CHRISTMAS DECORATIONS

3. Christmas decorations are `commonBulk`. Also, the Christmas decorations are made up of a variety of marterials (such as Blown glass, metal, wood, blown plastics, expanded polystyrene or ceramics) but because it is difficult to tell what the decorations are made of by eye inspection, it is almost impossible to recycle.

CHRISTMAS TREE (ARTIFICIAL)

3. Artificial Christmas trees are made with PVC pipings. A major problem in the recycling of PVC is the high chlorine content in raw PVC (around 56 percent of the polymer's weight) and the high levels of hazardous additives added to the polymer to achieve the desired material quality. As a result, PVC requires separation from other plastics before mechanical recycling. <https://www.ecomena.org/recycling-pvc/#:~:text=A%20major%20problem%20in%20the,other%20plastics%20before%20mechanical%20recycling.>

CHRISTMAS TREE (NATURAL)

1. Remove any ornaments, lights, tinsel or other decorations from the tree, as well as the stand.

Put a tarp under the tree before you haul it to the curb or your car to prevent needles from shedding on the floor.

If the tree is being picked up at the curb, you may need to cut large trees (taller than 5 feet) in half so they will fit in the truck.

2. the trees are run through an industrial chipper and transformed into mulch.

Most of the mulch is used in local parks and playgrounds, as well as erosion-prevention and weed-abatement projects throughout the community.

3. Trees are recyclable because they can be transformed into mulch, which can be used in playgrounds and local parks as a protective surface by absorbing the initial shock from a fall. <https://homeguides.sfgate.com/kind-mulch-put-childrens-playground-94969.html#:~:text=Because%20of%20the%20high%20risk,initial%20shock%20from%20a%20fall.>

CLOTHES

1. (Please remove any extra stuffs…. The usual instruction.)

2.

* The incoming unwearable material is sorted by type of material and color. Color sorting results in a fabric that does not need to be re-dyed. The color sorting means no re-dying is required, saving energy and avoiding pollutants.
* Textiles are then pulled into fibers or shredded, sometimes introducing other fibers into the yarn. Materials are shredded or pulled into fibers. Depending on the end use of the yarn, other fibers may be incorporated.
* The yarn is then cleaned and mixed through a carding process
* Then the yarn is re-spun and ready for subsequent use in weaving or knitting.
* Some fibers are not spun into yards, however. Some are compressed for textile filling such as in mattresses. <https://www.thebalancesmb.com/the-basics-of-recycling-clothing-and-other-textiles-2877780>

<https://www.youtube.com/watch?v=AjHVMhAOZa4>

3. Much of the problem comes down to what our clothes are made from. The fabrics we drape over our bodies are complex combinations of fibres, fixtures and accessories. They are made from problematic blends of natural yarns, mand-made filaments, plastics and metals.This makes them hard to separate so they can be effectively recycled. Sorting textiles into different fibres and material types by hand is labour intensive, slow and requires a skilled workforce. Also, blends are most suitable for mechanical fibre recycling, where fabrics are shredded and pulled to transform them into fibres of shorter length. Shorter fibre length produces fabrics of lower quality and strength, so the results from this kind of recycling can’t be used for clothing.

https://www.bbc.com/future/article/20200710-why-clothes-are-so-hard-to-recycle

COFFEE GROUNDS

`commonFood`

COFFEE FILTERS

3. oils from the coffee grounds can still remain trapped in the fibers. This makes them unsuitable for the recycling process, as [the oils affect the quality of the paper created](https://livegreen.recyclebank.com/because-you-asked-why-can-t-i-recycle-stuff-with-food-on-it). Because of this, recycling programs generally won’t accept paper coffee filters. <https://livegreen.recyclebank.com/column/because-you-asked/can-i-recycle-coffee-filters>

COFFEE MACHINE

3. ‘commonBulk’

COLD PACK -🡪 INSERT PHOTOS FOR EACH PARAGRAPH!! <https://www.keeptruckeegreen.org/guide/ice-packs/>

1.

