Green/DIY Cleaning

Welcome to DIY Green Cleaning!

Clark County Master Composter Recycler Program

Agenda

- Introductions
- Chemicals and Cleaners
- Marketing
- DIY Cleaning Kit
- Cleaning Guide
- Individual Recipes
- Doing the Research
- Essential Oils
- Demo time! Let's make some cleaners

Chemicals and Cleaners

What is really in those cleaners that we buy?

Goals of Cleaning

- Remove dirt
- Not to kill germs/bacteria
- To create a healthier environment

Do your cleaning products introduce toxins in your home?

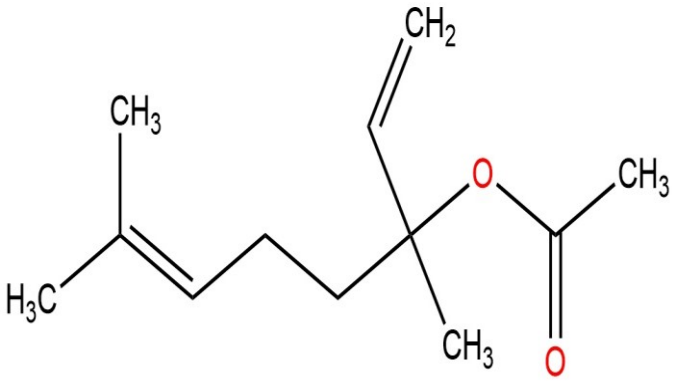
Chemicals in each room

- Bathroom
  - Anti-bacterial soaps
  - Triclosan
  - Fragrances
- Kitchen
  - Surfactants
  - Fragrances
  - Triclosan
- Laundry
  - Surfactants
  - Fragrances
  - Petroleum Distillates

Proprietary Information

- Perfume

- Fragrance



Linalyl Acetate

Reading The Label On The Store Shelf

- Words to lookout for:
  - Flammable
  - Corrosive
  - Irritant
  - Poison

Product Signal Words

POISON – very toxic. ***Fatal dose: a few drops to 1 teaspoon***
DANGER – highly flammable or corrosive

WARNING – moderately toxic. ***Fatal dose: 1-2 teaspoons***

CAUTION – mildly toxic. ***Fatal dose: 2 or more teaspoons***

Non-Toxic - does NOT mean "safe," it only means it does not qualify for signal words.

Note: Published by Clark County and by Metro.
MG/KG of weight, these doses are for the average adult weighting 150 lbs.

It's not only about us!

- Environmental Hazards
  - Air Pollution
  - Water Pollution

Surfactants destroy mucus layer that protects fish and aquatic creatures

Phosphates cause algae growth

Marketing

The good, the bad, and the ugly truth

Marketing words:

- “Natural”
- “Non-Toxic”
- “Environmentally Friendly”
- “Eco-safe”
- “Cruelty-free”
- “Biodegradable”

What do they really mean?

Nothing!

- There is no oversight for the term “non-toxic”
- Cleaning products are not required to list certain ingredients
- Manufacturers claims, mean only what the manufacturer says that they do

How to Identify a Green Imposter

- Some labels have no standard meaning
- Truthful but unimportant claims
- Distracting claims

Certifications

- “Green Seal”
- “US EPA Safer Choice”
- “USDA Biobased”

SAFER CHOICE
Meets U.S. EPA Safer Product Standards

Look for this symbol which identifies USDA certified biobased products.

GREEN SEAL CERTIFIED

Some "Green" Brands

- Bio-Kleen (made here in Vancouver)
- Planet (made in British Columbia)
- ECOS
- Seventh Generation
- Mrs. Meyers
- EarthFriendly
- Citra-Solv, Pure Citrus
- Ecover (made in Belgium) Dr. Bronner's (liquid soap)
- Bon Ami (scrubbing powder)
- Murphy's Oil (wood soap)
- 20-Mule Team Borax (laundry booster)

And… you're wasting money!

Make your own for less than $1.00!

Commercial all-purpose cleaners cost $3.00 - $8.00

Cleaning Cost per Ounce

- Commercial Products…….. 6 ¢ to 16 ¢ including water
- Homemade Recipes…….. 2 ¢ to 4 ¢ before adding water
- Plus:
  - No shopping hassles
  - No disposable containers
  - Reduced storage space

Think Pair-Share

- Knowing what you have learned..
  - How many chemicals do you have in your house?
  - How has marketing affected your choices?

DIY Cleaning Kit

Made from items you already have in your pantry

DIY Cleaning Kit

Cleaning Guide

The what, where, why, and when of DIY cleaning

Counters and Cutting Boards

- Disinfect with:
  - Hydrogen Peroxide, then
  - Vinegar
- Alternative for high risk contamination:
- Mild bleach solution (1 tbsp per quart)

When to actually sanitize?

