Reading 3

Skills:

- Organization
- Identify synonyms

Getting started: What is the best device humans have invented?

ALAN TURING

The persecuted and eventually pardoned Alan Turing was the great mind that was able to **crack** the Enigma machine, a type of **enciphering** machine used by the German armed forces to send messages securely. During the Second World War, Turing worked for the Government Code and Cypher School, Britain's codebreaking center that produced ultra-intelligence. Turing played a crucial role in cracking intercepted coded messages that enabled the Allies to defeat the Nazis in many crucial combats, including the Battle of the Atlantic. By doing so, he helped win the war.

In the latter part of the war, he worked for the Radio Security Service. There, he developed his knowledge of electronics with the assistance of engineer Donald Bayley. Together they designed and build a portable secure voice communications machine called Delilah. This device was intended for different applications, but it couldn't be used with long-distance radio transmissions.

After the war, in 1948, he became Director of the Computing Machine Laboratory at Victoria University, where he worked on the development of a software for one of the earliest computers- the Manchester

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Mark 1. Turing wrote the first version of the Programmer's Manual for this machine, and was hired as a consultant in the development of a commercialized machine, the Ferranti Mark 1.

In 1951, he turned to mathematical biology, finally publishing his work "The Chemical Basis of Morphogenesis" in January 1952. He was interested in morphogenesis, the development of patterns and shapes in biological organisms. Turing's work on morphogenesis remains relevant today and is considered a seminal piece of work in mathematical biology.

Turing is widely considered to be the father of theoretical computer science and artificial intelligence. The creation of the Turing Machine is widely regarded to have been the foundation of modern theories of computation and computability. From the iPad to Facebook, much of the technology we use today can be traced back to Turing's genius. Mobile phones too owe their existence in part to this great man's intellect and vision.

Glossary:

- **Crack**: to find the solution to a problem.
- **Encipher**: convert a message into a coded form.

1. Organize the following events in the life of Turing in chronological order:

1____ 2____ 3____ 4____ 5____

a. He released a book
b. He worked on a computer program
c. He designed a device to talk with people.
d. He worked for an intelligence agency.
e. He was able to decode messages from the enemies.

2. In each paragraph, look for synonyms of the following words or phrases:

- **Paragraph 1**: vital, allowed, beat
- **Paragraph 2**: final, help
- **Paragraph 3**: employed
- **Paragraph 4**: is still, very important
- **Paragraph 5**: extensively, considered

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