

LOS: Force Vector, Force Diagram, Free-Body Diagram, Source, Receiver

Feel the Force

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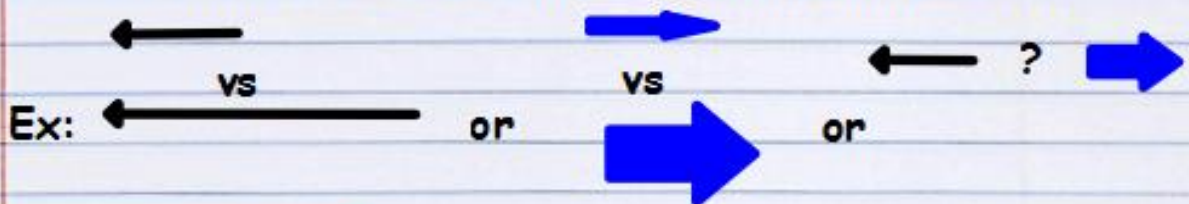
Focus Question:

How do you identify and describe the forces acting on an object?

Evidence: LOS, Diagramming Rules, Lab Stations

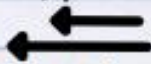
**Force Vector** - Arrow used to explain the DIRECTION and comparative STRENGTH of a force

\* Size Matters, be consistent when using vectors



**Force Diagram** - Drawing showing ALL of the forces acting in an "interaction"

Should Show:

- All forces involved - Forces often occur in pairs
- Direction of forces shown - **Vectors** used
- All vectors ( $\leftarrow$ ) are labeled w/ force type
- Vectors are proportionate to strength 
- Results of forces are clear - balanced or not

**Free-Body Diagram** simplified drawing showing the size and direction of the forces acting on a single object.

Examples:

Ex 1: hanging on rope

Ex 2: boy pushes car

