



Y8 - Acids and Alkalis

Science homework booklet

Core questions

How to use:

1 - **Copy** the answers once into your **knowledge organiser** to help you to learn them.

2 - Fold the page in **half** so that you can only see the questions, and write the answers out **again from memory**.


3 - Show your knowledge organiser to your teacher on the specified due date. You should show them **TWO** sets of answers to each question.

That's it!

Teacher's name: _____

Acids and Alkalis

Date Due: _____

No.	Question	Answer
1	What does this mean? 	Will cause a chemical burn
2	Why do we use images and not words in hazard labels?	International communication
3	What is the main safety precaution when using chemicals	Wear Goggles
4	Name 3 common acids used in the home	Lemon Juice, Vinegar, battery acid
5	Name 3 common acids used in a science lab	Hydrochloric, Sulphuric, Nitric
6	What tastes do acids have in common	Sour
7	What Ion do all acids contain?	H+

Acids and Alkalis

Date Due: _____

8	What is a base?	Any substance which neutralises an acid
9	Name 3 common bases in the home	Soap, Toothpaste and Baking Powder
10	Name 3 bases used in the science lab	Metal Oxides, Metal Hydroxides, Metal Carbonates
11	What do all alkalis have in common?	Feel soapy
12	What is an alkali?	A soluble base
13	What Ion do all alkalis contain?	OH-

Acids and Alkalis

Date Due: _____

14	What are indicators?	A substance which tells you if something is acidic or alkaline
15	Give 1 example of a single indicator	Litmus paper
16	Give 1 example of a multi-indicator	Universal indicator
17	What does a multi-indicator tell you which a single indicator does not?	Strength of acid/alkali
18	List 3 examples of using an indicator	Checking pH, Soil, Swimming pools, Industrial waste
19	Name 5 indicators	<ol style="list-style-type: none">1. Universal indicator2. Red litmus paper3. Blue litmus paper4. Red cabbage

Acids and Alkalis

Date Due: _____

20	What is the colour range of the pH scale of acids?	Red > orange > yellow
21	What is the pH range (number) of acids?	pH less than 7
22	What is the number range of a weak acid?	pH 4, 5, 6
23	What is the number range of a strong acid?	pH 1, 2, 3
24	What is the colour range on the pH scale of alkalis?	Blue > Purple
25	What is the pH number range of alkalis?	pH greater than 7
	What is the pH of a strong alkali?	11-14
26	What is the pH number of a weak alkali?	pH 8-10
27	What is the pH number value of a neutral solution?	7
28	What is the colour on the pH scale of a neutral solution?	Green

Acids and Alkalis

Date Due: _____

29	What is neutralisation?	The reaction between acids and a base
30	Give an example of everyday neutralisation.	Bee sting (acid) putting on bicarbonate of soda (Alkali)
31	What technique is used to mix acids and alkalis precisely?	Titration
32	What gas is produced when metals react with acids?	Hydrogen
33	What gas is produced when carbonates react with acids?	Carbon Dioxide
34	Finish the equation: Acid + base	→ Salt + Water
35	Finish the equation: Acid + metal	→ Salt + Hydrogen
36	Finish the equation: Acid + Carbonate	→ Salt + Water + Carbon Dioxide
37	What type of salt is made with hydrochloric acid?	Chloride
38	What type of salt is made with sulphuric acid?	Sulfate
39	What type of salt is made with nitric acid?	Nitrate

A random selection of questions, chosen by your teacher, that you have found the most difficult to answer.

Write the numbers of these questions here:

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