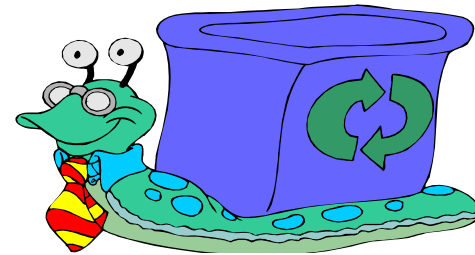


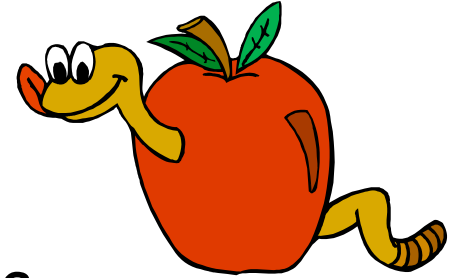
Vermicomposting



Lumbricus rubellus
(common redworm)



Vermicomposting



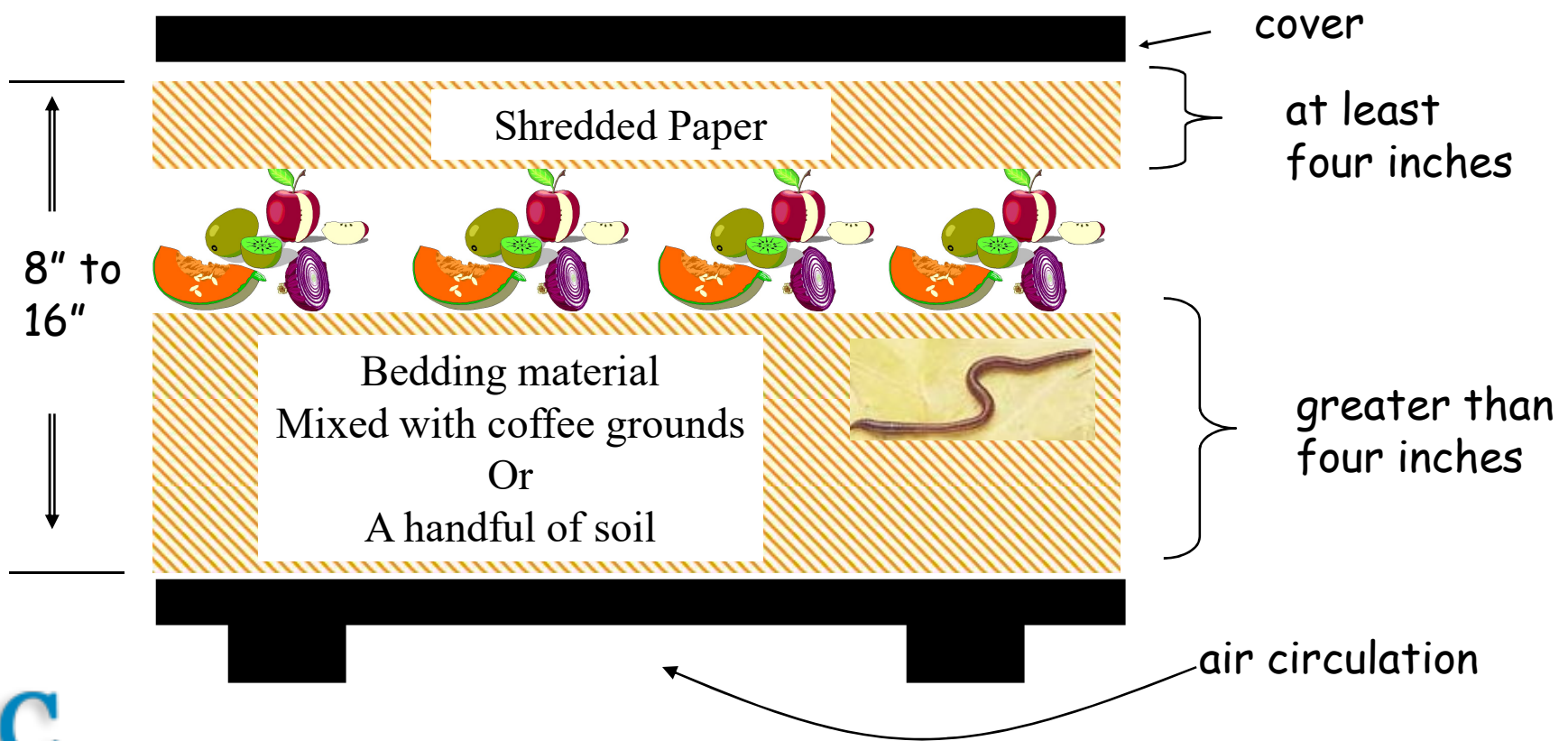
- Environment for redworms
 - to eat vegetable and fruit food waste
 - dispose of office paper and junk mail
- Different than backyard compost pile
 - managing hardy worms instead of bacteria
 - no turning required
 - no proper mixture of materials required
 - no chopping

