

Tech for
Everyone
Logo

MODERN COMPUTING
SERIES

CODEBREAKER
EDITION

Name:

.....

Date:

.....

Alan Turing

PRESENTED BY TECHSHEETS.DEV

The Father of Modern Computers

Every time you use a laptop, a tablet, or a smartphone, you are using an idea dreamed up by a brilliant English mathematician named **Alan Turing**. Born in 1912, Alan loved numbers and puzzles from the time he was a young boy.

During World War II, Alan used his puzzle-solving skills to help save millions of lives. The opposing army used a secret machine called the **Enigma** to send scrambled, secret messages that nobody could read. The code changed every single day, and experts thought it was "unbreakable." But Alan didn't give up! He helped design a giant, clacking machine called the *Bombe* that could crack the Enigma code, allowing his country to know what the other side was planning!

Even before the war, Alan had an idea that changed the world. Back then, machines could only do one specific job (like a calculator that only does math). Alan imagined a "Universal Machine." If you fed this machine a different set of instructions, it could do *any* job you wanted! Today, we call these instructions "software" or "apps," and his idea is the blueprint for every single computer in the world!

Later in life, Alan started thinking about the future. He wondered, "*Can machines think?*" He created the **Turing Test**, an experiment to see if a computer could ever become so smart that a human couldn't tell they were talking to a robot. Because of this, Alan Turing is also considered one of the founders of Artificial Intelligence (AI)!

Reading Check

1. What was the name of the "unbreakable" secret code machine that Alan helped crack during World War II?

- ☐ The Secret Cipher
- ☐ The Enigma
- ☐ The Turing Box

2. What did Alan's "Universal Machine" idea do differently than other machines at the time?

3. What do we call the "instructions" we feed to computers today?

4. What was the "Turing Test" designed to figure out?

Codebreaker Challenge!

Cryptography is the science of writing and solving secret codes. Let's practice being codebreakers like Alan Turing! In this simple code, every letter of the alphabet is replaced by its matching number: A=1, B=2, C=3, and so on.

Use the alphabet to crack the two secret words below!

Secret Word 1: 3 - 15 - 4 - 5

Answer: _____

Secret Word 2: 13 - 1 - 20 - 8

Answer: _____

Beat the Turing Test!

The Turing Test asks: "Can a robot fool a human into thinking it's alive?" Design an Artificial Intelligence (AI) robot. Draw what your AI looks like, and write down a sentence it would say to convince someone that it is a real human being!

Draw your clever AI robot here!

🧠 ARTIFICIAL INTELLIGENCE 🧠

What does your robot say? _____
