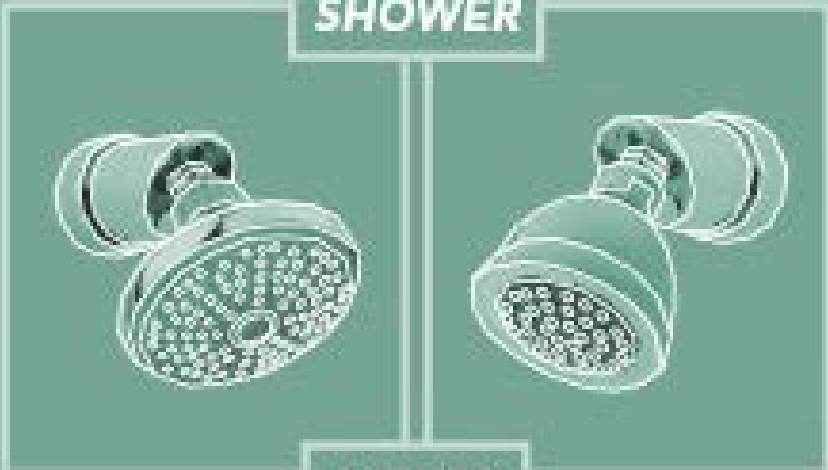



PRD 301 – Green Design  
Materi 14

# ACTING GREEN vs BUYING GREEN

comparing green products with their outdated counterparts

SHOWER		
Stick with your normal shower head and learn to suds up in 9 minutes instead of 15.		Buy a low-flow shower head and enjoy your normal 15 minute routine.
LIGHTS		
Turn on your incandescents at 5pm and do your chores quickly...the lights go off at 5:49pm sharp!		Turn your LEDs on at 5pm, and keep them on until you go to bed at 11pm.



## STEP 1 – REMOVE & CLEAN PIT

You'll need to start by removing the pit from the avocado carefully (without cutting it), and then washing it clean of all the avocado fruit (often it helps to soak the pit in some water for a few minutes and then scrub all the remaining fruit off). Be careful not to remove the brown skin on the pit – that is the seed cover.

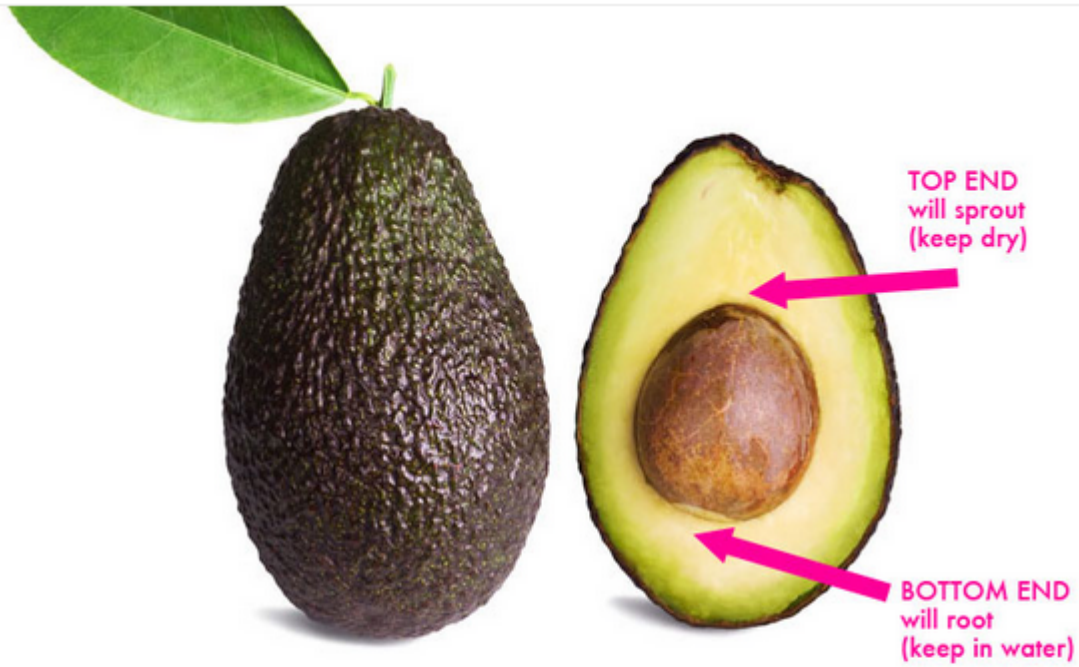
## HOW TO: Grow an Avocado Tree from an Avocado Pit

