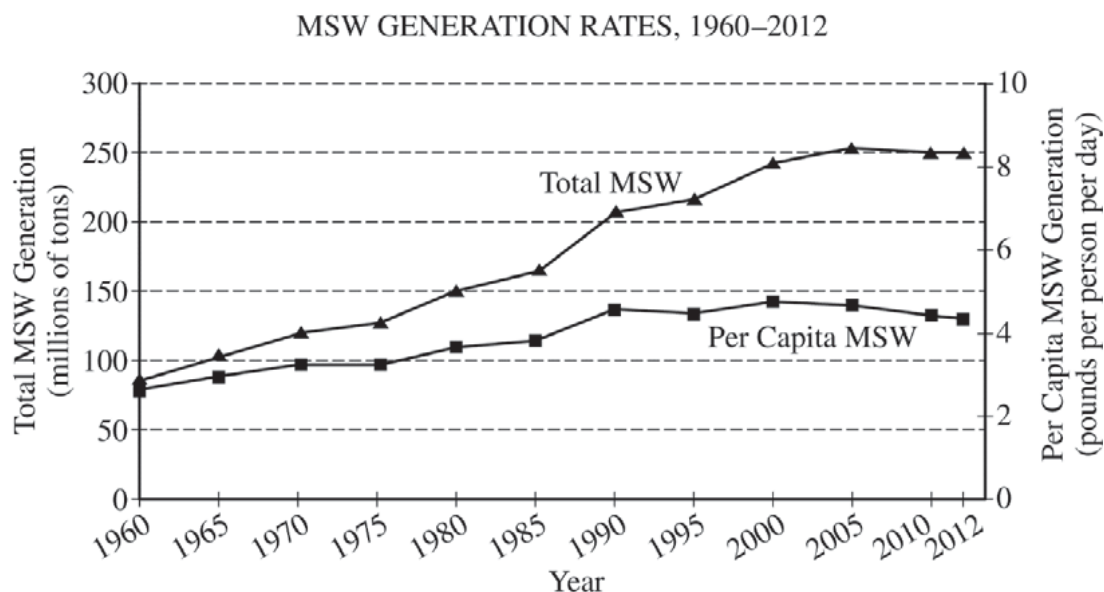


3. Municipal solid waste (MSW) is the trash collected from households and businesses. The graph below shows MSW generation in the United States from 1960 to 2012.



- (a) Use the data provided in the graph above to respond to the following.
- Explain** one probable cause (other than increased composting) for the change in per capita waste generation from 2000 to 2012.
 - Calculate** the percent increase in total MSW generation from 1980 to 2012.
- (b) Two ways of managing MSW are incineration and disposal in landfills.
- Identify** one disadvantage of waste incineration.
 - Identify** one disadvantage of waste disposal in landfills.

Trash incineration is one way to generate electricity from MSW. Electricity can also be generated from waste buried in landfills.

- (c) **Describe** the specific steps of a process used to produce electricity from waste buried in a landfill.
- (d) Many landfills do not accept used tires. As a result, the tires are often dumped in poorly regulated piles. **Describe** one human health problem associated with piles of discarded tires.
- (e) Composting is one way to reduce the amount of waste that enters a landfill.
- Other than reducing the volume of waste, **identify** one advantage of composting.
 - Identify** one disadvantage of composting.