Vermicomposting

- Produces worm castings
 - a nitrogen rich fertilizer
 - use instead of purchasing fertilizer
- Reduces food waste
- Neat, Easy, Odorless, Fun!

Organization of the bin

The bedding material should be damp.
As moist as a wrung out sponge.

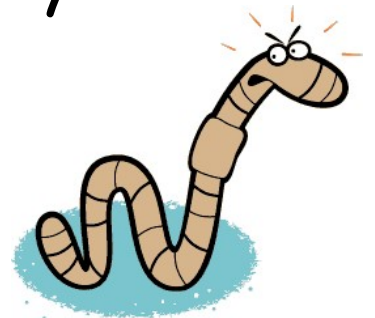


Bedding material

- Shredded office and junk mail paper
 - can dry easier than news print
- Shredded boxes and newsprint
 - these are valuable recyleables so maybe the worms shouldn't get them
 - avoid glossy print
- Dried partially decomposed leaves
- No soil - these worms are litter dwellers

Any size bin can work

- Rule of thumb
 - two square feet of surface area per person
OR
 - one square foot per pound of waste per week
- Worms will reproduce to fill the box but will not overpopulate
 - hermaphrodites (both male and female organs)
 - reproduce at two months of age
- Should start with a pound of worms which must either be purchased or donated by a friend



Worm Facts

- Can eat $\frac{1}{2}$ body weight per day
 - 1 lb. worms can eat $\frac{1}{2}$ lb. of food per day = 3 $\frac{1}{2}$ lb. of food per week

Selecting a bin

For sale from Santa Clara County



Don't use chemically treated woods or highly aromatic woods

Buy or build your own



UC
CE

composters.com

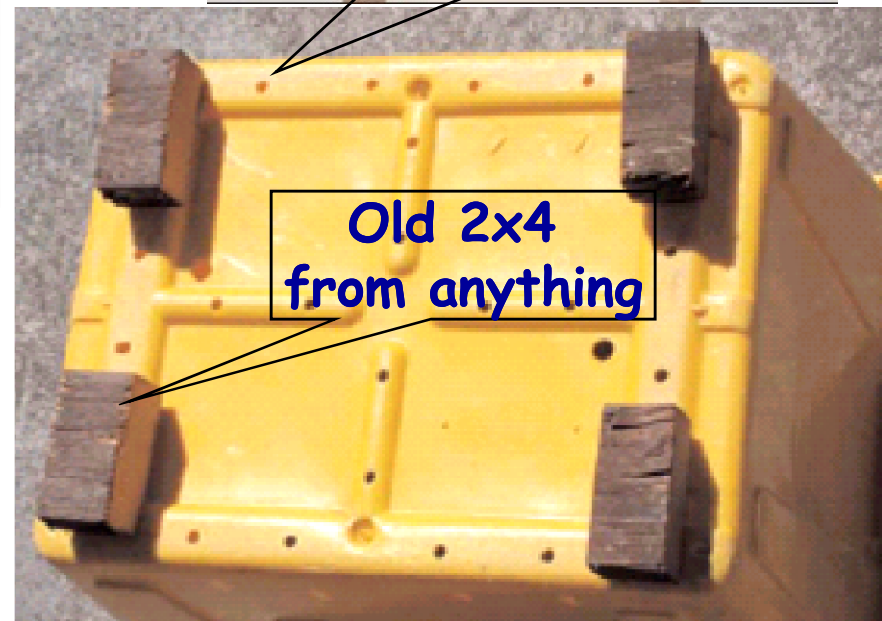
A Home Made Worm Bin from an Old Recycling Bin