DESIGN



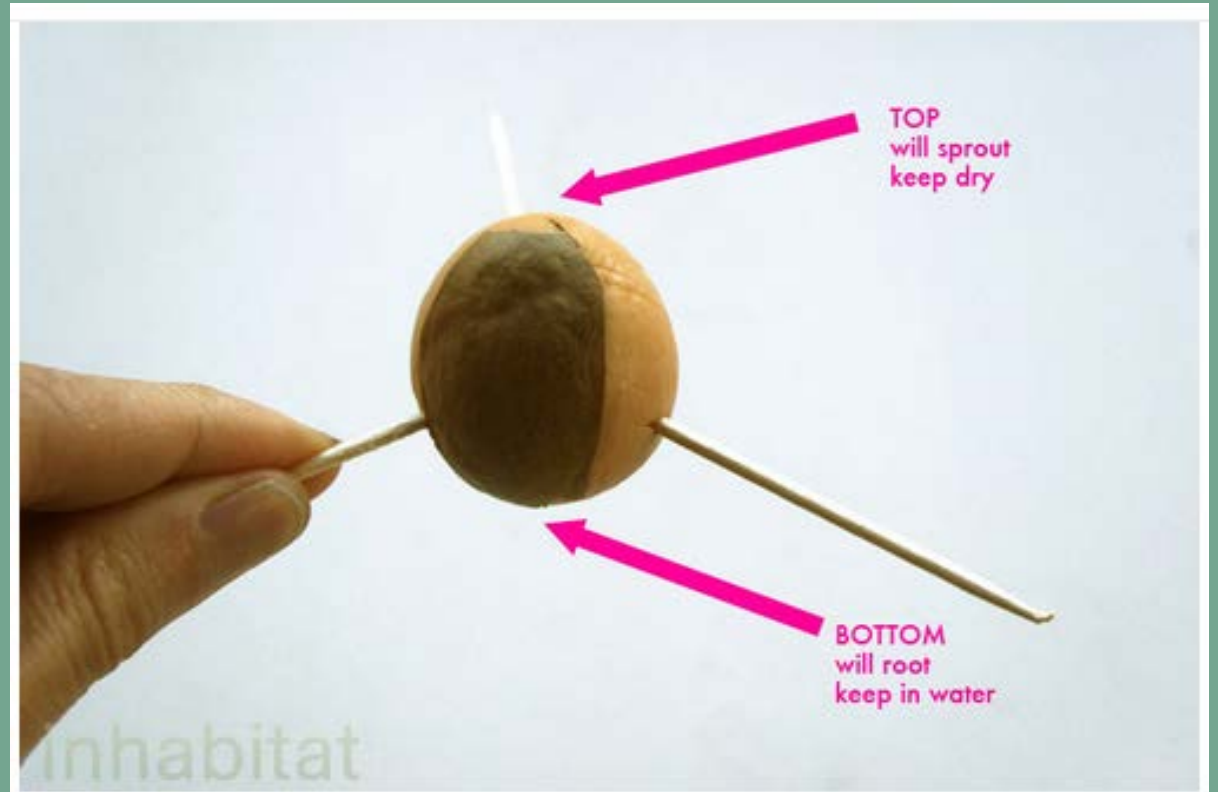
HOW TO GROW AN AVOCADO TREE FROM SEED

Avocados are one of the wonderful fruits of summer. High in nutrition and flavor, nothing signals the start of summer like a zesty lime guacamole dip with tortilla chips. The next time you're making guacamole or slicing an avocado for a salad, try saving your pits to grow into avocado trees. It's surprisingly easy to grow your own avocado tree from seed, and it makes a great educational project for home and classrooms. Check out our handy-dandy guide below, complete with photos, to learn how to grow an avocado tree from seed.



## STEP 2 – LOCATE WHICH END IS ‘UP’ AND WHICH IS ‘DOWN’

Some avocado pits are slightly oblong, whereas others are shaped almost like perfect spheres – but all avocado pits have a ‘bottom’ (from where the roots will grow), and a ‘top’ (from which the sprout will grow). The slightly pointier end is the top, and the flat end is the bottom. In order to get your pit to sprout, you will need to place the bottom root end in water, so it’s very important to figure out which end is the ‘top’ and which is the ‘bottom’ before you go piercing it with toothpicks.



## STEP 3 – PIERCE WITH FOUR TOOTHPICKS

Take four toothpicks and stick them at a slight downward angle into the avocado seed, spaced evenly around the circumference of the avocado. These toothpicks are your avocado scaffolding, which will allow you to rest the bottom half of the avocado in water, so therefore the toothpicks need to be wedged in there firmly. I recommend sticking them in at a slight angle (pointing down), so that more of your avocado base rests in the water when you set this over a glass.





## STEP 4 – PLACE AVOCADO SEED HALF SUBMERGED IN A GLASS OF WATER

And set on a quiet windowsill with sunlight. It's helpful to use a clear glass so you can easily see when roots start to grow, and also when the water needs to be changed. Many guides recommend to change the water every day, but I found, through trial and error, that it is better to change the water every five days to a week or so. You do want to make sure you change the water regularly, to prevent mold, bacteria and fungus growth, which can doom your little avocado sprout.



