Magic Moments

A **moment** is the turning effect of a force.

When opening a door what two things effect how strong the turning effect is?

On a door what is the pivot? What is the force?

Where do you normally push the door? Close to the pivot or away from the pivot? Why?

Look at the following diagram of a door (looking down). Label the pivot, the pushing force and the distance between the pivot and the force.



If the force=100N and the distance=0.55m, calculate the moment using the formula:

moment = force x (perpendicular distance to pivot)

What are the units for moment?

