



tree
monster



tree monster

Concept **Tree Monster** Toys envisions a world of fun responsible products using materials that are conscious of our environment. Safe enough for your little monsters, all of our products are made with Organic and natural materials. We are made in the U.S.A. and only work with United States suppliers and manufacturers. We support sustainable business practices, and design our products with care, so that they are whole enough to return to the earth one day.

Certifications **(OTA) Organic Trade Association Member**

Focuses on the organic business community in North America. Promoting and protecting the growth of organic trade to benefit the environment, farmers, the public and the economy.

Certified AP Non-Toxic

ASTM - American Society for Testing & Materials for Toy Safety “Certified in a program of toxicological evaluation by a medical expert to contain no materials in sufficient quantities to be toxic or injurious to humans or cause acute or chronic health problems.”

GOTS - Global Organic Textile Standard

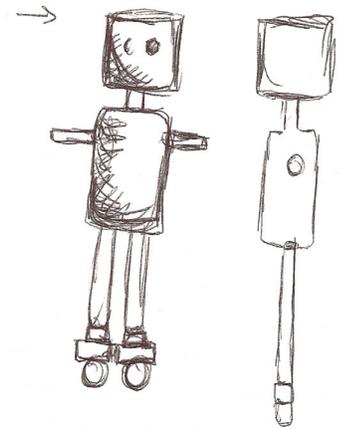
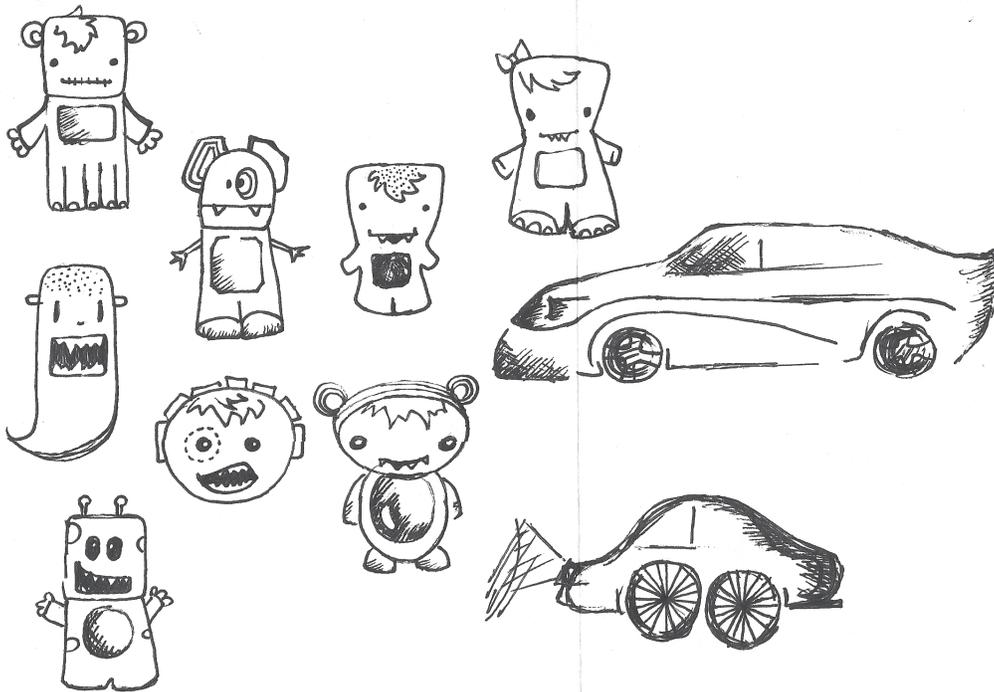
Ensuring the organic status of textiles, from harvesting of the raw materials, through environmentally and socially responsible manufacturing



Persona **Jane Doe** | Married with 2 children.
age 27-45 Occupation: Nurse. Education Level: RN, Bachelors Degree.
Hobbies: Enjoys Spending time wither her children, Knitting and Hiking.
Tries to be environmentally conscious.

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- Rough Ideas**
- Plush Toys** - Made from bamboo fabrics or organic cottons.
 - Wooden Toys** - Made from bamboo or alternative woods.
 - Toy Cars** - Made from bioplastic or bamboo.
 - Packaging** - 100% recycled materials.





