# Activity: The properties of honey

Honeys are a complex mixture of sugars, water, enzymes and various other compounds. In this experiment, you can compare the taste, colour, texture and pH of different honeys.

## Background

Honeybees make honey from nectar collected from flowers in the area around their hive. The flavour, colour and texture of the honey depend on which varieties of flowers the bees collect from.

The value of honey depends on its qualities. You can evaluate the properties of honeys using the following quick tests.

## Aim

To compare the taste, colour, texture and pH of several honey samples.

## Materials

Different honey samples   
pH indicator paper  
Dropper  
Deionised water  
Disposable spatulas   
Sample tile  
Microscope  
Microscope slide  
Honey colour chart

## Method

1. Use a wooden spatula to taste each honey sample – make sure you use a clean spatula for each taste. Record the taste and texture.
2. Record the colour of each honey sample, using the colour chart.
3. Look at each honey sample, and note its appearance. Rub a small amount of honey between your fingers and then look at it under a microscope. Describe its texture – is it runny, smooth or grainy?
4. Place a small amount of each honey sample onto a sample tile. Dilute with three drops of water. Label.
5. Dip the end of the indicator paper into the honey solution and read the pH from the chart provided with the indicator paper.

## Results

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| **Honey sample** | **Taste** | **Colour** | **Texture** | **pH** | **Additional notes** |
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## Conclusion

* Which honey do you like the best?
* What taste, texture and colour does your favourite honey have?
* Do your classmates like the same types of honey?
* Which honey do you think is the best quality and is the most expensive?