

ANALYSIS OF THE TYPE OF FINGERPRINTS IN DIFFERENT PEOPLE



E. García1 , E. León 2
1 Alumnado IES Fidiana
2 Profesorado IES Fidiana

Teacher IES Fidiana: Dra Elena León Rodríguez

INTRODUCTION:

Fingerprints are waves located on the extreme of fingers. There aren't any fingerprints that are the same. The use of has been an incredible advance in criminology and the identification of people in general. Fingerprints have helped in vast fields of science, with special emphasis on criminology.

The papillary ridges are sweat secretion glands, when excreted, it runs through all the ridges and mixes with the fat of the individual, so when touching on object prints are recorder. A minutia is a fingerprint point of interest. These are classified into various types: termination, bifurcation, lagoon, line-point, crossing and therefore they constitute a biometric system of identifying individuals.

In recent years there has been a great advance in fingerprint technology, to the point of being able to identify a person just by putting the finger on a fingerprints detector. Today these technologies are used to acces confidential data and contents of mobile devices, and it is also one of the system preferred by adolescent. That is why it's interesting to know the principles on which this type of knowledge is based.

OBJECTIVES:

-The main objective of this project is to identify a fingerprints and the frequency of appearance of the different types of minutia at IES Fidiana.

-Analyze the differences between prints: shape, size and minutiae.

MATERIALS

Today there are fingerprint recognition sensors, but being an expensive material, I used paper and ink. The procedure followed has been to impregnate the finger in the ink and place it on the paper to obtain the imprint of the fingerprints.

1ª session

Establishment of the objectives of this project

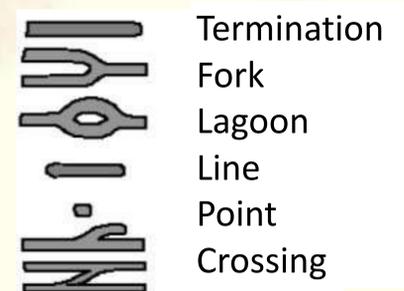
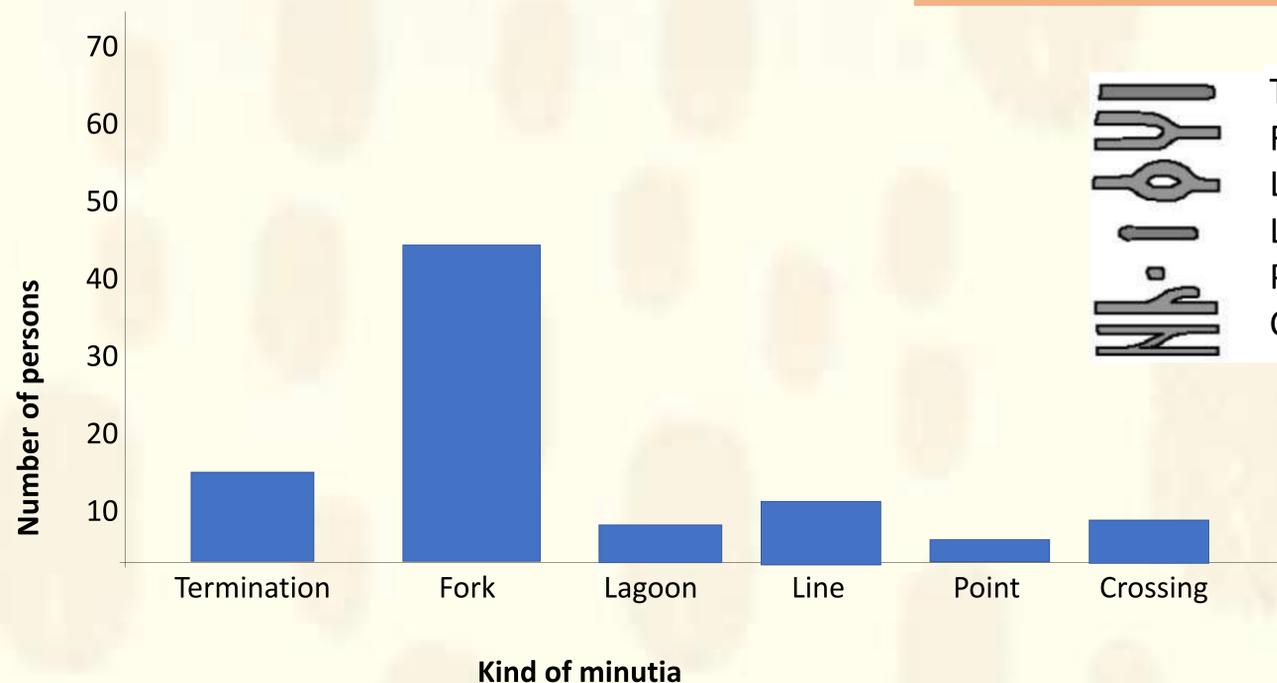
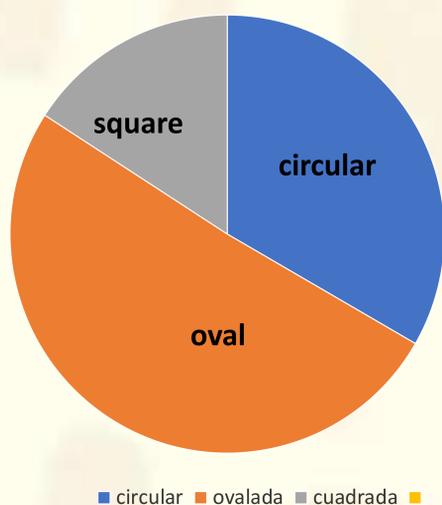
2ª session

The fingerprints of the students were taken

3ª session

We identify and classify the prints. In addition, after their analysis, they were graphically represented

Graph of the types of fingerprints



CONCLUSION

1º The most common print shape is the oval print. The least common is the square shape, the circular one being the one that appears with an intermediate frequency.

2º The most common minutia in the centre of the fingerprint is bifurcation, followed by termination, line and crossing. The least common being lagoon and point.

ACKNOWLEDGMENTS

- To the teachers Elena León Rodríguez y Mª Ángeles Gutiérrez.
- To the I.E.S. Fidiana.
- To the Biology and Geology Department.
- To the Department of R+D+I (FidiCiencia Project) from I.E.S. Fidiana.
- To the Ministry of Education for the concession of the Educational Innovation Project "FidiCiencia".