# Activity 2 - Moment of Forces 

Activity

- 75 points

Problem:

Take a photo of any door with handle. Indicate its distance from the hinge point and the handle of the door. Find its Moment with respect to the hinge and the door handle. If the door handle has a horizontal force of 20 N . Justify the result, if the Handle distance is reduced?

Rubric: 4 criteria • 50 pts
8) Class comments

## Moment :

$$
M=F^{*} D \quad(H E R E D=45 \& F=20 N)
$$

Moment(M) $=20$ * 45

$$
=900 \mathrm{~N}
$$

When distance( $D$ ) is reduced the hinge moment also reduces.

$$
M \propto D
$$

Therefore the door handle is fixed at end of the door to provide enough moment to open or close it.

