

Product Dissection & Benchmarking Project: Lab I

Preparation:

1. Read about product dissection in the handout from Otto and Wood, *Product Design*.

Date: January 13, 2010

Team #: 2

Team Name: Reanimation

Members: Tom Harford

Rob Heisler

Brianna Post

Emily Wolf

Lab I Assignments:

1. Complete data sheet 1.
2. Submit your completed lab 1a and 1b on Angel. Make sure you have your product name on each sheet. The file **MUST** be saved as a PDF file (file/save as/pdf). The filename **MUST** be:



TeamN_ProductName.pdf

Example: Team3_CrestSpinBrushPro.pdf

3. Prepare a comprehensive features comparison table for features that are in your list of features to be benchmarked.

Laboratory Tools:

1. Digital scale
2. Camera.

Estimated time: 1 hour.

A. Visual Inspection:



Tasks:

1. Take digital pictures of the product, its parts and the packaging.
2. Record the following information for the product you are given for dissection on data sheet 1a.
3. Recorded information should reflect everyone's opinion in the dissection team. Therefore, if there is a difference of opinion among members, opinions and members who provided them should be noted.

DATA SHEET 1a	Team #: 2
Getting Ready for Dissection: Part I	
Manufacturer/Product Name: Oral-B Cross Action Power	

General Product Information: How many detachable pieces the product has? 4
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Part number:	Part name:
1	Brush cover
2	Battery Protector
3	Battery
4	Detachable brush head

Describe the pieces including their functions and their materials.	
Part number:	Material & Functional Description:
1	Plastic and serves as a sanitary protection for the brush
2	Plastic and keeps battery covered, protected from water, and in place
3	Duracell Alkaline Battery to power the toothbrush
4	Plastic and executes brushing action

Is it easy to detach each part? yes	
Part number:	Detachment (Easy, difficult, use of force etc.):
1	Very easy but secure
2	Easy, twist off
3	Easy, push in and pull out
4	Difficult but could be easy with proper tool provided with replacement

Describe the packaging. Is it easily opened? Describe the opening procedure.
Yes. You just have to find the seam in the cardboard and tear open.

DATA SHEET 1a		Team #: 2
Getting Ready for Dissection: Part I (cont.)		
Manufacturer/Product Name: Oral-B Cross Action Power		
Product Features: Provide team's collective opinion related to features of the product using the following list as a starting point.		
Packaging (including information insert)	Easy to open but sneaky information. Easy on the eyes. The information that is provided is useful.	
Aesthetics (multi-color, etc.)	Generic color palette for a toothbrush. Need a wider selection of colors to reach a wider audience and increase usage.	
Cleaning – of teeth	Assumed good. Good spin and up-down oscillating action.	
Cleaning – of brush	Good but lots of crevices that that gunk could be caught in and inhibit the overall performance of the toothbrush. Duly noted that there is a replacement brush head available.	
On/off switch location	Easily located and functional	
Ease of switch use	Easy and separate switches for on and off functions	
Battery location	The rear of the toothbrush to provide for easy replacement access	
Handle (Ergonomics)	Poor soft grip handle and the comfort is non existent	
Quality	There is room for improvement but overall a satisfactory project	
Safety	Very safe. No fear of electrocution or harm from detachable pieces	
Versatility, attachments	Each piece executes its singular purpose well	
Weight with batteries	0.164 lbs	
Environmental friendliness	Somewhat friendly with disposable heads however not biodegradable	
Other features	No additional features other than the cleaning of teeth	

Product Dissection & Benchmarking Project Handout I – Part b

Laboratory Tools:

1. Computers which are connected to the internet,
2. Library resources.

Estimated time: 1 hour.

B. Market Realities for the Product:



Tasks:

1. Using on-line and library resources gather and record information on the market.
2. Keep a list of websites as references. These will be needed for your report.

DATA SHEET 1b		Team #: 2
Manufacturer/Product Name: Oral-B Cross Action Power		
Getting Ready for Dissection: Part Ib		
Cost (Be prepared to record multiple values and sources)	Unknown however estimated to be between \$25 and \$35	
How long has the product been in the market?	2008	
Target population	4 and up however we think 12 and up due to size	
Versions of the product (Previous versions of the product)	Non electric toothbrushes of the same product	
What are improvements between versions of the product?	Electric facilitates brushing	
How is it sold (TV infomercial, drugstores, etc.)	TV, web ads, drugstore posters/ads	
Patented Features of your toothbrush (Please include patent dates, numbers and brief description of patent).	File Date: Oct. 29, 1993, Patent Date: Nov. 26, 1996 Patent Number: 5,577,285 The metal rod oscillates causing the head of the toothbrush and the bristles to oscillate as well.	
Competitive Patent (Please include patent dates, numbers and brief description of patent).	File Date: Oct. 21, 2002, Patent Date: Dec. 11, 2003 Patent Number: US 2003/0226223 The brush head does not completely oscillate.	