VOCABULARY Fill in the blanks with the words from the box.

complicated analytical calculation article astronomy

1. logical; examining very carefully
   After detailed _____ research, the scientists concluded that the previous assumptions were out by 5.2%.
2. the scientific study of the stars
   Paul's interest in _____ began when, aged five, he was fascinated by seeing the Moon through a telescope.
3. difficult to understand or deal with, because many parts or details are involved
   This puzzle is very _____, because it has more than 5,000 pieces.
4. the process of calculating numbers or an equation
   Two plus two equals four is an easy _____ to do.
5. a piece of writing in a magazine or newspaper
   The scientist won lots of praise from his peers for the _____ he wrote in the leading medical journal covering his speciality.

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READING Read in chunks. Fill in the blanks with the correct form of the words above.

The First Computers

The Englishman Charles Babbage is regarded / as the inventor of the concept of a computer. // He was born in London, / on December 26th, 1791. // From an early age, he became very interested in mathematics. By the time he left school, he had written **1**_____ on mathematical subjects for the Royal Society of London. This was an organisation whose members were among the most famous scientists of the time.

While still a young man, Babbage became interested in **2**_____ and the equipment used to study the stars. His study of stars made it necessary for him to do many very long mathematical calculations. These took up a lot of his time and were very boring. To save time, he invented a mechanical calculator which he called the Difference Machine. This machine was so useful that Babbage began work on a more **3**_____ machine. This was a machine that could do any kind of **4**_____. He called it the **5**_____ Engine. Unfortunately, he never completed his work on this machine.

The Analytical Engine became the basis for the way modern computers calculate, but the first modern computer was not invented until over 100 years later when Konrad Zuse (1910–1995), a German engineer, invented the Z1 in 1938.

Reading Time

_____ minutes _____ seconds **206 words**

LIVEWORKSHEETS