There is unfortunately no way to recycle the hard ice packs, but the flexible ice packs can be recycled, but that requires a little extra work. The first step is removing the gel from the plastic. It can go in a trash can (not down the sink; it will clog). another option is to pour it into a bowl or on a tray.

The gel will shrink as it dries, so this added step before disposal reduces the impact on the waste stream. That leaves recyclable plastic — except it can’t go into a curbside can. It’s a specialized kind of plastic, the same type used for grocery bags, so it has to go to a designated recycling location.

<https://www.record-courier.com/news/20180630/too-many-ice-packs-from-mail-orders-heres-how-to-dispose-of-them#:~:text=The%20ice%20packs%20can%20be,%E2%80%9Ccold%20chain%E2%80%9D%20shipping%20suppliers.&text=That%20leaves%20recyclable%20plastic%20%E2%80%94%20except,go%20into%20a%20curbside%20can.>

2.

‘commonPlasticBags?’

3.

‘commonBulk’

COMPUTER PERIPHERALS

1.

`bulkPreparation`

1. [Remove all data](https://earth911.com/eco-tech/remove-data-from-electronics/) from your computer to prevent identity theft. You may want to back up important files on an external hard drive.
2. Unplug the computer peripherals (keyboard, speakers, etc.) from your desktop or laptop. You can likely recycle these parts as well using the same company where you take the machine, but consider reusing them or donating them since they won’t need a software upgrade to work on a new computer.
3. For a laptop, flip it over and see if you can remove the battery. Many laptops use lithium-ion batteries, which [require special transportation](https://earth911.com/eco-tech/changing-battery-recycling/) for recycling, so this is especially important if using a manufacturer mail-back program.

<https://earth911.com/recycling-guide/how-to-recycle-computers/>

2.

Step 1 – Receiving and Pre-Processing

We receive, sort and process computer equipment from businesses based on client specific needs. The client reports we are able to produce depends on how equipment is handled prior to being recycled.

**REPORTING BY WEIGHT**

If the unit of measure for client reports is by weight, pre-processing will include weighing shipments as they are received and manual removal of hazardous items (such as batteries). When required, equipment can be sorted by type or material to facilitate more detailed client reporting based on weight.

**REPORTING BY ITEM**

Some clients need reporting by item instead of by weight. In this case, in addition to weighing shipments, each item received will be scanned and audited according to client requirements. Data is destroyed on data bearing items prior to recycling.

Step 2 – Hazard Removal

After equipment is received, the next step in computer recycling is to remove and separate hazardous materials, including batteries, toner/ink, mercury bulbs found in some scanners/printers and cathode ray tubes from monitors, which contain lead. This manual process ensures hazards are disposed in a compliant manner and is important in providing an environmentally sound solution.

Step 3 – Shredding

Our major recycling sites are equipped with automated industrial shredders, conveyor systems and sorting equipment. After hazards are removed, the computer equipment is fed by conveyor into a large shredder. The shredder tears the material into large pieces, about 2” to 6” in diameter. This first step prepares the e-waste to begin the process of separating plastic parts from steel, copper, aluminum, glass and other commodities.

Adjacent manned support services include hard drive destruction, parts recovery, asset repair and resell and managing safe disposal of hazardous waste.

Step 4 – Sorting of Commodities

After shredding, the conveyor belts push the e-waste through magnets, eddy currents, infrared cameras and air jets. These technologies sort out different material types and separate sorted material from the e-waste stream.

Iron and steel is separated from the e-waste, then aluminum, copper and circuit boards are separated.  After the bulk metal is removed, the e-waste stream, which is now mainly plastic, is further separated into ABS from polystyrene plastic.  In the final step, the plastic is sent through an advanced metal removal process, to remove any residual metal and improve the purity of the plastic stream.

