***Tasty science*** Planning ahead and equipment list

## Safety considerations

These activities require students to eat/taste, which **should not be done** in a science laboratory (see: ‘Eating in labs?’, *Science ASSIST* website, <https://assist.asta.edu.au/question/2296/eating-labs>).

Determine if any of the students are allergic to the intended tasting liquids and substitute where possible. Advise students not to participate if there are concerns. To prevent possible contamination, students should not ‘double dip’. It would be ideal if students could rinse their mouth with water after tasting.

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## Introduction: Investigating the tongue

### Equipment needed per group of 4–5

* mirror (could be a plane or convex mirror from light kits)
* a small packet of Maltesers® or equivalent (sweet that requires chewing and then mouth clean with tongue)

## Investigation 1: What can you taste?

### Equipment needed per group of 4

* 16 sterile cotton buds or equivalent
* plastic cups labelled 1, 2, 3, 4
* liquids that taste ‘salty’, ‘sweet’, ‘sour’, ‘bitter’
* sweet: straight cordial
* sour: lemon juice
* salty: soy sauce or water with salt added
* bitter: strong, cold coffee

It is suggested that the cups be set up prior to the activity. Also, ensure the teacher has a record of what liquid is in each numbered cup. If possible, make all the liquids of similar appearance so the taste is the only difference.

|  |  |  |  |
| --- | --- | --- | --- |
| Cup 1 | Cup 2 | Cup 3 | Cup 4 |
| sweet | salty | sour | bitter |

## Investigation 2: Investigating the tongue map claim

### Equipment needed per group of 3

* 12 sterile cotton buds or equivalent
* plastic cups labelled 1, 2, 3, 4
* liquids that taste ‘salty’, ‘sweet’, ‘sour’, ‘bitter’
* sweet: straight cordial
* sour: lemon juice
* salty: soy sauce or water with salt added
* bitter: strong, cold coffee
* blindfold