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Toy Proposal 1



Plush Toy | 8 x 10 inches

Made from :

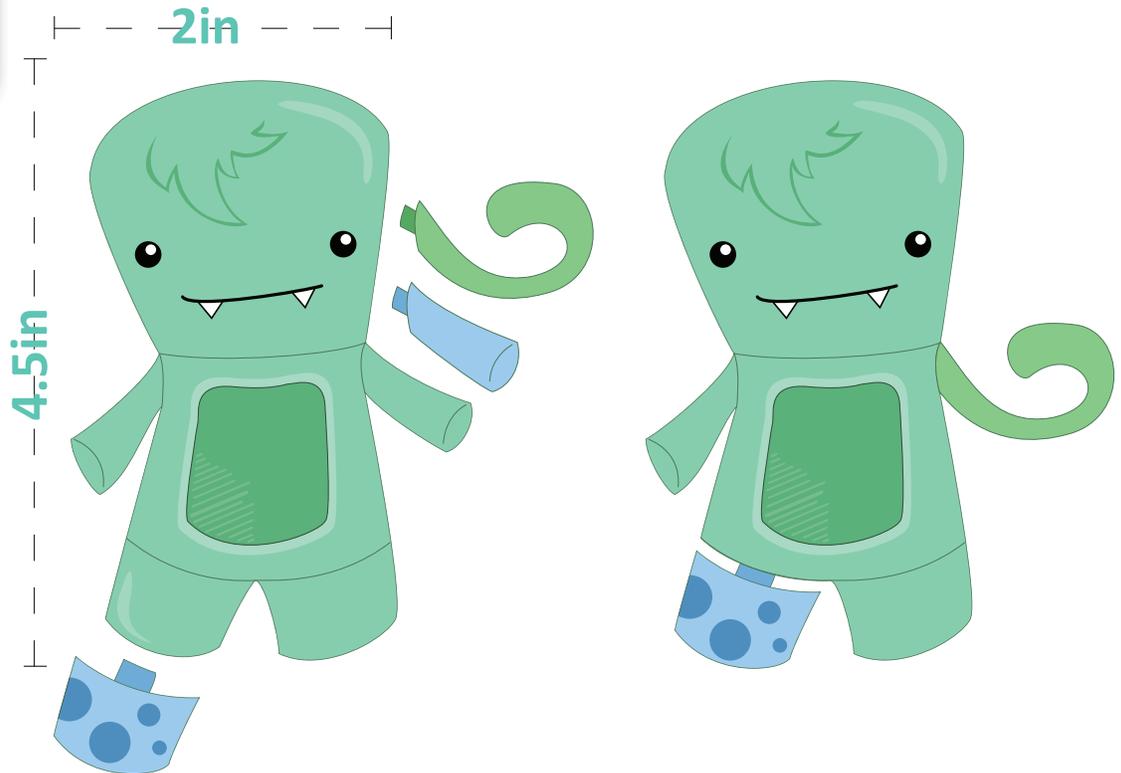
Organic Cotton : Poplin

Organic Cotton Thread

Natural Dyes

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Toy Proposal 2



Wooden Character Toys | 2 x 4.5 inches
with interchangeable limbs

Made from :
Rubberwood
Adhesive
Milk Paint



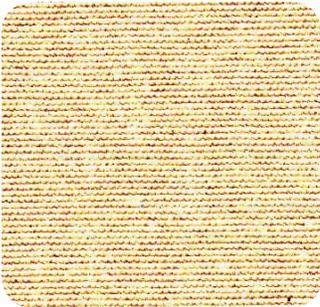
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Materials



Rubberwood | From the Pará rubber tree or *Hevea brasiliensis*. It is strong, flexible, has a subtle grain and is resistant to fungus, bacteria and mold. The rubber tree exudes a latex sap, which has become the world's main source of natural rubber. Over 36 million acres of rubber trees are currently being grown in the tropical regions of Asia, Africa and America. After the economic life of the rubber tree, which is generally 26 to 30 years, the tree no longer yields enough latex sap. Planters then fell the rubber trees and plant new ones. While the old rubber trees used to be burned, they are now used for their timber.

Supplier : Jayakas Factory. North Carolina, U.S.A.



Organic Cotton fabrics | Grown without the use of toxic pesticides, herbicides and synthetic fertilizers. Using Organic cotton prohibits these toxins that are commonly used in growing cotton. Chemicals known to affect the development of children and babies are banned from organic fabrics. The chosen Textile we would use would be 100% Certified Organic Poplin Cotton. Light in color, with a plain thread weave, prepared for dye.