Step 5 – Collection and Shipment of Separated Commodities

As each commodity is separated from the e-waste stream, the material is collected in pallet sacks or large cardboard boxes and shipped to another processor or directly to a manufacturer.  Using recycled material in the manufacturing of new products has benefits that go far beyond material reuse. It reduces pollution and carbon emissions, reduces energy and water consumption and keeps useful materials out of landfills.

<https://www.simsrecycling.com/recycle/e-waste-recycling/process/#:~:text=Separating%20Iron%20and%20Steel%20from,sale%20as%20recycled%20commodity%20materials.>

<https://youtu.be/NryNob_haXc>

OROROROROR WIKIPEDIA:

In the recycling process, TVs, monitors, mobile phones and computers are typically tested for reuse and repaired. If broken, they may be disassembled for parts still having high value if labour is cheap enough. Other e-waste is shredded to roughly 100 mm pieces and manually checked to separate out toxic batteries and [capacitors](https://en.wikipedia.org/wiki/Capacitor) which contain poisonous metals. The remaining pieces are further shredded to ~10 mm and passed under a magnet to remove ferrous metals. An [eddy current](https://en.wikipedia.org/wiki/Eddy_current) ejects non-ferrous metals, which are sorted by density either by a centrifuge or vibrating plates. Precious metals can be dissolved in acid, sorted, and smelted into ingots. The remaining glass and plastic fractions are separated by density and sold to re-processors. TVs and monitors must be manually disassembled to remove either toxic lead in CRTs or the mercury in flat screens.

3.

Computer perperipherals are `commonBulk`

COOKIE TIN //BISCUIT TIN

1.

1. Most steel cans will have a paper label, which does not need to be removed. The paper will be removed during the recycling process, and since it’s a low quality of paper, it won’t be worth your time to remove and recycle it with other paper.
2. You should rinse your cans to remove any leftover food. This will prevent your recycling bin from smelling and reduce the risk of animals attacking your recycling.
3. Completely remove the lid (also made of steel) and insert into the can, then pinch the top so it closes. This will also [prevent birds or cats from getting their heads stuck](http://www.dailypost.co.uk/news/north-wales-news/rspca-warning-cats-heads-stuck-2770619) in the cans.

<https://www.youtube.com/watch?v=97p5lH-BS50>

2.

\*\*CAN\*\* <https://youtu.be/t4PLxg06HBU>

3.

Although cookie tins are generally recyclable, it does not apply to Denton Recycling possibly because the facility does not have equipment to recycle cookie tins.

Putting items in the recycling bin that can’t be recycled can contaminate the recycling stream. After these unrecyclable items arrive at recycling centers, they can cause costly damage to the equipment. Additionally, after arriving at recycling centers, they must be sorted out and then sent to landfills, which raises costs for the facility

COOKING OIL

1.

1. Designate a container in your house for used cooking oil. Metal coffee cans or plastic butter containers work great, but make sure it’s labeled so no one accidentally drinks it. You don’t need to keep it refrigerated unless you want to reuse it.
2. Keep filling the container with new oil each time you cook. Don’t worry about draining any fats or combining different types of oil, but try to remove any large pieces of meat or produce.

Filte rusing papertowel: <https://www.youtube.com/watch?v=h9Bt4eyIBPw>

2.

The cooking oil recycling process depends on where the oil is sent. If it goes to a processor, the anaerobic digestion process will break down the oil and any other organic ingredients without oxygen into a gas that can be used as alternative energy. If it’s sent to a biodiesel plant, it is filtered and processed into fuel that can be burned in most diesel engines, like trucks. <https://earth911.com/recycling-guide/how-to-recycle-cooking-oil/>

Cookin oil to make biodiesel <https://www.youtube.com/watch?v=1eZODZ4zrXQ>

3.

