

FRICTION

In each of the following situations state what effect the change will have on the force of friction using the following choices:

a) increase

b) decrease

c) no change

- 1) The normal force increases. _____
- 2) The speed of the object changes from 10 m/s to 20 m/s. _____
- 3) The roughness of one surface is increased. _____
- 4) The surface area in contact increases. _____
- 5) A lubricant is added between the surfaces. _____
- 6) μ_s changes to μ_k _____
- 7) The angle of an incline increases. _____

In each of the following situations state what effect the change will have on the coefficient of friction using the following choices:

a) increase

b) decrease

c) no change

- 8) The normal force increases. _____
- 9) The speed of the object changes from 10 m/s to 20 m/s. _____
- 10) The roughness of one surface is increased. _____
- 11) The surface area in contact increases. _____
- 12) A lubricant is added between the surfaces. _____
- 13) The angle of an incline increases. _____