ANSWERS TO ACTIVITY 11 & 12.

1.M.A is the number of times a machine eases a given load.

2.M.A = L/E

3.Load = 80kg

Effort = 40kg

M.A = ?

M.A = Load over effort(L/E).

M.A =80/40

M.A=2.

4.M.A = L/E

M.A =150Kg/50kg

M.A =3

5a. Turning point/pivot.

b. Lever

c. First class lever.

d. Observe Tr.Jackson's method first.

*Husband x 4m   =   wife x 3m.

*60kg x 4m   =   Xkg x 3m

*240   =   3X

240/3   =   3X/3

80   =   X

Therefore X = 80 Kg.

e). M.A   = L/E

M.A =80Kg/60kg

M.A   =1.3

No 6. Load = M.A X E

L=25 X 30

L =25 X 3

Load = 75N.

OR,CAN WE TRY THIS STEP TOO;

M.A = L/E

2.5   = L/30N

2.5X30   = L/30X30

=75N   = L

Therefore L=75N.

No7. M.A = L/E   remember under work we said, 1kg = 10Newtons.

M.A = 17.5Kg/140m

M.A=17.5X10/140

M.A=1.25 Remember M.A has no units as the answer.YOU CAN TRY any other method please.

ACTIVITY 12

1. An inclined plane is a machine with a sloppy surface.

2.Stair cases,Ladders,Winding roads.

3.They can be used for loading and offloading goods on vehicles.

-ladders can be used for climbing trees and buildings.

-winding roads are easy to climb hills and mountains.

4.Y Effort,   x   Load

5.Increasing the length of the slopping surface.//by inclining or lengthening the slopping surface or ramp/slope.