

Tier 2 - Secret Life of Our Stuff Part 1: Welcome to Trash!

Name: _____



During the video

- 1) There are 1.6 million people in the Metro service region throwing away trash. How many semi-truck trailers per day do you predict it takes to hold and carry that trash to the Columbia Ridge Landfill in Arlington, OR?
- 2) Why do you think we have landfills?
- 3) If only 40% of our discarded materials go to the landfill trash, where does the other 60% of stuff go?
- 4) What are three things you do that reduce the amount of trash coming from your home?

Secret Life of Our Stuff Part 2: Secret Revealed!

During the video

- 5) Why is a circular "Product Lifecycle" (circle-like) better than the "linear system" (line-like) described in the video?
 - 6) What specific kinds of damage occur to the environment and to people when we over-**extract** natural resources?
 - 7) What specific kinds of damage occur to the environment and to people when we **refine, produce, ship, and sell** products?
 - 8) What specific kinds of damage occur to the environment and to people when we **dispose** of most of our materials in a landfill?
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- 9) Where do you predict the most environmental damage takes place in a linear system? Is it upstream or downstream from you? Explain why.

10) Consider the impact of the different conservation actions on each stage of a product's life cycle. Put an X in the box if an action (e.g. recycling) helps us avoid that stage.

Action	Extraction	Refining	Making	Retail	Use	Landfill Disposal
No Action						
Recycling	X					X
Reusing						
Reducing						
Refusing						
Repairing						

11) Based on your answers above, pick 1-3 actions you believe are the most helpful in changing this system and explain why you chose them.

Secret Life of Our Stuff Part 3: What CAN go in the recycling?

During the video

12) Please rate yourself on how confident you are on what CAN go in the recycling bin (check your rating).

- | | | | | |
|-----|-----|--------|------|----------------|
| 1 | 2 | 3 | 4 | 5 |
| Not | Low | Medium | High | Very confident |

Try this before watching the “Materials Recovery Facility (MRF)” video that will show you how they separate out all recyclable materials into the five you see below. See if you can predict any of the ways the following materials can be separated from the others when a truck load of mixed recycling gets dumped onto a big conveyer belt. (hint: there are no computers or scanners in these old-fashioned processes)

- a. Cardboard (hint: cardboard is usually larger than all the others and is stiffer than paper)
- b. Plastic (hint: plastics containers are smaller than cardboard)
- c. Paper (hint: paper is lighter in weight than all the other materials)
- d. Metal (hint: iron/steel has a very unique property allowing compasses to work)
- e. Aluminum (hint: Have you ever seen what happens to your hair when there is static electricity?)

13) After watching the MRF video, what did you see that surprised you, or that you thought was interesting? Did you see any of your predictions come true?

14) Check the box next to the item in each pair that CAN be recycled.

<p>1</p>  <p>Freezer food box</p> <p>or</p>  <p>Dry shelf food box</p>	<p>2</p>  <p>Junk mail with window</p> <p>or</p>  <p>Bubble-lined envelope</p>
<p>3</p>  <p>Hard or paperback books</p> <p>or</p>  <p>Catalogues & magazines</p>	<p>4</p>  <p>Plastic-lined paper bags</p> <p>or</p>  <p>All-paper bags</p>
<p>5</p>  <p>Paper spiral notebooks</p> <p>or</p>  <p>Paper towels & napkins</p>	<p>6</p>  <p>Paper hot drink cups</p> <p>or</p>  <p>Toilet paper tubes</p>
<p>7</p>  <p>Cereal boxes</p> <p>or</p>  <p>Plastic cereal bags</p>	<p>8</p>  <p>Plastic drink bottles</p> <p>or</p>  <p>Plastic drink cups</p>
<p>9</p>  <p>Round plastic containers smaller than 6 oz</p> <p>or</p>  <p>Round plastic containers bigger than 6 oz</p>	<p>10</p>  <p>Paper food tray</p> <p>or</p>  <p>Clean, dry milk cartons</p>
<p>11</p>  <p>Plastic lids</p> <p>or</p>  <p>Round plastic containers bigger than 6 oz</p>	<p>12</p>  <p>Vendor paper bags</p> <p>or</p>  <p>Plastic bags</p>
<p>13</p>  <p>Plastic water bottle</p> <p>or</p>  <p>Plastic to-go container</p>	<p>14</p>  <p>Plastic bottles with necks</p> <p>or</p>  <p>Plastic squeeze tubes</p>
<p>15</p>  <p>Plastic lids</p> <p>or</p>  <p>Metal lids</p>	<p>16</p>  <p>All-paper cards</p> <p>or</p>  <p>Cards with glitter or foil</p>
<p>17</p>  <p>Clean foil</p> <p>or</p>  <p>Snack wrappers</p>	<p>18</p>  <p>Plastic bottle lids</p> <p>or</p>  <p>Clean plastic bottles</p>

