

Practice with Force Diagrams – 6 Situations

Construct force diagrams and schemas for the objects described below

- a. *When throwing a key vertically upward, my hand moves through a distance of about 0.75 m before the key leaves my hand. The .05 kg key reaches a maximum height of about 21 m above my hand.*

While the key is in my hand

after the key leaves my hand



- b. *A 4 kg squirrel misses his step while running across a tree branch and falls 15 m straight down to the ground below.*

While falling through the air

While being stopped by the ground



- c. *An 80 kg rock climber is suspended by a rope from a rock ledge 125m above the ground with his 3 kg bag of tools suspended below him by a rope from his belt.*

The rock climber

The bag of tools