Supplier : Sew Eco-Logical Inc. Eugene, Oregon U.S.A.

Organic Cotton Thread/Yarns | Grown without the use of toxic pesticides, herbicides and synthetic fertilizers. Rowan Purelife Organic Cotton Yarn. Super Fine Weight. Light in color, ready for dye.

Supplier: Royal Yarns International, Rockville, Maryland U.S.A.



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Materials cont.

Natural and Organic Dyes | 100% Natural dyes from plants and woods. logwood, acryls, fustic, brazilwood and hematine.

Supplier: Abbey Color, Philadelphia PA, U.S.A.



Natural Organic Milk Paints | Milk Paint and Milk Paint Primer Free of ; VOC's HAP's, solvents or harmful poisons, lead, mercury, radioactive materials, petroleum by-products, plastics, synthetic preservatives. Made from Casein (milk protein), natural salts and natural pigments. Safe for people with chemical sensitivities, pregnant women and children. 100% organic paint safe for people, and the environment. The ingredients in the base paint are used in the food and pharmaceutical industries, and are all completely biodegradable. Comes in 20 vibrant colors.

Supplier: The Old Fashioned Milk Paint Co. Groton Massachusetts ,U.S.A.



Adhesive | EcoGlue Premium Wood Adhesive is a high performance environmentally safe industrial adhesive. A white glue, dries clear and holds a strong bond to wood. It is non-toxic and contains less than 1% VOC. EcoGlue contains no solvents.

Supplier: Ellsworth Adhesives, Germantown, WI U.S.A.



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Budget Numbers are based upon the production of 1,000 toys each.

Plush Toy	Material	Amount Needed	Cost
	Poplin	170 yd.	\$451.40
	Thread	36,000 in	\$59.94
	Dye	73 lb.	\$91.25
	Labor	1,000 made	\$3,750.00
	Total:	1,000 dolls	\$4352.59
		Cost per doll	\$4.35

Manufacture Sew Eco-Logical Inc. Eugene, Oregon U.S.A.

1st prototype: 3 weeks

Fabric Manufacturing : 6 to 12 weeks

Production 4 to 8 weeks

Wooden Toy	Material	Amount Needed	Cost
	Rubberwood	84 pannels	\$4,100.00
	Milk Paint	15 gal.	\$689.25
	Adhesive	3 gal.	\$35.00
	Labor	1,000 made	1,245.00
	Total:	1,000 characters	\$6069.25
		Cost per character	\$6.07

Manufacture Moore then Cabinets. Santa Clara, CA U.S.A.

1st prototype: 2 weeks

Manufacturing : 3 to 4 weeks

Production 5 to 6 weeks

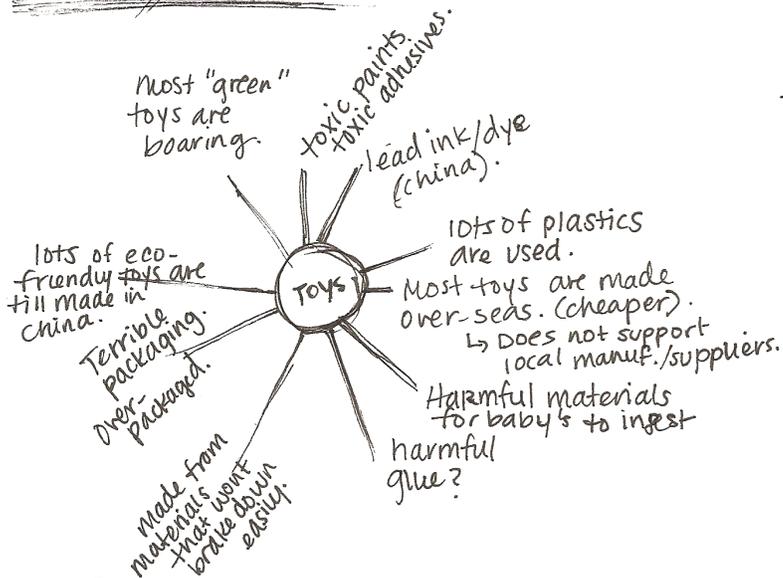
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Process Journal & sketches

Toy Co. first ideas...

- make toys from bioplastics?
- make toys from natural materials?
 - woods
 - bamboo? etc..
- recycled materials.
- alternatives... (research)

Common toy/toy company problems...



New ideas....

