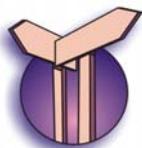# Which Soap is Best ?

Student Activities

Scenario

There are many brands of soap on the supermarket shelves. But how to decide which bar of soap to buy ? Have you ever thought about which soap is the best one to buy ? How do you decide ? Is it the one that cleans the best ? Is it the one that is best for the hands ? Is price a factor ? Is size a factor ? Let us carry out a project to find out which soap is 'best', where we need to define the appropriate meaning of the term 'best' in our context.

Your Tasks

To determine which soap is 'best' you will need to consider a number of factors. The activities in part 1 and 2 will help you to consider which factors are important. Part 3 is a project to compare the effectiveness of different soaps. You will need to design the procedure for this. When you have completed parts 1, 2 and 3, you should be able to use the results to help to make your choice of the 'best' soap. This is part 4.

Part 1:Looking at labels - comparing costs

Obtain several brands of soap. Look at the labels and complete the table below

	Brand name	Name of country soap made	Cost $	Mass in g	Cost per g
1.					
2.					

Questions

1. Is there any missing information from the table ?

2. Does it matter for the purposes of this project ?
    If so, how can we obtain the information ?

Part 2   Making more comparisons - testing the soaps

1.   Smell the soap. Describe the smell.

2.   Soak the bar of soap for 1 hour. Do not move it during this time. Then remove it and dry the bar for 1 day. Reweigh the bar. Calculate the loss in mass.

3.   Design another experiment to compare different bars. State the purpose of the experiment.

Questions

1.   What useful comparative information can you get from test 1?

2.   Why is perfume added to soap ? Is this likely to be a factor in determining the 'best' soap ?

3.   Imagine you are a counsellor working for the consumer society. What factors would you suggest were important when choosing which soap to buy ?

4.   Did you find any soap that was black in colour ? (Very unlikely) Can you suggest a reason for this ?

Part 3   The Project

Design a set of procedure for comparing the effectiveness of soaps for cleaning. In this you will need to decide what will be cleaned, the factor that needs to be compared and the variables you will need to keep constant.

In the project, I will clean ....

Factor 1 which I will compare is ....

(For this comparison, I will control the following ...)

Factor 2 which I will compare is ....

(For this comparison, I will control the following ...)

My results indicate …...

Part 4   The choice of 'best' soap

I suggest the best soap is ....

I have based my choice on the following ……