Used cooking oil can be refined into different types of [biofuels](https://en.wikipedia.org/wiki/Biofuel) used for power generation and heating.[[2]](https://en.wikipedia.org/wiki/Vegetable_oil_recycling#cite_note-WorcesterTelegram-2) A significant benefit is that biofuels derived from recycled cooking oil typically burn clean,[[2]](https://en.wikipedia.org/wiki/Vegetable_oil_recycling#cite_note-WorcesterTelegram-2) have a low carbon content and do not produce carbon monoxide. This helps communities to reduce their [carbon footprints](https://en.wikipedia.org/wiki/Carbon_footprint).[[2]](https://en.wikipedia.org/wiki/Vegetable_oil_recycling#cite_note-WorcesterTelegram-2) The recycling of cooking oil also provides a form of revenue for restaurants, which are sometimes compensated by cooking oil recyclers for their used [deep fryer](https://en.wikipedia.org/wiki/Deep_fryer) oil. <https://www.telegram.com/article/20120408/NEWS/104089973/1237>

COOKING POT (ALUMINUM)

3. If your cookware is coated with polytetrafluoroethylene (what you may know by the DuPont brand name Teflon), recycling may be more limited as this needs to be removed prior to recycling <https://earth911.com/home-garden/how-to-recycle-your-old-cookware/#:~:text=For%20pots%20and%20pans%20that,likely%20not%20your%20curbside%20bin.&text=Your%20pots%20and%20pans%20are,though%2C%20they%20are%20ferrous%20metal.>

COOKING POT (CERAMIC)

\*\*CERAMIC\*\*

COOKING POT (FIBERGLASS)

3. Cooking pots are

‘commonHeatDurable’: heat-treated glass, which have been treated to be more durable (i.e., does not melt during recycling process) and are a contaminant to your glass bottles and jars. It takes only five grams of heat-treated glass to contaminate an entire one-ton batch of recycled container glass, so package them for disposal and put them in the garbage.

<https://livegreen.recyclebank.com/column/because-you-asked/what-should-i-do-with-my-chipped-dishes-and-bowls>

<https://earth911.com/home-garden/how-to-recycle-your-old-cookware/#:~:text=For%20pots%20and%20pans%20that,likely%20not%20your%20curbside%20bin.&text=Your%20pots%20and%20pans%20are,though%2C%20they%20are%20ferrous%20metal.>

COOKING POT (GLASS)

Same as above

CORRUGATED CARDBOARD // 골판지

`commonCardboard`

COSMETICS

3.

‘commonBulk’ + In addition, A small-format container doesn’t flow well through curbside recycling program. Most of the facilities that sort recycling are automated with optical and physical sorter machines. Little containers like lipstick tubes can get missed by sorting machines and thrown into the trash—and back into a landfill.

COTTON BALL

1.

If you have a compost bin at home, you can simply recycle cotton balls by putting them in your compost.

<https://www.greenlaunches.com/recycle/recycling-surprises-ten-things-youve-been-throwing-away-that-you-can-recycle.php>

2.

(add compost process? Has bugs…… ahh… <https://www.youtube.com/watch?v=iAiRNq8JXw8>)

3.

‘commonHygeine’

‘commonMoreEnergy’ (take more energy; from Styrofoam)

COTTON PAD

Same as cotton ball

COTTON SWAB

Same as cotton ball + #1 add ‘as long as cotton swabs have cardboard rather than plastic handles.

CUP (CERAMIC)

`commonCeramics`

CUP (GLASS)

3.

While your glass cups and wine glasses are likely made from soda-lime glass, they [aren’t recyclable](https://earth911.com/home-garden/how-to-recycle-weird-glass/) in most places. This is because manufacturers use additives to adjust the glass for its intended purpose. You’ve probably noticed that wine glasses break more easily than a soda bottle or a pickle jar. This is because the composition of the glass is slightly different.

Additives change the melting point of the glass. Container glass (glass used in food jars and beverage bottles) shares a common melting point, making it easy to recycle together. This is why recycling programs commonly accept only container glass.

