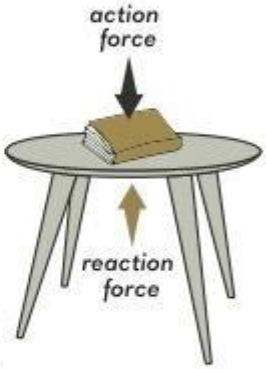
Name _____ Date _____

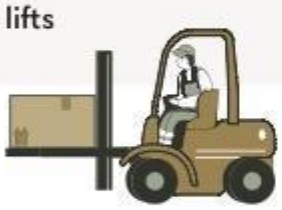
NEWTON'S THIRD LAW OF MOTION

Newton's third law of motion states that every action force has an equal and opposite reaction force. The *action force* is the force exerted by one object onto a second object, and the *reaction force* is the force exerted by the second object back onto the first object.



For example, imagine a book that is at rest on a table. The book pushes downward on the table due to its weight. This is the action force. At the same time, the table pushes upward on the book with the same strength, preventing the book from falling through the table. This is the reaction force.

For each scenario below, identify the action force and reaction force. The first one has been done for you.

A baseball bat hits a baseball. Action force: The baseball bat pushes onto the baseball. Reaction force: The baseball pushes back onto the bat.	A child jumps on a trampoline. Action force: _____ Reaction force: _____	A boy lies in a hammock. Action force: _____ Reaction force: _____
Sled dogs pull a sled. Action force: _____ Reaction force: _____	A forklift lifts a box.  Action force: _____ Reaction force: _____	A woman pulls a suitcase. Action force: _____ Reaction force: _____

LIVEWORKSHEETS