1. The two basic requirements for a healthy scalp are cleanliness and stimulation.
2. Scalp treatments and massage may be performed either: 1. Before a shampoo if a scalp condition is apparent, or 2. During the shampoo (once conditioner has been applied to the hair) for relaxation.
3. The purpose of a general scalp treatment is to maintain the scalp and hair in a clean and healthy condition.
4. Excessive oiliness is caused by overactive sebaceous glands.
5. Dandruff is the result of a fungus called malassezia.
6. Correct hair brushing stimulates the blood circulation to the scalp; brushing helps remove dust, dirt, and hair-spray buildup from the hair and gives hair added shine.
7. The two exceptions to hair brushing are as follows:
   1. • Do not brush or irritate the scalp before giving a chemical service.
   2. • Do not brush if the scalp is irritated.
8. Naturally, the primary purpose of a shampoo is to cleanse the hair and scalp prior to a service.
9. To be effective, a shampoo must remove all dirt, oils, cosmetics, and skin debris without adversely affecting either the scalp or hair.
10. Select a shampoo according to the condition of the client’s hair and scalp. Hair can usually be characterized as oily, dry, normal, or chemically treated.
11. Understanding pH levels will help you select the proper shampoo for your client. The amount of hydrogen in a solution, which determines whether it is alkaline or acid, is measured on a pH scale that has a range from 0 to 14.
12. The pH of a neutral solution, one which is neither acidic nor alkaline, is 7
13. A shampoo that is acidic will have a pH ranging from 0 to 6.9; a shampoo that is alkaline will have a pH rating of 7.1 or higher.

**The Chemistry of Water**

1. Water is the most abundant and important element on Earth. It is classified as a universal solvent because it is capable of dissolving more substances than any other solvent known to science.
2. Water is the main ingredient in most shampoos.
3. The second ingredient that most shampoos have in common is the primary surfactant (or base detergent). Surfactants are cleansing or surface active agents.

**Types of Shampoos**

1. A pH-balanced shampoo is balanced to the pH of skin and hair (4.5 to 5.5).
2. Conditioning shampoo, also known as moisturizing shampoo, is designed to make the hair appear smooth and shiny and to improve the manageability of the hair.
3. Medicated shampoo contains special ingredients that are very effective in reducing dandruff or relieving other scalp conditions.
4. Clarifying shampoo contains an active chelating agent that binds to metals (such as iron and copper) and removes them from the hair, as well as an equalizing agent that enriches hair, helps retain moisture, and makes hair more manageable.
5. For oily hair and scalp, balancing shampoo will wash away excess oiliness, while preventing the hair from drying out.
6. Dry shampoo, also known as powder shampoo, which cleanses the hair without the use of soap and water. The powder picks up dirt and oils as you brush or comb it through the hair.
7. Color-enhancing shampoo is created by combining the surfactant base with basic color pigment.