

Year 6 Science Activity Instructions – Investigation on Indicators

You can choose to find answers to any of the questions below

1. Which plant extract can be used as an indicator?
 - a. Red cabbage
 - b. Beetroot
 - c. Rose petals
 - d. Hydrangea flower
 - e. Blackberries
2. Compare the plant extract to determine which will be best to use as an indicator
3. Once the indicator has been made, you can use it to determine the pH of a range of household items such cleaning products and liquids around the house

Making the indicator

Equipment

- Pestle and mortar
- Sieve and a filter funnel
- Red cabbage leaves
- Cup
- Water
- Pan
- Knife
- Chopping board

Safety

- Please check with an adult to confirm if you are allergic to any of the plants
- Ask an adult to help you cut the cabbage with the knife
- Complete this activity with adult supervision because of the hot water, and heating on the oven top, to prevent burning yourself
- Work on a flat surface with clear space

Method

1. Chop up some red cabbage with a knife
2. Put some of the red cabbage into the mortar and a few drops of water
3. Grind with the pestle
4. Put the mixture into a pan, add about a cup of water and bring to the boil for a minute
5. Leave to cool and filter

Using your indicator

Equipment

- Red cabbage juice
- White plate
- Substances to test

Safety

- Work on a flat surface with clear space
- Be careful with the household product to prevent contact with eyes
- Please check with an adult to confirm you are not allergic to any of the household items you are using

Method

- 1 Put one of the substances into a white plate
- 2 Add a few drops of your cabbage juice
- 3 Write down the colour change
- 4 Do this again with another substance