Intro to Applied Tech

What is Technology?

Official Definition: Technology is
In your own words… Technology is
List 5 examples of technology you use daily
1:
2:
3:
4:
5:
Choose one piece of technology from your list and answer the following questions in complete sentences:
What problem does it solve?
How does it make life easier or better?

Look at the list below. Type in "Yes" if it is technology or "No" if it is not.	
Item	**Technology? (Yes/No)**
Smartphone	
Bicycle	
Clouds in the sky	
Show	
Tree	
Pencil	
Ears	

Design Process

- **Ask (Identify the Problem):**
  - **Define the problem:** What needs to be solved or improved?
  - **Identify requirements and constraints:** What are the criteria for a successful solution, and what limitations exist?
  - **Consider the needs of users:** Who will be affected by the solution, and what are their needs?
- **Explore (Research and Understand):**
  - **Do background research:** Gather information about the problem, potential solutions, and existing technologies.
  - **Brainstorm potential solutions:** Generate a wide range of possible ideas.
  - **Explore materials and technologies:** Research available resources and tools that could be used to create a solution.
- **Model (Develop Potential Solutions):**
  - **Create a model or prototype:** Develop a tangible representation of a potential solution.
  - **Sketch and plan:** Create detailed drawings and plans for the solution.
  - **Select a promising solution:** Choose the most viable solution based on the research and brainstorming.
- **Evaluate (Test and Refine):**
  - **Test the model or prototype:** Conduct experiments and tests to evaluate the performance of the solution.
  - **Analyze results:** Identify strengths and weaknesses of the solution.
  - **Refine the design:** Make improvements based on the test results.
- **Explain (Communicate the Solution):**
  - **Document the design:** Create a report or presentation that explains the problem, the solution, and the design process.
  - **Communicate the results:** Share the solution with stakeholders and users.
  - **Iterate and improve:** Continue to refine the solution based on feedback and new information.

Copy (ctrl+c) and Paste (ctrl+v) each step of the design process with its description:

a. Test your solution and identify areas for improvement.

b. Communicate your results or demonstrate how your solution works.

c. Identify the problem and what you need to solve it.

d. Build or sketch a prototype to solve the problem.

e. Research and brainstorm ideas for solving the problem.

Step	Description
Ask	
Explore	
Model	
Evaluate	
Explain	

7 Resources of Technology?

For technologies to happen they must use resources, below we are going to define resources and list the 7 needed resources in technologies.

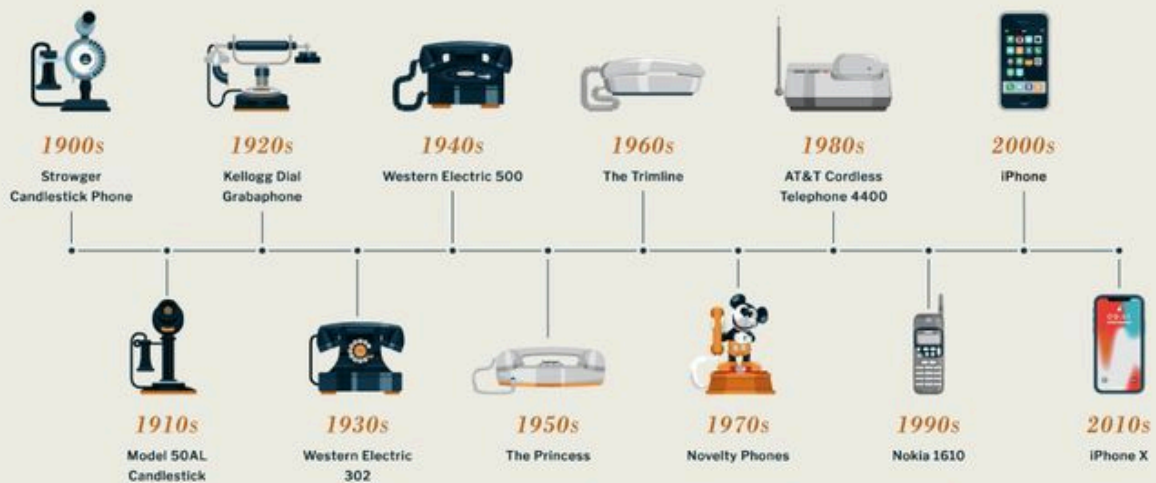| Definition of Resource	A resource is
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Evolution of Technology?