<https://earth911.com/home-garden/recycling-mystery-old-kitchen-glassware/#:~:text=While%20your%20glass%20cups%20and,t%20recyclable%20in%20most%20places.&text=Additives%20change%20the%20melting%20point,it%20easy%20to%20recycle%20together.>

CUP (PAPER) // COFFEE CUP은 비닐코팅이라서 노노라는 걸 더할 것.

3.

Unlike most paper items, paper cups can’t be recycled because they’re actually coated in plastic—as little as five percent per cup. That’s why they’re able to hold liquid without leaking all over the place. It’s also why they don’t get broken down into pulp and turned into recycled paper.

CUP (PLASTIC)

\*\*NOTE: But it says recyclable…?? I’m confused\*\*

3.

Paper cups have a thin layer of plastic coating on them to protect them from condensation. The plastic coating sprayed on paper cups makes the paperboard underneath impossible to recycle in the standard pulp process because the container will not break apart during recycling.

CUP (STYROFOAM)

3.

‘commonStyrofoam`

There are two reasons Styrofoam isn't allowed in recycle bins: density and contamination. Styrofoam is 95% air so it is not cost-effective to store or ship. It is often contaminated with food or drink, and it is difficult to clean because it is so porous. Remember that recycling uses energy for transport and processing. There is no point in recycling if you use more energy than you save. <https://www.wastewiseproductsinc.com/blog/the-problem-with-recycling-styrofoam/#:~:text=Why%20Can't%20You%20Recycle,because%20it%20is%20so%20porous.>

CUP LID (PLASTIC)

1.

1. For plastic bottles, you need to ask your local recycling program whether caps are accepted before trying to recycle them with the bottle. Some will ask you to leave them on, some accept caps but want them separated, and some will ask you to throw them away.
2. For plastic containers (e.g. butter tubs, yogurt cartons), the lid is usually made of the same material as the base. If the container is #5 plastic, odds are strong that the lid is as well. In these cases, feel free to reattach the lid before recycling if your program accepts non-bottle plastics.
3. If your local recycling program doesn’t accept caps and you know they are made of polypropylene, consider [the Preserve Gimme 5 program](https://www.preserveproducts.com/recycle/programs/gimme-5-program-171), where you can recycle all #5 plastics by mail.

<https://earth911.com/recycling-guide/how-to-recycle-plastic-caps-lids/>

2.

Assuming you left the cap on the bottle, the first step in the recycling process is to separate the bottles and caps into their individual resins. The material recovery facility (MRF) will use a pressurized system to expel caps and flatten bottles. Plastics are then soaked in water, where the bottle (made of #1 plastic) will sink and the cap (#2 or #5 plastic) will float.

Recyclers will shred the #2 or #5 plastic into flakes, which are washed, rinsed and dried. Flakes are then melted into pellets, which are transported to a manufacturer to make new plastic caps or other materials, such as casing for car batteries, storage containers or reusable plastic bags.

3.

‘plasticInfo’??

CUTLERY (PLASTIC) //UTENSILS (PLASTIC)

3. Plastic utensils are not recyclable because of its inconsistent material, and unfortunately, individual utensils are not labelled which type of plastics they are made of, and of its unorthodox shape, which can jam machinery. Also, China that has been a major importer of plastics decided to reduce its amount of imports, so now the market for recycled plastic is much reduced.

<https://earth911.com/home-garden/recycling-plastic-utensils/>

CUTLERY (WOOD)

3. Wood cutlery are not recyclable in Denton Recycle Facility because…

Wood contaminates the recycling stream which is meant to be clean, residue-free, and only made up of items for recycling curbside (paper, plastics, glass, etc.). Wood can be reused or recycled into woodchips/mulch when brought to a proper facility.

<https://www.recycleannarbor.org/news/440-recycling-tips-for-better-results-what-to-do-with-wood>

It is also important to remember not to compose wooden cutlery at home. Although wood itself is compostable, wooden cutlery are made to withstand heat and liquids, so they will not break down fully—they need to be processed by an industrial facility.