Old fence wood



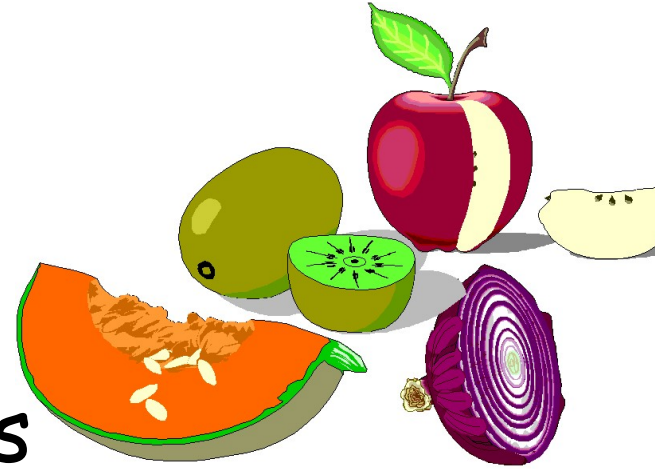
Many 1/4" drain and air holes



Old 2x4 from anything



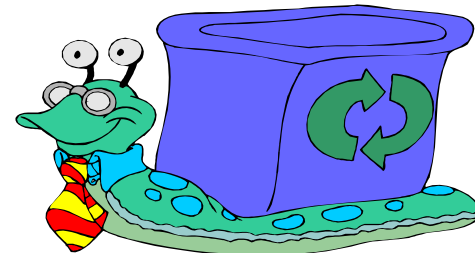
Worm Food



- Vegetable and fruit scraps
- Pasta, cooked beans
- Coffee grounds complete with filters
- Tea leaves, bags
- Egg shells
- Paper towels, napkins
- Banana peels and egg cartons

What to avoid

- No animal products - meats, bones
- No dairy products - cheese
- Be careful with breads (because of molds)
- No seeds (because they won't break down)
- Yard clippings
- No pet wastes
- No oils or plastics
- No soil



Locating the bin

- Ideal temperature is between 55°F and 77°F
- Plenty of air circulation
- In the shade during summer especially if a plastic bin is being used
- Good locations include under a shade tree, patio, garage, or laundry room (commercial bin only)
- One speaker at our class keeps one in her living room

