

# C1 REVISION - CHAPTER 1 - FUNDAMENTAL IDEAS

Draw the symbol for sodium include its atomic mass and atomic number (what do they tell us)

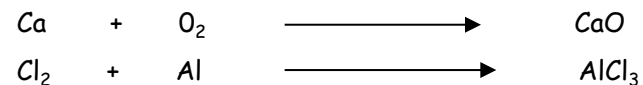
What are the charges and masses of electrons, protons and neutrons

Write down all you know about the periodic table

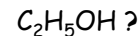
Draw the electronic configuration for argon

Describe how sodium and chlorine bond;

Balance the following equation:



How many atoms and elements are there is:



Where are electrons and neutrons and protons found in an atom?

What is covalent bonding?

## KEY WORDS:

Electron  
Proton  
Neutron  
Shell  
Electronic Configuration  
Orbit

## ASSESSMENT:



# C1 REVISION - CHAPTER 2 - ROCKS & BUILDING MATERIALS

What is the scientific name AND chemical formula for limestone?

What is produced when a carbonate reacts with an acid?

What is thermal decomposition?

Write the word and symbol equation for the thermal decomposition of limestone

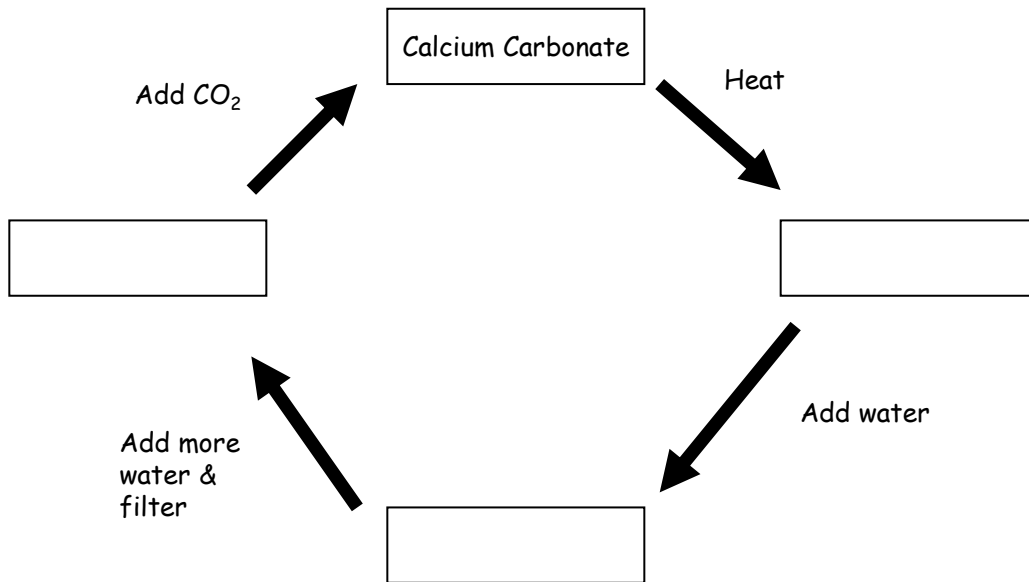
What is cement?

What is concrete?

What are the benefits and drawbacks to limestone quarrying?

BENEFITS	DRAWBACKS

Complete the limestone reaction cycle:



**KEY WORDS:**

CALCIUM CARBONATE  
THERMAL DECOMPOSITION  
CONCRETE  
CEMENT  
QUARRYING  
LIMESTONE  
LIMEWATER

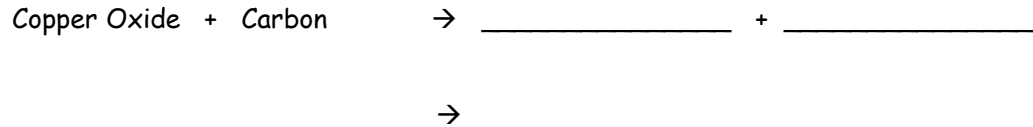
**ASSESSMENT:**



# C1 REVISION - CHAPTER 3 - METALS & THEIR USES

Put these metals in their order of reactivity  
Carbon, Magnesium, Copper, Iron & Potassium

Less reactive metals are displaced by carbon. Complete the equation below and then make your own one:



Explain a bit about each of the ways to extract copper:

Smelting:

Displacement:

Bioleaching

Phytomining

What is an ore?

How is iron extracted?

What is an alloy?

