SB 600-Fall 2014 (Steketee)	Name	
Due: Start of class, Week 3.	HARD COPY PLEASE!	

WHAT IS YOUR BODY BURDEN?

Choose one *active* 15-minute part of your day and, using this chart, record your environmental exposure to substances as you carry on various activities during this time period. An *active* 15-minutes means a time period such as getting ready in the morning; eating lunch; out socializing, working, etc. In addition to recording the substances to which you are exposed, indicate the route of exposure (e.g. *absorption* Through skin, *ingestion*, *inhalation*, *injection*). Be sure to list the specific substances, using their full chemical name. Become a label reader (at least for that 15-minutes) and indicate *all* of the substances noted on the labeling. You may end this part of the activity once you've filled the form with substances even if 15 minutes have not gone by.

After you have finished filling out the form, you will identify those substances of concern. Go to California's "Proposition 65 list" http://www.oehha.ca.gov/prop65/prop65_list/files/P65single060614.pdf and see if you can find the substances you have included on your sheet. Indicate the type of toxicity (reproductive, carcinogenic, et al.) reflected on the listing. Alternatively, the Environmental Working Group has a website specifically for cosmetics and beauty care projects: http://www.ewg.org/skindeep/. If you are using EWG's Skin Deep site, include the "hazard score" as well as the toxicity type. Once you match 10 of your listed substances with some type of toxicity, or you've searched all the substances on your sheet, you may stop with this part of the activity.

Time/Activity	Substance	Route of Exposure	Toxicity Type? & Hazard Score

Finally, take a look at what David Ewing found out about his body burden of chemicals: http://davidewingduncan.com/media/media_pollution.pdf

Questions to ponder:

- 1) What are the different types of harm which you have identified?
- 2) What are the ways my body handles these substances? How many/much of these substances remain in my system?
- 3) How long do they remain in my system?
- 4) What are their effects upon each other ("synergistic" effects)?
- 5) What are the short-term and long-term effects on living organisms (me!)?
- 6) What organizations/agencies are protecting me and other consumers from toxic substances?
- 7) How do these entities determine whether a substance is harmful?
- 8) What factors need to be taken into account when determining whether substances are harmful?
- 9) Why do companies produce/sell products with ingredients that pose harm to living organisms?

Key Concepts

body burden
bioaccumulation
biomagnification
toxicity
mutagen
teratogen
carcinogen
synergistic effects
risk assessment
risk analysis
risk perception
Toxic Substances Control Act (U.S.)
Environmental Protection Agency
Proposition 65 (California)
precautionary principle