

Answer all question in the spaces provided. The diagram below shows a man pushing a chair. Study the diagram and answer the questions below.



- a) Identify the type of force that could affect the motion of the chair.  
\_\_\_\_\_ [1]
- b) If the gentleman decides to lift the chair, what force would then affect the motion of the chair?  
\_\_\_\_\_ [1]
- c) If 60J of work was done to move this chair 3m, how much force (N) was exerted?  
\_\_\_\_\_ [1]



- d) Name the part of the bicycle which applies useful friction.  
\_\_\_\_\_ [1]
- e) Briefly explain why friction is useful.  
\_\_\_\_\_ [1]

- f) The diagram has wheel and axle. Where on the bicycle is it located?  
\_\_\_\_\_ [1]
- g) A cyclist competes in a cross country event.
- (i) Name the force acting on the speeding cyclist, trying to slow down, as she heads into a strong wind?  
\_\_\_\_\_ [1]
- (ii) How much work was done if the cyclist used 40N of force to travel 5m into the strong wind?  
\_\_\_\_\_ [1]