15) Which items do you think are the most difficult for people to get right? Explain why. Be sure to include these items when you answer question 16.

16) Which items on this list would you like to pick to share with people around you to help them get better at recycling? Why did you pick those items?

17) Please rate yourself for how confident you are NOW with what CAN go into the recycling bin.

1	2	3	4	5
Not	Low	Medium	High	Very Confident

After watching the videos parts 1, 2 & 3

18) Play the “Recycle or Not” game at <https://recycleornot.org> and test your new knowledge of recycling. Playing this game multiple times will bring up new choices!

How did this go for you? Was it harder or easier than you expected? Was there anything that surprised you?

19) Watch the “Trash Cam” located at Metro South Transfer Station: <https://www.oregonmetro.gov/tools-living/garbage-and-recycling/metro-south-transfer-station/metro-south-trash-cam>

What you see is a long cement pit where the garbage is dumped. The commercial haulers, like the trucks that come to your home or apartment, are dumping on the left-hand side. People, like your neighbors who own smaller pickup trucks, are dumping on the right. A small tractor with a scoop in front is pushing the trash into the pit, while a bigger tractor is pushing it toward where the camera is. Below and behind the camera is a giant compactor that smashes the trash into 60,000 pound loads into one semi-truck (remember, Metro averages 65 semis per day).

What are three things you see in this trash?

What kinds of things might be very dangerous to the workers at this transfer station if you discarded them in your trash bin? Why?

20) Research what is meant by “Cradle to Cradle” manufacturing. What does it take to get a product certified as “Cradle to Cradle Certified?”

If all products were “Cradle to Cradle Certified,” would it change the health of people and the planet? Why?

21) Research what is meant by “Right to Repair.” See if you can find the name of two companies fighting right to repair laws and list them here.

Why do you think they are fighting these laws?

Can you think of one way you might change the minds of people running these companies?

22) Watch the TED Talk by Van Jones about the impact of plastic on people:

https://www.ted.com/talks/van_jones_the_economic_injustice_of_plastic?language=en

Van Jones said, “In order to trash the planet, you have to trash people. If you create a world where you don’t trash people, you cannot trash the planet.”

Can you think of one way the health of people is related to the health of the planet?

23) Research the effects of plastics on our world’s wildlife. Here are a few links to get you started.

<https://www.oregonzoo.org/discover/animals/california-condor>

<https://youtu.be/cwTDvqagPIM>

<https://youtu.be/d2J2qdOrW44>

What were two or three memorable ideas you found in your research?

24) You have seen disposable products hurt both people and wildlife. From your perspective, what is one positive changes you could make help create healthier people and a healthier planet?

25) Watch the video of Eduardo Cruz Torres who is one of Metro's Environmental Champions:

<https://youtu.be/Bssjvn3b8Jw>

What is Eduardo's view of the value of materials in the garbage? What is your view of the value of materials in the garbage??
