

# C2 Revision Questions

# Question 1 .... of 50

- What are the three main parts of the Earth?

# Answer 1 of 50

- Crust, Mantle and Core

# Question 2 .... of 50

- What are the three different types of rock?

# Answer 2 .... of 50

- Igneous, metamorphic and sedimentary

# Question 3 .... of 50

Which rocks are the hardest and which are the softest? Explain why

# Answer 3 .... of 50

- Igneous are hardest as they have interlocking crystals. Sedimentary is softest

# Question 4 .... of 50

Name three bad things about quarries



# Answer 4 .... of 50

- Dust pollution, ruins landscape, noise from explosions, increased lorries

# Question 5 .... of 50

- What is concrete made from?

# Answer 5 .... of 50

- Cement, sand, gravel and water

# Question 6 .... of 50

What are tectonic plates?

# Answer 6 .... of 50

- Large parts of the lithosphere that move across the mantle

# Question 7 .... of 50

- Give two reasons why people live near volcanoes

# Answer 7 .... of 50

- Fertile soil and no eruptions for a long time

# Question 8 .... of 50

- Which igneous rocks have the largest crystals?



# Answer 8 .... of 50

- Those that cool inside the volcano (the ones that cool slowly)

# Question 9 .... of 50

- What can you do to a quarry once it has been used?

# Answer 9 .... of 50

- Cover with plants and grass, fill with water for lake, fill with rubbish for landfill

# Question 10 .... of 50

- Describe what a convection current is

# Answer 10 .... of 50

- When a fluid gets heated and moves up when hot and sinks when cold

# Question 11 .... of 50

- How are igneous rocks made?

# Answer 11 .... of 50

- Lava cooled down

# Question 12 .... of 50

- Name three rocks that can be used for building materials



# Answer 12 .... of 50

Limestone, marble and granite

# Question 13 .... of 50

- Which is concrete stronger from, compression or tension?

# Answer 13 .... of 50

Compression

# Question 14 .... of 50

- Name a use of copper

# Answer 14 .... of 50

- Electrical wires

# Question 15 .... of 50

- How do we remove copper from its ore?

# Answer 15 .... of 50

- Heat it with carbon or electrolysis

# Question 16 .... of 50

- What happens when you heat calcium carbonate? What is this called?



# Answer 16 .... of 50

- Thermal decomposition. Breaks down into calcium oxide and carbon dioxide

# Question 17 .... of 50

- How can we reinforce concrete?

# Answer 17 .... of 50

- Putting steel rods in the concrete

# Question 18 .... of 50

- How are sedimentary rocks made?

# Answer 18 .... of 50

- Sediments of rocks compressed under the weight of other rocks

# Question 19 .... of 50

- What is subduction?

# Answer 19 .... of 50

- When one plate sinks below another

## Question 20 .... of 50

- What is the name for the outer layer of the Earth?



# Answer 20 .... of 50

- Crust/ lithosphere

# Question 21 .... of 50

- How are metamorphic rocks made?

# Answer 21 .... of 50

- Sedimentary rocks put under a lot of heat and pressure

## Question 22 .... of 50

- Name three good things about quarries

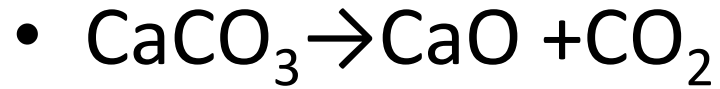
# Answer 22 .... of 50

- Creates jobs, get rocks for buildings, improves economy

# Question 23 .... of 50

- What is a symbol equation for the thermal decomposition of calcium carbonate?

# Answer 23 .... of 50



# Question 24 .... of 50

- Why do we recycle copper?



# Answer 24 .... of 50

- Saves resources, money and energy

# Question 25 .... of 50

- How is cement made?

# Answer 25 .... of 50

Limestone is heated with clay)

## Question 26 .... of 50

What is a disadvantage with high temperature and pressure in the Haber process?

# Answer 26 .... of 50

- High costs (for stronger containers), cost of containers and energy

# Question 27 .... of 50

- What are the optimum conditions for the Haber process?

# Answer 27 .... of 50

200 atmospheres  
450°C

# Question 28 .... of 50

- What does increasing the pressure achieve in the Haber process?
- What does increasing the temperature achieve in the Haber process?



