EXAMINATION PREPARATION

V.Ryan © 2000 - 2009

On behalf of The World Association of Technology Teachers

W.A.T.T.

World Association of Technology Teachers

This exercise can be printed and used by teachers and students. It is recommended that you view the website (www.technologystudent.com) before attempting the design sheet .
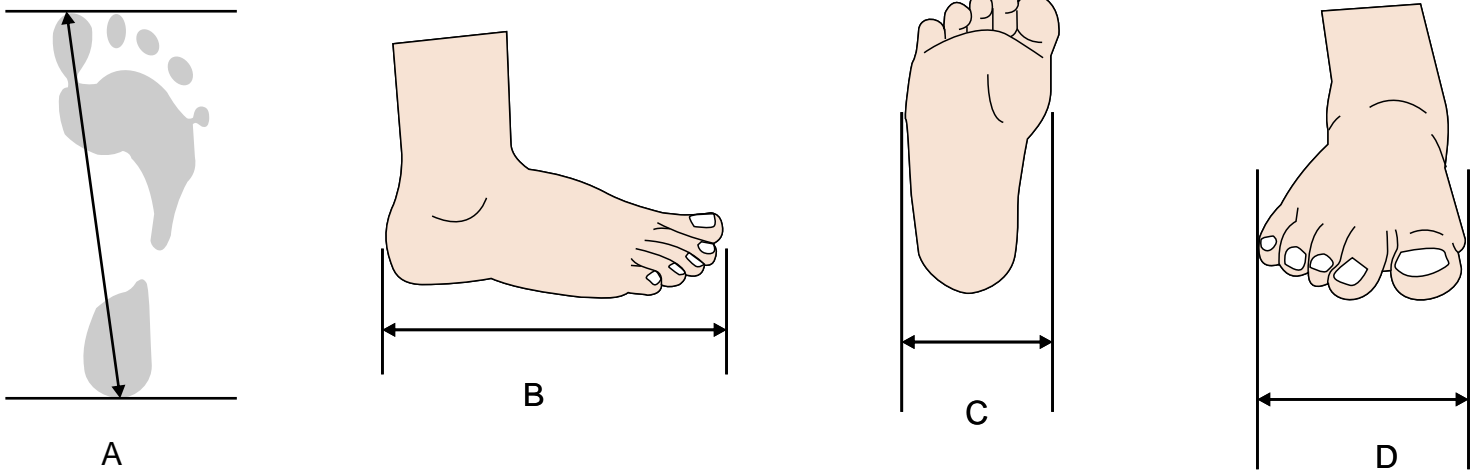
ERGONOMICS AND ANTHROPOMETRICS

What is ERGONOMICS ?
The study of people and their relationship with the environment around them. Designing according to the needs of the user/customer.

What is ANTHROPOMETRICS ?
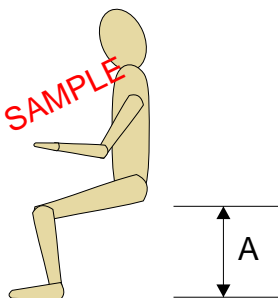The study of the human body and its movements.

1. During the design of a pair of shoes anthropometric data will be used. The data/ measurements are seen below. How will this help?

A

B

C

D

_____

_____

_____

_____

On the ergonomic figures shown below, mark on the missing ergonomic dimensions / measurements you would need to collect if you were research each of the projects. The answer has already been completed on the first example.
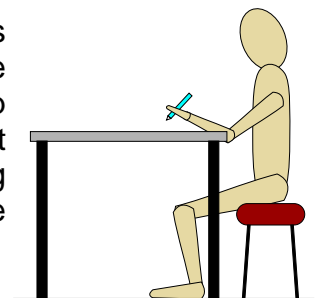
CHAIR

A.

SAMPLE

A

The diagram opposite shows the ergonomic dimension required for working out the comfortable seating height.
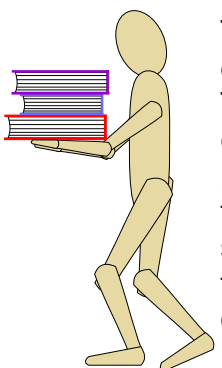
READING LAMP

B.

The person opposite needs a reading lamp so that he can work at night. The lamp must be set at the right height. Draw on the missing ergonomic dimension for the height of the lamp.

LIBRARY SHELF

C.

The librarian needs a shelf on which to place his books. The shelf must be at a comfortable height. Their must be no 'over stretching' to place the books on a high shelf. Draw on the diagram the missing ergonomic dimension.

DOOR HANDLE

D.

The person opposite needs to position a door handle on the door at the correct ergonomic height. If the handle is too low or too high it may be difficult to turn the handle. Draw on the missing ergonomic dimension