

A home-made smell remover

This task is about mixing everyday substances to bring about a chemical change.



All fish smell "fishy" because they contain unpleasant-smelling substances called amines (which are bases). When lemon juice (an acid) is squeezed on to the fish, this smell disappears.

a) What name is given to the reaction between an acid and a base?

b) Why would this reaction make the smell go away?

Lemon juice is expensive and you've been asked to come up with a cheaper method to get rid of those fish smells in a kitchen where you work part-time. People you ask for ideas make various suggestions of combinations of substances you could try. Now you need to evaluate them. *Which is most likely to work and why? Could any of these pairs of substances be used to remove the "fishy" smell? Think about which substance might be acidic to begin with, and whether they stay acidic once mixed. Might any of the pairs turn acidic after they are mixed?*

c) Write your reasons for your prediction about each pair in the space provided.

Pair

Reasons for your prediction

i) **Baking soda and water**

Will this remove the smell?

Yes/ No/ It depends (Select one)

ii) **Vinegar and baking soda**

Will this remove the smell?

Yes/ No/ It depends (Select one)

iii) **Yoghurt and water**

Will this remove the smell?

Yes/ No/ It depends (Select one)

iv) **Vinegar and yoghurt**

Will this remove the smell?

Yes/ No/ It depends (Select one)