- Cold or flu running through your home
- Dealing with raw meats, especially poultry
- Other human bio-hazards (vomit, urine, feces, blood)
- How to Clean:
- First according to the CDC, first wash with soap and water to remove debris.
- One quart of distilled water to one tablespoon Clorox mix.
- Wipe it down, and allow it to dry

Disinfecting

- Our recipe will disinfect
  - 1. Remove debris with soap
  - 2. Use spray bottle with 1 quart distilled water to 1 Tbs. bleach
  - 3. Wipe down surface
- Disinfect in the following situations
  - 1. Sickness in your home
  - 2. Dealing with raw meats
  - 3. Dealing with human bio-hazards

Refer to the Washington Department of Health for further information

Individual Recipes

They are so easy to make a teenager can do it

Safer Scrubber

Ingredients	Cost
½ cup warm water	Tap Water = $0.01
2 tablespoons white vinegar	Vinegar = $0.02
3 tablespoons vegetable oil soap	Soap = $0.60
1 cup baking soda	Baking Soda = $0.03
1 quart sized jar with air tight lid	▶ *Total = $0.70*
optional / a few drops essential oil	

▶ *Not counting the Essential Oil or the jar*

Add water first, then vinegar and soap. Stir in baking soda.

Good for sinks, tubs, showers, etc.

All Purpose Cleaner

Ingredients	Cost
3 cups warm water	Tap Water = $0.01
1 teaspoon washing soda	Super Washing Soda = $0.01
2 tablespoons white vinegar	Vinegar = $0.02
2 tablespoons vegetable oil soap	Soap = $0.40
1 spray bottle	▶ *Total = $0.44*
optional / a few drops essential oil	

- *Not counting the Essential Oil or Spray Bottle*

Mix everything but soap in spray bottle and shake. Add soap last. Mix gently. Apply and wipe clean.

Good for countertops, walls, woodwork, appliances, etc.

Window Cleaner

Ingredients	Cost
2 cups warm water	Tap Water = $0.01
¼ cup white vinegar	Vinegar = $0.04
¼ cup rubbing alcohol	Alcohol = $0.32
1 tablespoon cornstarch	Cornstarch = $0.01
1 spray bottle	*Total = $0.38*

- *Not counting the Spray Bottle*

Mix ingredients in spray bottle.

Use as you would any glass cleaner.

Doing the Research

Where to find information about products and chemicals

National Resources

- National Institute of Health
  - https://hpd.nlm.nih.gov/
- Environmental Protection Agency
  - https://www.epa.gov/
- US National Library of Medicine
  - https://toxnet.nlm.nih.gov/
- Washington State Department of Ecology
  - https://ecology.wa.gov/

Local Resources

- Clark County Household Hazardous Waste Information
  - http://www.clark.wa.gov/recycle/waste/index.html
- Clark County A to Z of recycling guide
  - http://www.clark.wa.gov/recycle/recyclingA-Z.html
- Washington Toxics Coalition
  - http://www.watoxics.org/
- Environmental Working Group – Home cleaning products database
  - http://ewg.org/cleaners/hallofshame/
- Grist.org – many different articles on testing out cleaning products, plastics, etc.
  - http://grist.org/article/you-missed-a-spot/
- National Institutes of Health
  - http://householdproducts.nlm.nih.gov/

Essential Oils

Adding natural fragrances to your cleaners

Essential Oils

- More is not better, it is toxic
- Don’t add more drops then what we say
- Medicinal versus scent

Essential Oils

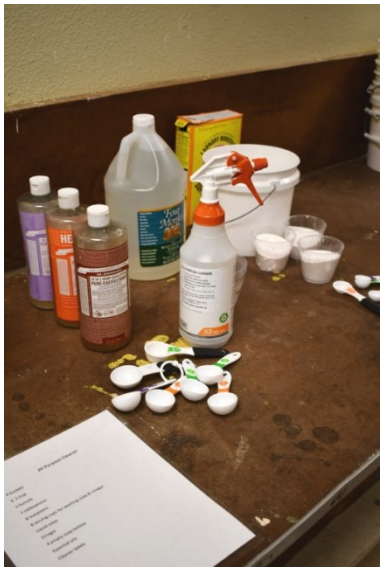
- Tea Tree – Anti-microbial, Anti-viral, Anti-fungal, & Insect deterrent
- Clove - Anti-microbial, Anti-viral, & Anti-fungal
- Eucalyptus - Anti-bacterial, Anti-viral, & Room freshener

Demo Time!

Time to make these cleaners for yourself

What we are going to make

All-Purpose Cleaner



Window Cleaner

Safer Scrubber