<https://www.keeptruckeegreen.org/guide/compostable-cups-plates-utensils/>

DAIRY PRODUCTS, CHEESE & YOGURT

`commonFood`

DESK

1.

Make sure your furniture is free of all personal items. If it’s a dresser or desk, empty the drawers. For couches and chairs, remove the cushions and check for loose change or receipts.

<https://earth911.com/recycling-guide/how-to-recycle-furniture/>

2.

First, it will be inspected to see if it is reusable.Unfortunately, due to the economy the resale market has been inundated with desks. So only a relatively new desk is considered reusable.

The desk will then be dissembled into the different material types. The wood type will be determined "compressed" or "real wood". If it is "real wood" there is a potential it can be reused or made into a mulch. The “compressed” wood will go to waste to energy or be mulched for landfill cover.

All the metal will be taken out of the desk from screws, draws, fixtures, and legs.

 If the desk has a light built into it then that will be removed for light bulb recycling. Any electronics that are a part of the light will be separated for electronic recycling. If any plastic exists it will be separated in the proper piles.

<http://www.ecycleenvironmental.com/scrap-recycling/recycle-office-furniture/desk-recycling#:~:text=Due%20to%20all%20the%20different,light%20bulbs%20embedded%20in%20them.&text=If%20it%20is%20%22real%20wood,or%20made%20into%20a%20mulch.>

3. `commonBulk`

`commonWoodFurniture`

`commonScrapMetal`

DESKTOP COMPUTER

Look at `computer` perper…

DETERGENT BOTTLE (PLASTIC)

1.

## Step 1

Twist off the lid of the laundry detergent bottle and set it aside. Fill the detergent bottle with warm water, allowing the detergent to foam up into the mouth of the bottle. Allow the bottle to sit for 30 minutes.

## Step 2

Pour out the water from the detergent bottle. Rinse out the bottle using warm water one more time. If it is still foamy, you might need to use a scrub brush to scrape the detergent away from the sides of the container.

## Step 3

Turn the detergent bottle so that its mouth is facing downward. Allow the bottle to dry.

<https://www.hunker.com/13421132/how-to-recycle-laundry-detergent-bottles>

2.

‘commonPlastic’

<https://www.youtube.com/watch?v=oKkTlSYsLAw>

3.

‘plasticInfo’

DISH SCRUB

3.

Most kitchen sponges are made of cellulose (natural fibres). However, the scrubby part is typically made of polyester or nylon. These materials are recyclable and are difficult to detach from the cellulose during recycling process. In addition, kitchen sponges contain bacteria, so they should be placed in trashcans.

DOG FOOD BAG

3.

the packaging used for dry pet food is made up of a variety of materials, including polypropylene, paperboard, and mixed plastics (polyester and polyethylene). In fact, pet food manufacturers are increasingly turning to [flexible plastic materials like polypropylene](https://www.purina.com/meet-purina/sustainability/pet-food-packaging-explained-why-use-polypropylene) for pet-food bags because it is more durable than paper, it’s lightweight for shipping, and it keeps the food fresher. Unfortunately, most curbside recycling programs don’t accept this material because many [Material Recovery Facilities (MRF)](https://myrecycling.recyclebank.com/eco-library/mrf-materials-recovery-facility) can’t sort it. et food that comes in a paper bag might not be recyclable either, if it’s been reinforced with a plastic coating.

<https://livegreen.recyclebank.com/column/because-you-asked/can-i-recycle-pet-food-bags>

OROROROROR

A good rule of thumb is that if you can’t tear the paper, it can’t be recycled. Most pet food bags are lined with paper and plastic layers that have been sealed together and should not be recycled. If the layers can be separated, do so.

<https://www.keeptruckeegreen.org/guide/pet-food-bags/#:~:text=A%20good%20rule%20of%20thumb,and%20should%20not%20be%20recycled.>