Technology doesn't just appear. It evolves, changing over time. Each new invention builds on what came before, and these changes have a huge impact on how we live, work, and interact with each other. Understanding this helps us see how technology shapes our world and how we can shape its future

TELEPHONE

Phones evolved to be smaller and lighter, until going fully mobile
with the creation of cell phones.

1900s — Strowger Candlestick Phone
1920s — Kellogg Dial Grabaphone
1940s — Western Electric 500
1960s — The Trimline
1980s — AT&T Cordless Telephone 4400
2000s — iPhone

1910s — Model 50AL Candlestick
1930s — Western Electric 302
1950s — The Princess
1970s — Novelty Phones
1990s — Nokia 1610
2010s — iPhone X

Timeline of the Phone

- **1876:** Alexander Graham Bell invents the first practical telephone.
- **1877:** The first telephone exchange was established, allowing multiple users to connect through operators.
- **Early 1900s:** Telephones become more common in homes and businesses.
- **1927:** The first transatlantic phone call is made between New York and London.*
- **1947:** The transistor is invented, paving the way for smaller and more powerful electronic devices.
- **1958:** The integrated circuit is invented, further miniaturizing electronic components.
- **1963:** Touch-tone dialing replaces rotary phones, speeding up call* connecti* Thons.
- **1973:** Martin Cooper makes the first mobile phone call.
- **1983:** The first commercial mobile phone network is launched in Japan.
- **1990s:** The rise of digital cellular technology and the introduction of SMS (text messaging).
- **1892:** The rotary dial is introduced, streamlining the dialing process.
- **Early 2000s:** The emergence of smartphones with touchscreen interfaces and internet connectivity.
- **2003:** Camera phones become widespread, leading to a surge in mobile photography.
- **2007:** The launch of the iPhone, revolutionizing the smartphone market.

- **2010s:** Rapid growth of smartphones, with increasing processing power, improved cameras, and advanced features.
- **2020s:** Foldable smartphones and 5G networks provide faster data speeds and innovative designs.
- **2025 and beyond:** The most popular smartphones today feature powerful processors, high-resolution cameras, large displays, and advanced AI capabilities. (Prediction): Smartphones may become even more integrated into daily life, featuring augmented reality (AR) interfaces, holographic displays, and advanced voice and gesture controls. AI-powered personal assistants will handle complex tasks, while seamless connectivity through satellite networks will provide global coverage. Biometric security, foldable or flexible screens, and energy-efficient designs will be standard. Additionally, phones may further integrate with wearable devices, creating personalized and immersive digital experiences.

What's Next for Smartphones?

- **Foldable and flexible displays:** Allowing for larger screens in more compact devices.
- **Enhanced Augmented Reality (AR) and Virtual Reality (VR) integration:** Creating more immersive and interactive experiences.
- **Improved AI and machine learning:** Enabling more personalized and intelligent features.
- **6G connectivity:** Offering faster speeds and lower latency.
- **Biometric authentication:** More secure and convenient unlocking methods.
- **Integration with other devices:** Seamlessly connecting smartphones with other devices like smartwatches, smart homes, and self-driving cars.
- **Focus on sustainability:** More eco-friendly materials and longer-lasting batteries.

The future of smartphones holds the promise of even more innovative and integrated technologies, further blurring the lines between the digital and physical worlds.

After reviewing the information about the Telephone and how it has evolved, answer the questions below. Use complete sentences!

How has the way we communicate changed since the invention of the telephone?
What are some ways smartphones have changed our daily lives, both positively and negatively?

What are some potential benefits and risks of future phone technologies?
How do you think your life would be different without smartphones?

Human Capabilities?

Human Capabilities	
Human capabilities are things that a human can usually do and technologies make them better, here we will explore some human capabilities and how technology makes them better.	
Human Capability 1	SIGHT
Examples of technologies	1. Glasses 2. 3. 4. 5.
Human Capability 2	Smell
Examples of technologies	1. 2. 3.

	4. 5.
Human Capability 3	Hear
Examples of technologies	1. 2. 3. 4. 5.
Human Capability 4	movement/transportation
Examples of technologies	1. 2. 3. 4. 5.
Human Capability 5	communicate
Examples of technologies	1. 2. 3. 4. 5.