR CONDUCTIVITY

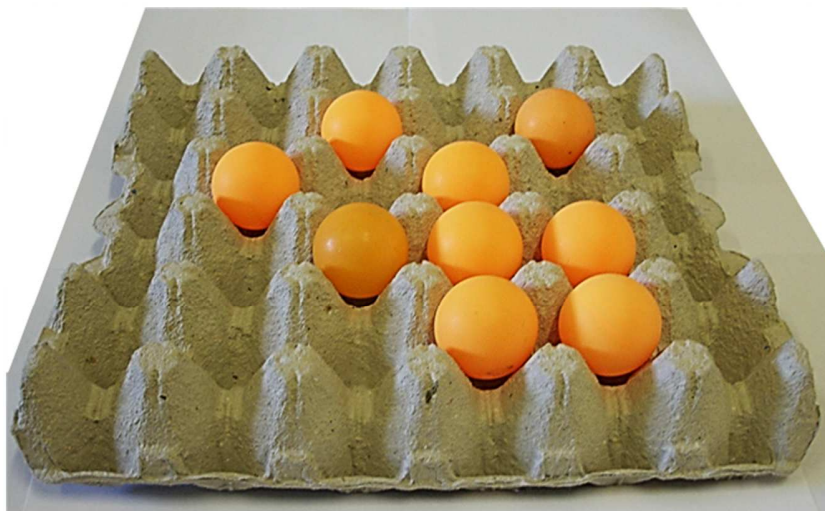
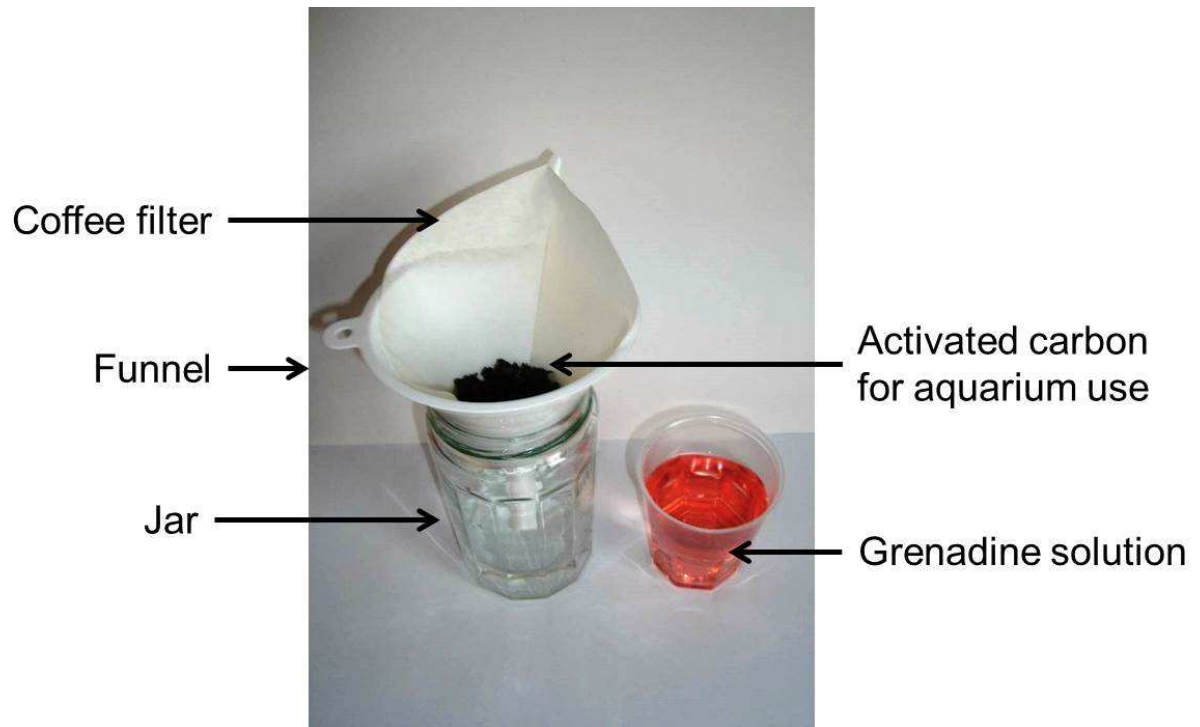


PREPARATION OF THE COLUMN AND ADSORPTION EXPERIMENT



Adsorption experiment using a grenadine solution or a blue food coloring

ALTERNATIVE EQUIPMENT AND ILLUSTRATION FOR EXPLAINING ADSORPTION



Egg box and ping-pong balls

I LIGHT A BULB - I DISCOLOR GRENADINE



COAL FORMATION



Sedimentation of plants



Peat



Lignite



Anthracite



COALIFICATION DURATION AND CARBON CONTENT

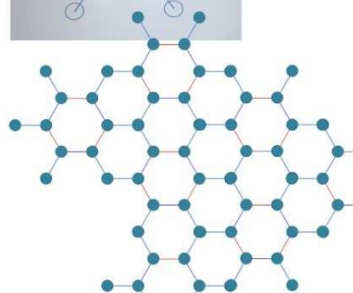
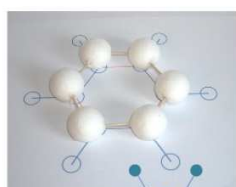
Peat 50% C < 10000 years	Lignite 65-75% C 65 millions years	Coal 80-90% C 300-500 millions years	Anthracite 95% C	Graphite 100% C
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Carbon content (increasing from left to right)

Water content (decreasing from left to right)

PROPERTIES OF GRAPHITE CONTAINING MATERIALS

Coal contains **graphite carbon**



Hexagonal paving in graphite

Graphite conducts **electricity**



Wood chopstick
Light off



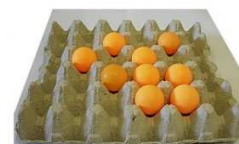
Graphite pencil
Light on



Copper wire
Light on

The more the matter conducts, the more the bulb shines

Activated carbon **adsorbs** dyes



Adsorption



Chimie & Société

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