

Aims

Using your knowledge of acids and alkalis, you are going to produce a training leaflet for hairdressers and barbers.

Task

Hairdressers and barbers use alkalis to prepare people's hair for being dyed. They add acid to the hair after this to neutralise the alkali that was used, preventing injuries to the scalp. Your leaflet needs to teach hairdressers and barbers all about acids and alkalis so that they can be confident when talking to customers and explaining how they can use acids and alkalis safely on their hair.

Set your leaflet out with the following headings. Make sure your leaflet pages cover the questions and suggestions below.

<p>Page 1: Acids and alkalis</p> <ul style="list-style-type: none"> ■ What are acids and alkalis? ■ What are acids and alkalis like (what are their properties?). First draft the properties. Then create a table or picture that compares acids and alkalis. ■ Give some everyday examples of everyday acids and alkalis. 	<p>Page 2: pH and indicators</p> <ul style="list-style-type: none"> ■ What does the pH scale measure. Give some pH values for everyday acids and alkalis. Try to give examples from the entire scale. ■ What is an indicator? ■ How could an indicator be used to find out if something is acidic or alkaline if the label was missing? ■ Draw a pH scale showing the colour some indicators would be for the different pH values. ■ Are there natural substances that can be used as indicators?
<p>Page 3: Neutralisation</p> <ul style="list-style-type: none"> ■ What is neutralisation? What are the products? ■ Give two examples of neutralisation reactions that show how they are useful. ■ What happens to the pH during a neutralisation reaction? ■ What is a salt ■ How are the salts from neutralisation reactions named? ■ What happens when metals react with acids? ■ Give examples of word equations showing acids reacting with alkalis and acids reacting with metals. 	<p>Page 4: Working safely with acids and alkalis</p> <ul style="list-style-type: none"> ■ What is the difference between a dilute and a concentrated acid? ■ What is a hazard symbol? ■ Include diagrams of hazard symbols ■ What safety precautions should be followed when you use acids and alkalis? ■ Why is acid added to the customer's hair after the alkali has been used? Why is this safe?