Lesson 5 - Waste Management (8.3)(1.5)

Purpose - Outline the options that humans use for waste management.

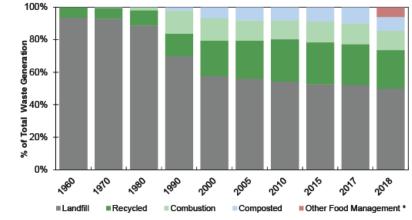
ADD - Waste and Environmental Justice? Waste disposal in LEDCs.

Write Notes for this in your NOTEBOOK today.

1. Think - Pair - Share - What do you think you throw away and recycle at your house or school in a typical week? How much do you think that would amount to in weight?



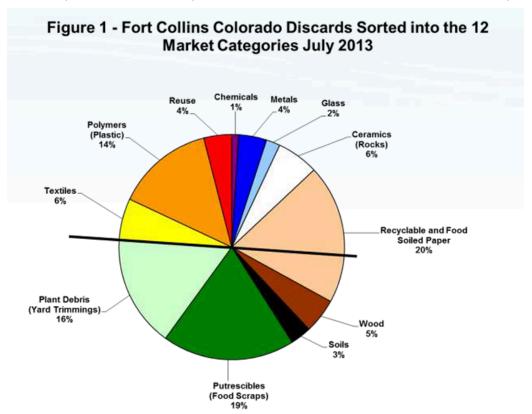
- 2. Write Waste (like garbage) (8.3) -
 - What is Solid Domestic Waste (SDW)? Skim this source to list the items that are SDW if needed.
 - b. What do you think about this statement? "Packaging and containers made up 28% of the MSW generated in 2018. Minimize the volume of packaging material required by selecting efficiently packaged products or buying in bulk.1"
 - c. According to this graph, what are the trends in waste generation in the United States?



* (e.g., animal feed, bio-based materials, and land application)

d. What is "incineration (combustion)" of SDW? What are the pros and cons of doing this? Look it up.

- 3. Read and write What is the <u>Fort Collins Zero Waste</u> initiative (skim this page for information)? What are the benefits and challenges of this goal?
 - a. OR look up the <u>Producer Responsibility Program in Colorado</u> (see Google AI summary below)
- 4. Here is a chart showing what a typical "waste" in Fort Collins looks like. Notice that this represents what ends up in the local landfill. Use this information in the next questions.



- a. What waste management options are being considered for our local waste?
- b. <u>Compare and contrast</u> 2 of the options that you think make most sense in this area.
 Keep in mind the projected future growth for northern Colorado of doubling by 2050.
 (scroll down in this source for ideas if you need more info)
- 5. Discuss Local analysis of our own actions
 - a. So, we often talk about Reduce Reuse Recycle
 - i. Suggest 2 ways to reduce your waste beyond what you currently do.
 - ii. Suggest 2 ways that **the school** could reduce waste.
 - iii. Suggest 2 ways **that companies** of the products you buy could reduce waste.

- 6. Global Connection How do global wind patterns create or reinforce the existence of this "Garbage Patch?" Answer with the pictures below.
 - a. Great Pacific Garbage Patch This is "an island" of trash in the Pacific Ocean that is estimated to be bigger than the state of Texas in area. The Depth is unknown.



b. The Tricellular Model (Earth scale weather affects from the round planet) impacts wind patterns.

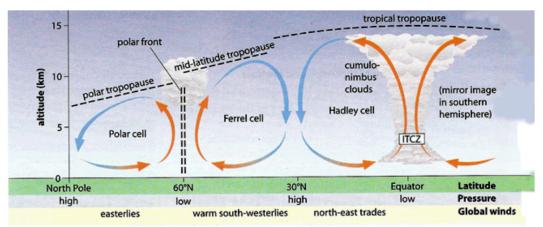
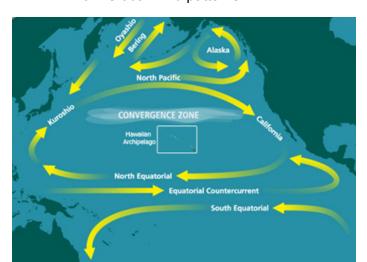


image from ask.revision.co.zw

c. Global wind patterns



Now, look at <u>Test Review 3</u> - Math in IB ESS Exam. Be sure to start to memorize specific equations highlighted.

Just Extra Information

Google Al response about **Producer Responsibility Program CO**

Yes, Colorado is requiring companies to pay for recycling through the Producer Responsibility for Recycling Act (EPR). The law went into effect in June 2022 and will take effect in 2026.

How it works

- Companies that sell products in packaging and paper products pay a fee
- The fee is higher for packaging that's not easily recyclable
- The fee funds a statewide recycling system that provides free recycling for all Coloradans

Benefits

- The program is expected to reduce waste, greenhouse gas emissions, and pollution
- It's also expected to improve air and water quality, and strengthen local economies

Concerns

- Some businesses are concerned about the rising costs of the program
- Some businesses are concerned about a lack of transparency in how the program will be carried out

 Some businesses are concerned that they may pass the increased costs on to consumers

Next steps

- The Circular Action Alliance is developing and maintaining the program
- The Colorado Municipal League (CML) is partnering with Recycle Colorado to provide webinars to help local governments prepare for the program