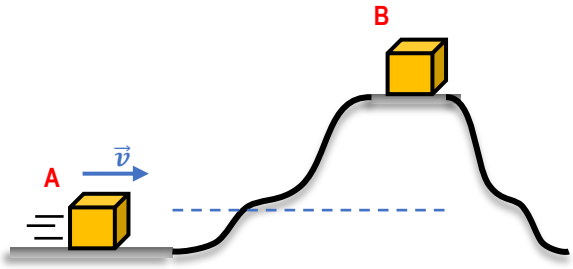
CONCEPT: SOLVING CURVED PATH PROBLEMS USING ENERGY CONSERVATION

$$K_i + U_i + W_{NC} = K_f + U_f$$

- IF objects move in curvy paths, the *ONLY** way you can solve them is using **Energy Conservation**.

EXAMPLE: What minimum speed would a block of unknown mass need to have at the bottom of a 20m high, smooth hill in order to just barely reach the top?



CONSERVATION OF ENERGY

1) Draw Diagram
2) Write Cons. of Energy EQ
3) Eliminate & expand terms
4) Solve