

Finding the Surface Area of Your Hand

A leading manufacturer of hand lotion, LOTIONS-R-US, needs to know how to find the surface area of a hand.

They have hired you to show them how to do this. You have been asked to write a report that explains how to accurately find the surface area of a hand.

As an example, you will find the surface area of your own hand (or one of your friend's hands). You have to include not just the palm and the back of the hand, but the 'sides' also.

As a check on accuracy, LOTIONS=R-US have asked you to find the surface area using **two** different methods.

You may use any of the methods that you have used in class for finding the area of odd shapes. Or you may use any other methods that you think are accurate, as long as you can justify your decision.

Your Report

Your report should be neatly presented on either looseleaf A4 paper or as a poster. All writing should be done using full sentences.

Your report should include:

- An introduction that describes the problem to be solved.
- Accurate descriptions of the methods that you will use to find the area.
- Any diagrams, drawing or pictures that you used.
- All necessary calculations, showing your working.
- A conclusion in which you discuss how accurate you think your answer is.

You may work with a partner or in a small group, but each person must present their own report.



Finding the Surface Area of Your Hand Assignment Marking Criteria

Name: _____ Class: _____

Communication and Justification Rating: _____

A	<p>The report is neatly presented on looseleaf A4 paper or as a poster. All writing is done using full sentences. Pictures or diagrams are neatly drawn and well presented. The introduction clearly describes the problem to be solved. The conclusion fully discusses the accuracy of each method and justifies any decision about the relative accuracy of each method.</p>
B	<p>The report is neatly presented. Almost all writing is done using full sentences. Pictures or diagrams are generally neatly drawn and well presented. The introduction describes the problem to be solved. The conclusion discusses the accuracy of each method and gives some justification for any decision about the relative accuracy of each method.</p>
C	<p>The presentation is satisfactory. Much of the writing is done using full sentences. Pictures or diagrams are included and can be understood. The introduction describes the problem to be solved. The conclusion discusses the accuracy of each method.</p>
D	<p>The presentation is satisfactory in places. The student has communicated The students has included pictures or diagrams. An introduction and/or conclusion is included in the assignment.</p>
E	<p>The presentation is poor and shows little evidence of care.</p>

Knowledge and Procedures Rating: _____

A	<p>The student has used two acceptable methods for finding the surface area of a hand. The calculations are correct. All calculations are set out using an appropriate method.</p>
B	<p>The student has used two acceptable methods for finding the surface area of a hand. The calculations are correct, with a small number of minor errors. Setting out has been shown for almost all calculations.</p>
C	<p>The student has used one acceptable method for finding the surface area of a hand. The calculations are correct, with a small number of minor errors. OR the student has used two acceptable methods for finding the surface area, but with some substantial errors in the calculations. Setting out is generally done.</p>
D	<p>The student has used one acceptable method for finding the surface area, but has made substantial errors.</p>
E	<p>The student has make only a minimal attempt at finding the surface area.</p>