- compostable packaging
- making cute characters. encourage people that "green can be fun"
- use safe inks/dyes (organic? local?) (look into natural dyes...)
- look into bamboo. as fiber and wood.
- look into organic cotton.

things I could have the company make....



CLOTH and BAMBOO DOLLS...?



Cars from wood? bamboo? Bio-plastic?

maybe a whole line of cars?

research new/other materials

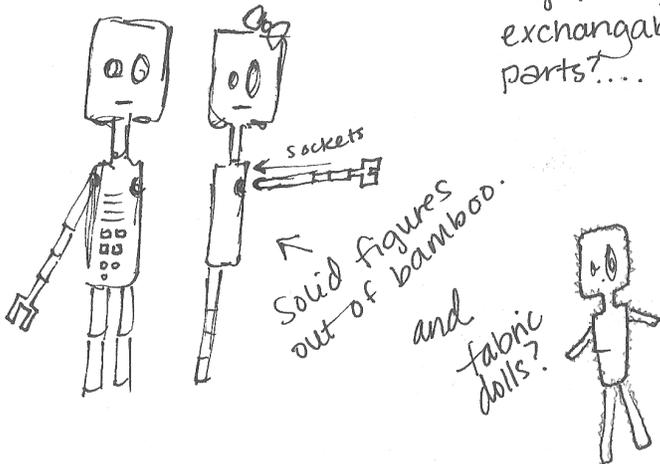
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Process Journal

Company Names...

grasshopper toys
green grass toys
green bean toys
bamboo toys
bamboo baby
bam bam toys
bamboo robot? ←

could make
Robot action
figures w/
exchangeable
parts?...



eco-friendly materials...

- organic wool/cotton...
- cotton thread/yarn (organic).
- soy based inks. to paint robots.
- bamboo.
- milk paint? Free of VOC'S, HAP'S
Lead, Mercury, Plastics...
www.milkpaint.com.

- Rubberwood - Comes from the Rubbertree (Parā rubber tree or Hevea brasiliensis). Grown for their latex, and then cut down and replaced.

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Process Journal

- Organic Cotton Supplier } fleece or
↓ Seworganic.com } Poplin?
- Based in OREGON.

- Organic Yarn
> Buhler Quality Yarn?

- Rubberwood = Bingltd.com

Costs...

DOLL = 8x10 and 36" Round
6 dolls in 1 yard.

= 170 yards for 1,000 dolls.

POPLIN

\$4.42 a yard for 100+ yards.

751.4 = 170yds \times \$4.42

1 yd = 36"
12 squares
in 1 yard

Thread

Rowan Purelife Organic Cotton Yarn.
\$9.99 per 180 yards

to sew 1,000 dolls... need 36,000 in
of yarn. costing 59.94 (6 rolls).

Dye

Natural Dyes / Per 1,000 dolls...
= \$91.25 in dye
at 1.25 per lb.

Labor for
Dolls...
Quote from
Sew-Eco-logical -

first prototype: 3 weeks
fab. man.: 6 to 12 wks.
Production: 4 to 8 wks
\$ 3,175.00

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Process Journal

Look into certifications...

- OTA (ORGANIC TRADE ASSOCIATION)
- GOTS Global Organic Textile Standard

OTA = "MEMBER BASED ASS. THAT ^{FOCUSES} FEATURES ON THE GROWTH OF ORGANIC BUSINESS COMMUNITY IN NORTH AMERICA."

GOTS - "ensuring organic status of materials, through ^{socially responsible} ~~socially~~ ^{environmentally} responsible manufact."

Other things to look into...

→ The Sustainable Cotton Project
in the San Joaquin Valley.

OR
The local Chamber of Com.

Cottoninc.com/organic - Cotton-Suppliers/

"to eliminate the concept of waste means to design things - products, packaging, and systems from the very beginning on the understanding that waste does not exist." - cradle to cradle p104

"Waste equals food, whether ~~or not~~ it's food for the earth or food for a closed industrial cycle. We manufacture products that go from cradle to grave. We want ~~them~~ to manufacture them from cradle to cradle."

- William McDonough.



Resources

Book:

Mendler, Sandra. ***The HOK Guidebook to Sustainable Design***. Wiley, 2000.

McDonough, William. & Braungart, Michael ***Cradle to Cradle***. New York: North Point Press, 2002.

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“Global Standard”. Global Organic Textile Standard. Sept 2009 <<http://www.global-standard.org/>>.

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