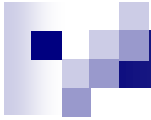# Introduction to Technology

Department of Technology Education

Wappingers Central School District

Mr. J. Butler

What is Technology?

- What comes to mind when you think or hear the term "technology"?
- What is this term associated with?
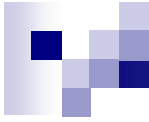- What is your definition of technology?

Technology

- Technology is cumulative sum of human developed in response to society's needs or desires to systematically solve problems
- Technology is combining knowledge with available resources to extend human capabilities. When combined with work, problems are solved; as a result societies are benefited.
- Technology is anything that is used to create products or processes.
- Technology is the application of math and science principles through the study of the man-made world.
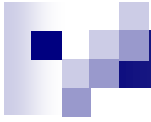- Technology is human innovation in action.

Technology Literacy

- The ability to use, manage and understand technology.
- To understand how technology and society influence one another and to use this knowledge in everyday decision making.
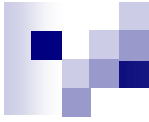
Technological Fix

- Fixes the symptoms but not the cause of the problem. Fixes allow people to avoid the effort of changing. example:
  - Catalytic Converters
    - Makes less emissions in air, but did not stop pollution from emissions.
  - Tylenol
    - Used to treat a headaches, but does not solve the problem of having it in the first place

System

- A system is **two** or more physical components and a set of procedures by means of with they interact.
- The basic components of a technology "system" includes artifacts, human skills, organizational patterns, and how it fits together.
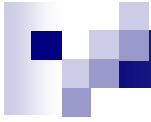
Systems - Five Components

- **Inputs**-The resources used by the system.
- **Processes**-The actions taken to use the inputs.
- **Outputs**-The result of the system.
- **Feedback**-Adjustments made to the processes to improve the outputs.
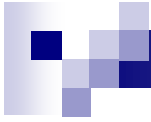- **Goals**-The reason for the system.

Technology Systems in Society

- Communication Systems
- Construction Systems
- Manufacturing Systems
- Transportation Systems

Luddites

- One who distrusts or fears the changes brought about by new technology.
- Today's Luddites continue to rise moral and ethical arguments against the excess of modern technology.
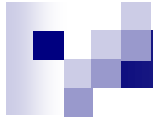
Sustainable Technology

- Technology that provides for our current needs without sacrificing the ability of future populations to sustain themselves.
  - Example: Biodegradable textiles

Green Technology

- Technology that offers a more environmentally friendly solution compared to an existing solution.
  - Example: Grass Roofs

Biotechnology

- "Applied Biology", the application of biological knowledge and techniques to develop products.