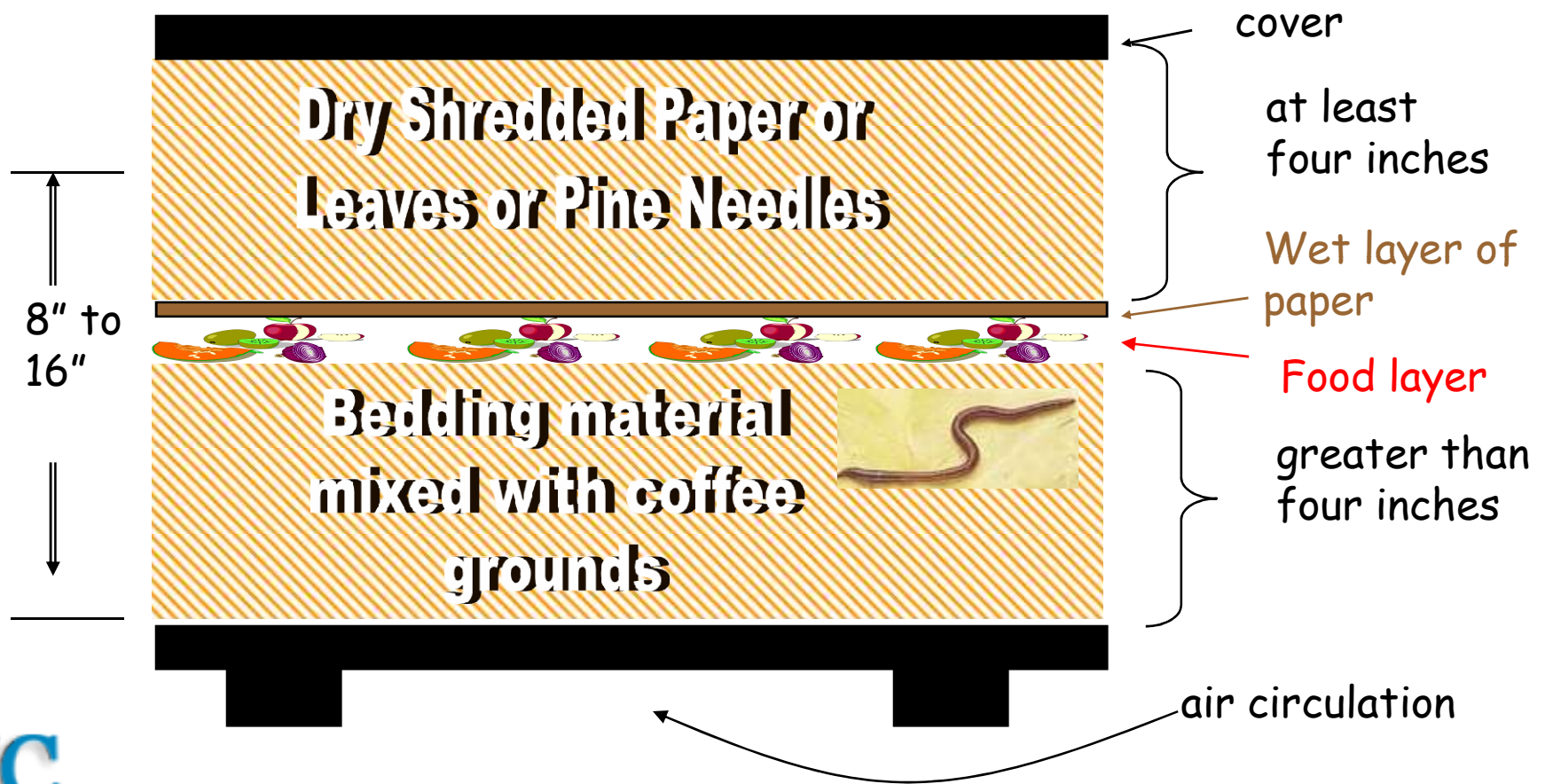


Inside a Worm Box



Organization of the bin

The bedding material should be damp but not so wet one can squeeze water from it



Feeding the Worms

1) Remove top materials

**Dry Shredded Paper or
Leaves or Pine Needles**

**Bedding material
mixed with coffee
grounds**

2) Add food
scraps



Feeding the Worms

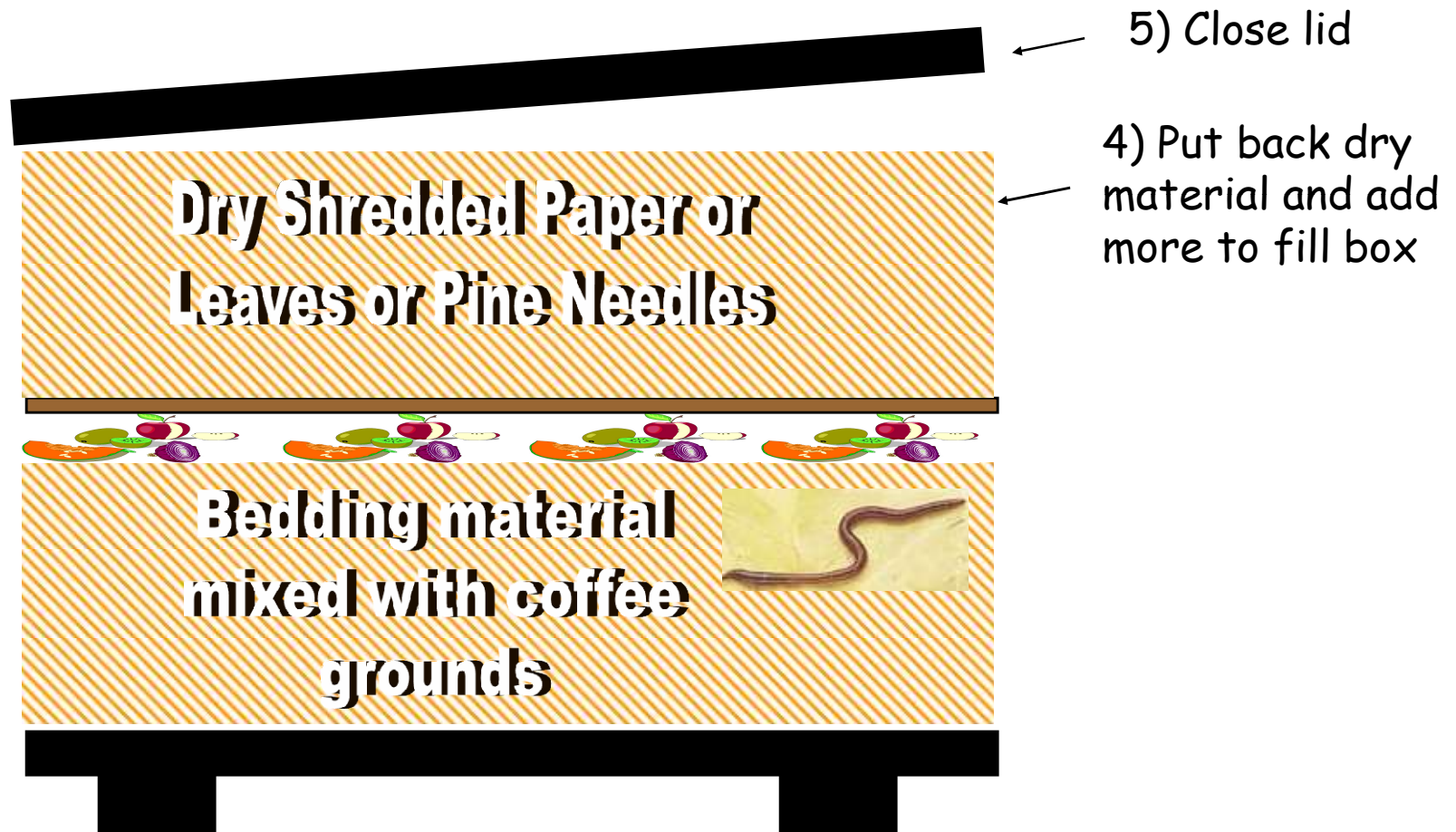
**Dry Shredded Paper or
Leaves or Pine Needles**

**Bedding material
mixed with coffee
grounds**



3) Wet old paper
and add more wet
paper

Feeding the Worms



Source of Worms

Blue Ridge Vermiculture - San Jose
408 227-5267 Ask for Jerry or email
TheWormDude@Comcast.Net

Sonoma Valley Worm Farm
800-447-6996

Common Ground - Palo Alto

www.calrecycle.ca.gov/organics/worms

A friend who already does Vermicomposting
- Worms reproduce quickly so ok to share



Harvesting Castings

- Castings are toxic to worms and should be harvested when most of the bedding materials have become dark castings
- There are many ways to harvest
 - vertical harvest -take lower layers
 - horizontal harvest - move finished materials to one side and feed on other side
 - dump and sort - spread out and pick out worms
 - variants of above
- Keep the worms - use the castings

Using Worm Compost

- Slow Release Nitrogen Rich Fertilizer
 - I use it instead of fish emulsion on bedding plants in my greenhouse
 - Spread around potted plants
 - Spread around vegetables or flowering plants in the garden
 - Can be sifted onto lawns
 - Incorporate into soil around shrubs and trees
- Can be incorporated into a planting mix
- Preferred compost for compost tea brewing applications