## STEP 5 – WAIT FOR YOUR AVOCADO SEED TO SPROUT!

Many online guides I have read say that sprouting can take anywhere from 2-4 weeks, but in my experience, usually takes at least 8 weeks to get a sprout, so be patient. Here is the process you will witness:

1. The top of the avocado pit will dry out and form a crack, and the outer brown seed skin will slough off.
2. The crack will extend all the way to the bottom of the avocado pit, and through the crack at the bottom, a tiny taproot will begin to emerge.



3. The taproot will grow longer and longer (and may branch), and eventually a small sprout will peek through the top of the avocado pit.
4. Do not allow your taproot to dry out unsubmerged EVER – doing so will be the death of your plant.



## STEP 6 – POT IN SOIL WHEN TREE IS ABOUT 6” TALL

When the stem is 6-7 inches long, cut it back to about 3 inches, this will encourage new growth. When it hits 6-7 inches again, pot it up in a rich humus soil in an 8-10" diameter pot, leaving the top half of the seed exposed. Place on a sunny windowsill. Avocados love sun – the more sun the better.













## STEP 7 – WATER & WATCH IT GROW

Give it frequent waterings with an occasional deep soak. The soil should always be moist, but not saturated. Yellowing leaves are a sign of over-watering; let the plant dry out for a few days.

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<p>Stick with your normal shower head and learn to suds up in 9 minutes instead of 15.</p>	<p><b>SHOWER</b></p>  	<p>Buy a low-flow shower head and enjoy your normal 15 minute routine.</p>
<p>Turn on your incandescents at 5pm and do your chores quickly...the lights go off at 5:49pm sharp!</p>	<p><b>LIGHTS</b></p>  	<p>Turn your LEDs on at 5pm, and keep them on until you go to bed at 11pm.</p>
<p>Be nice and cool when you crank up the A/C. But you only get 2 hours, so choose your time wisely.</p>	<p><b>COOLING</b></p>  	<p>Enjoy the relative comfort of your energy-efficient ceiling fan for 24 hours a day.</p>
<p>Explain to your dinner guests that they'll have to keep to your strict two use per flush policy.</p>	<p><b>TOILET</b></p>  	<p>Spring for a water-efficient toilet and flush to your heart's content.</p>
<p>Your old washer is pretty thirsty. Better wear today's outfit at least two times before throwing it in the wash.</p>	<p><b>LAUNDRY</b></p>  	<p>Your new Energy Star washer sips on water so you can clean your duds after each and every use.</p>

## Konsumsi berkelanjutan - Sustainable consumption

Desainer mengembangkan produk, layanan, dan sistem yang memenuhi kebutuhan dasar dan meningkatkan kualitas hidup. Untuk memenuhi persyaratan konsumsi berkelanjutan, mereka juga harus meminimalkan penggunaan sumber daya alam, bahan-bahan beracun dan limbah, dan mengurangi emisi polutan pada semua tahap siklus hidup.

Bukan hanya peran desainer untuk menciptakan pasar untuk produk yang berkelanjutan. Konsumen perlu mengubah kebiasaan mereka dan menyatakan keinginan dan kebutuhan akan produk-produk ini.

## Konsumsi Berkelanjutan **Sustainable consumption**

Istilah: Konsumsi barang dan jasa yang memiliki dampak lingkungan minimal, mempromosikan

keadilan sosial dan layak secara ekonomi, sementara memenuhi kebutuhan dasar manusia di seluruh dunia.

Konsumsi berkelanjutan bukan tentang mengonsumsi lebih sedikit tetapi mengonsumsi secara berbeda.

Konsumen perlu didorong untuk memperbaiki dan menggunakan kembali produk daripada membuangnya.

Desain berkelanjutan dan produksi berkelanjutan berkontribusi terhadap konsumsi berkelanjutan.

Ini dapat dicapai dengan sejumlah cara, misalnya, tidak membeli lebih banyak makanan daripada yang dibutuhkan dan mengurangi limbah; mengubah sikap terhadap penggunaan air dan energi, misalnya, mematikan keran saat menyikat gigi, air aerasi di kamar mandi, lebih sedikit air per flush toilet, air abu-abu.



User	Manufacturer	Designer	
Advantages	<ul style="list-style-type: none"> <li>new products (green or innovative)</li> </ul>	<ul style="list-style-type: none"> <li>in long run costs reduced</li> <li>improve reputation of the company</li> </ul>	
Disadvantages	<ul style="list-style-type: none"> <li>new products may cost more</li> <li>products become obsolete</li> </ul>	<ul style="list-style-type: none"> <li>forced to develop new products</li> <li>add costs due to changes in design or manufacturing</li> </ul>	<ul style="list-style-type: none"> <li>forced to change design ideas</li> <li>constrained in creativity</li> </ul>

