# Science and Technology

Glencoe Chapter 2 Section 1
Integrated Science
Pages 38-45

#### A. Scientific Discovery

- History is full of breakthroughs in science that have changed the course of human history.









## Types of Discoveries

Some discoveries were through scientific experiments, and others were by random chance or out of necessity.



- Fire for cooking and heat was by chance
- Wearing animal skins to stay warm was by necessity
- Early medicine with roots and plant parts was a bit more scientific



# Examples of Scientific Insight

#### 1. Disease Prevention Today

 Measures are taken now because we know how contagious diseases are spread from person to person and what causes

infections in wounds.





# Examples of Scientific Insight

- 2. Weather Forecasting
  - Meteorologists use a variety of specialized instruments to predict the weather.







# B. What is technology?

- Science is an exploration process.
- Technology is the application of scientific knowledge of materials and processes to benefit people or to meet a human need.

Need



**Applying** 

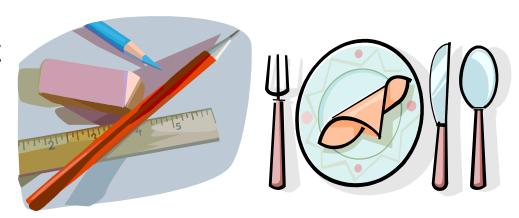




## Technology can be:

1. Any human-made object (technological object)

Examples: Computers, Pencils, Bed, Spoon



2. Technological Methods or Techniques for making an object or tool

Examples: Glass making, Weaving, Writing



#### Technology can be:

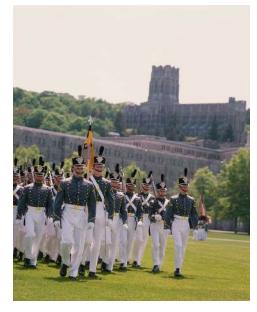
3. Knowledge or skills needed to operate a human-made object

Examples: Writing computer code, Operating a car



4. A system of people and objects used to do a particular task

Examples: Internet, Military, Airline industry



## C. Global Technological Needs

- Developing countries
- → Technological solutions focus on supplying basic needs for families.

→ Technology that would supply adequate

and safe drinking water and food supplies would be valued.



#### C. Global Technological Needs

- Industrialized Countries
- → Because the needs for survival are met in industrialized nations, money often is spent on technology.



designed to improve individuals.

# Visualizing Technology Supplying Basic Needs