Name 2 alloys:

Give 2 use AND properties of:

i) Aluminium

ii) Titanium

**KEY WORDS:**

DISPLACEMENT  
ORE  
BLAST FURNACE  
ALLOY  
SMELTING  
BIOLEACHING  
PHYTOMINING

**ASSESSMENT:**



# C1 REVISION - CHAPTER 4 - CRUDE OIL & FUELS

Name the process by which we separate crude oil into useful components:

What property does this process rely on?

What does 'saturated' mean?

Give a problem each pollutant causes:

*Carbon Dioxide*

*Sulphur Dioxide*

*Carbon Monoxide*

*Nitrogen Oxide*

*Particulates*

Give the benefits and drawbacks of each alternative fuel

	BENEFITS	DRAWBACKS
<b>BIODIESEL</b> (more detail required for this one!)		
<b>ETHANOL</b>		
<b>HYDROGEN</b>		

Complete the table to summarise alkanes and alkenes:

	ALKANES	ALKENES
Saturated or unsaturated		
General formula		
Name an example		
Draw an example		

**KEY WORDS:**

ALKANE  
ALKENE  
SATURATED  
FRACTIONAL DISTILLATION  
ALTERNATIVE FUEL  
POLLUTANT  
COMBUSTION

**ASSESSMENT:**



# C1 REVISION - CHAPTER 5 - PRODUCTS FROM OIL

What does 'cracking' mean?

What happens to the following when added to Bromine water:

i) Alkanes

ii) Alkenes

What is 'polymerisation'?

Draw a diagram to demonstrate it:

List 3 problems with plastics:

How are biodegradable plastics made?

What are the problems with them?

Describe how 2 designer polymers work:

Explain the 2 ways ethanol can be produced:

## KEY WORDS:

CRACKING  
POLYMERISATION  
PLASTIC  
POLYMER  
MONOMER  
FERMENTATION  
BIODEGRADABLE

## ASSESSMENT:



# C1 REVISION - CHAPTER 6 - PLANT OILS

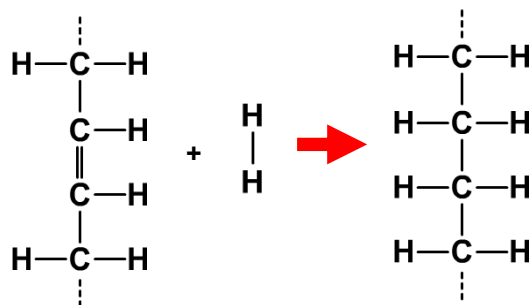
What is the equation for photosynthesis?

Describe the 2 ways to extract plant oils:

Pressing

Distillation

Use the diagram to explain how oils are hardened into spreads (hydrogenation)



Conditions required:

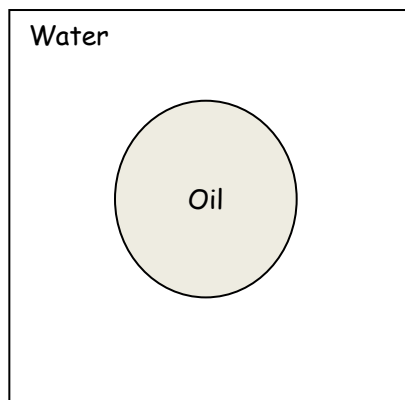
Explain what is happening:

What do emulsifiers do?

Name 2 products that need emulsifiers in them

Name 2 products that ARE emulsifiers

Complete the diagram to demonstrate emulsification:



What does hydrophobic mean?

What does hydrophilic mean?

**KEY WORDS:**

PRESSING  
 DISTILLATION  
 HARDENING  
 HYDROGENATION  
 EMULSIFIER  
 HYDROPHOBIC  
 HYDROPHILIC

**ASSESSMENT:**



# C1 REVISION - CHAPTER 7 - OUR CHANGING PLANET

What are the layers of the Earth?

Complete the table to show the atmosphere of Earth today

Gas	%
Others (inc. Argon)	

What is continental drift?

What causes the motion of the plates?

What happens at plate boundaries

How did life on Earth possibly start? Use the headings below to help you.

Miller-Urey Experiment:

Meteorites

Deep Sea Vents

What was Earth's atmosphere like in the past?

Explain how it changed to contain oxygen

What is the carbon cycle?

Why have carbon levels been increasing?

**KEY WORDS:**

ATMOSPHERE  
CARBON CYCLE  
MANTLE  
CRUST  
CORE  
MILLER-UREY

**ASSESSMENT:**

