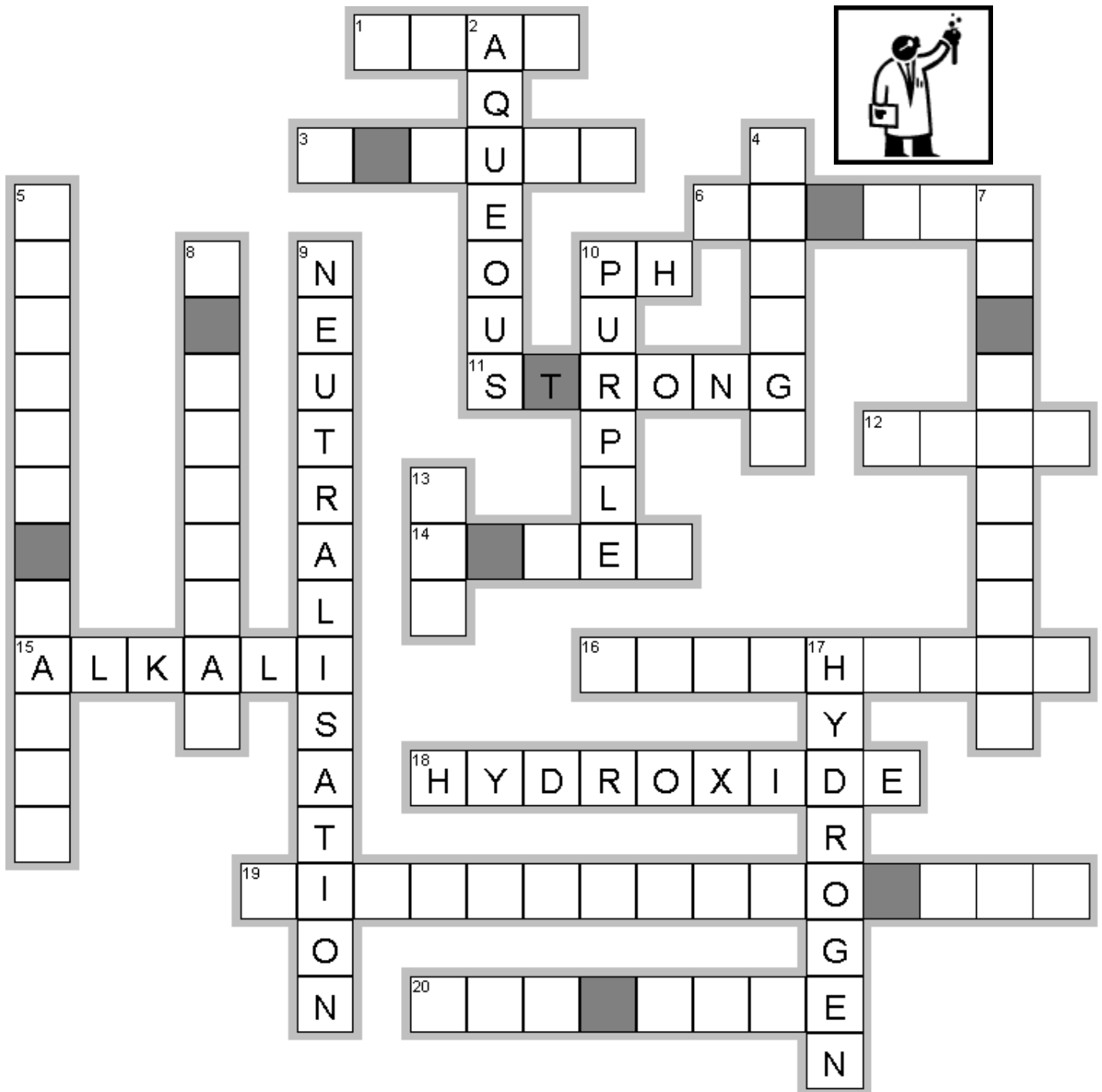


Strong and weak acids/ alkalis

A crossword with a difference:

- Where you have a clue fill in the answer;
- Where you have the answer write your own clue!



The crossword puzzle grid contains the following words and clues:

- 1. A
- 2. Q
- 3. U
- 4.
- 5.
- 6. 7
- 8.
- 9. N
E
U
T
R
A
L
- 10. P H
- 11. S T R O N G
- 12.
- 13.
- 14. E
- 15. A L K A L I
S
A
T
I
O
N
- 16. H
- 17. Y
- 18. H Y D R O X I D E
- 19. I O
- 20. E
N

An illustration of a scientist in a lab coat is located in the top right corner of the grid.

Mystery word from the shaded squares: _____

Across

1. An acid or alkali that doesn't ionise much in water.

3. Acid that has been mixed with a lot of water,

6. A hydrogen ion.

10. **pH** _____

11. **STRONG** _____

12. Type of substance that can donate a proton.

14. Always made in neutralisation reaction (together with a salt).

15. **ALKALI** _____

16. Type of acid involved in producing acid rain (due to sulphur impurities in fuels.)

18. **HYDROXIDE** _____

19. Lithium hydroxide + hydrochloric acid \rightarrow _____

20. Charge on a hydrogen ion _____ + water

Down

2. **AQUEOUS** _____

4. Colour corresponding to pH 4 with UVI.

5. Not the same as strong!

7. Reacts with alkalis to make metal nitrates.

8. Type of indicator that can be used to find the pH number of an acid or alkali.

9. **NEUTRALISATION** _____

10. **PURPLE** _____

13. $\text{H}_2\text{SO}_4 + \text{NaOH} \rightarrow \text{Na}_2\text{SO}_4 + 2\text{H}_2\text{O}$

17. **HYDROGEN** _____

Across

1. WEAK
3. DILUTE
6. PROTON
10. pH
11. STRONG
12. ACID
14. WATER
15. ALKALI
16. SULPHURIC
18. HYDROXIDE
19. LITHIUMCHLORIDE
20. POSITIVE

Down

2. AQUEOUS
4. ORANGE
5. CONCENTRATED
7. NITRICACID
8. UNIVERSAL
9. NEUTRALISATION
10. PURPLE
13. TWO
17. HYDROGEN