# Answer 28 .... of 50

- Increasing pressure increases the yield
- Increasing temperature decreases the yield but increases the rate

# Question 29 .... of 50

- Name 3 advantages of aluminium compared to steel

# Answer 29 .... of 50

- Less dense (lighter), does not rust, more malleable

# Question 30 .... of 50

- Name 3 things you could do to prevent a material rusting?

# Answer 30 .... of 50

- Paint it, cover it in oil, seal it from oxygen and water

# Question 31 .... of 50

- In electrolysis, what is the impure copper connected to and what is the purer copper connected to?

# Answer 31 .... of 50

- Anode = Impure
- Cathode = Pure

# Question 32 .... of 50

- What does corrode mean?



# Answer 32 .... of 50

- To lose strength due to chemical attack

# Question 33 .... of 50

- What two ingredients are needed for the Haber process? Where do we get these from?

# Answer 33 .... of 50

- Hydrogen (crude oil) and Nitrogen (from the air)

# Question 34 .... of 50

- What else will affect the cost of ammonia?

# Answer 34 .... of 50

- Cost of labour, building, energy, reactants, speed of reaction

# Question 35 .... of 50

- What is the liquid used in electrolysis? What is used to purify copper?

# Answer 35 .... of 50

- Copper sulphate

# Question 36 .... of 50

- What is a catalyst? Name three properties of a catalyst?



# Answer 36 .... of 50

- A material that increases the rate of reaction. Unreacted, usually unique to that reaction and often only small amounts are needed.

# Question 37 .... of 50

- What is meant by a reversible reaction?

# Answer 37 .... of 50

- A reaction that can go in both directions

# Question 38 .... of 50

- What is the word and symbol equation for the Haber process?

# Answer 38 .... of 50

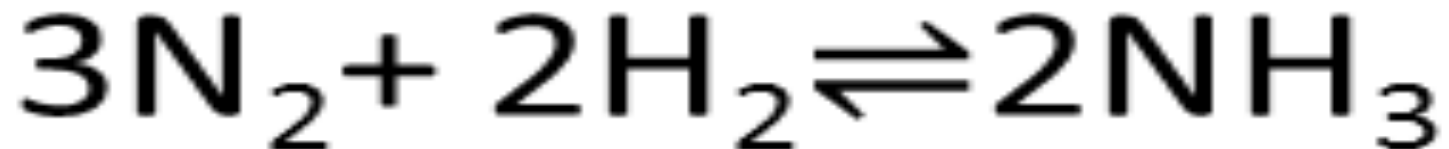
- Has small holes (from expanded PTFE), that water droplets cannot pass through but water vapour can.

## Question 39 .... of 50

- What type of bonds hold hydrocarbon molecules together?

# Answer 39 .... of 50

Nitrogen +  
Hydrogen  $\rightleftharpoons$   
Ammonia



# Question 40 .... of 50

- Give an example of a smart material and its use



# Answer 40 .... of 50

- Nitinol. Goes back to original shape when heated

# Question 41 .... of 50

- What is the advantage of universal indicator over litmus paper?

# Answer 41 .....of 50

- Tells you how acidic/ alkaline something is according to scale

# Question 42 .... of 50

- What is an alloy? Give an example

# Answer 42 .... of 50

- A mixture of a metal with another metal or with carbon. Steel, amalgam

## Question 43 .... of 50

- Complete the equation: Hydrochloric acid + Sodium Hydroxide =

# Answer 43 .... of 50

- Sodium chloride + water

# Question 44 .... of 50

- What two things are always made in a neutralisation reaction?



# Answer 44 .... of 50

- Water and a salt

# Question 45 .... of 50

- What is a nitrogenous fertiliser? Give two examples

# Answer 45 .... of 50

- Fertiliser containing nitrogen- Ammonium nitrate, ammonium phosphate

# Question46 .... of 50

- What do we use ammonia for? Why we use fertilisers

# Answer 46 .... of 50

- Fertilisers, explosives, nitric acid and cleaners.  
Increase crop yield

# Question 47 .... of 50

- What is eutrophication?

# Answer 47 .... of 50

- When water becomes rich with nutrients, plants grow on surface causing plants at bottom to die and algae to form

# Question 48 .... of 50

- What can we do to extract chlorine from salt water (brine)?



# Answer 48 .... of 50

- Electrolysis of salt water

# Question 49 .... of 50

- What are the 3 essential elements plants need?

# Answer 49 .... of 50

- Nitrogen, phosphorus, potassium

# Question 50 .... of 50

- Name 2 ways we can extract salt from the Earth

# Answer 50 .... of 50

- Digging and cutting it, pumping water down a mine and extracting the dissolved salt