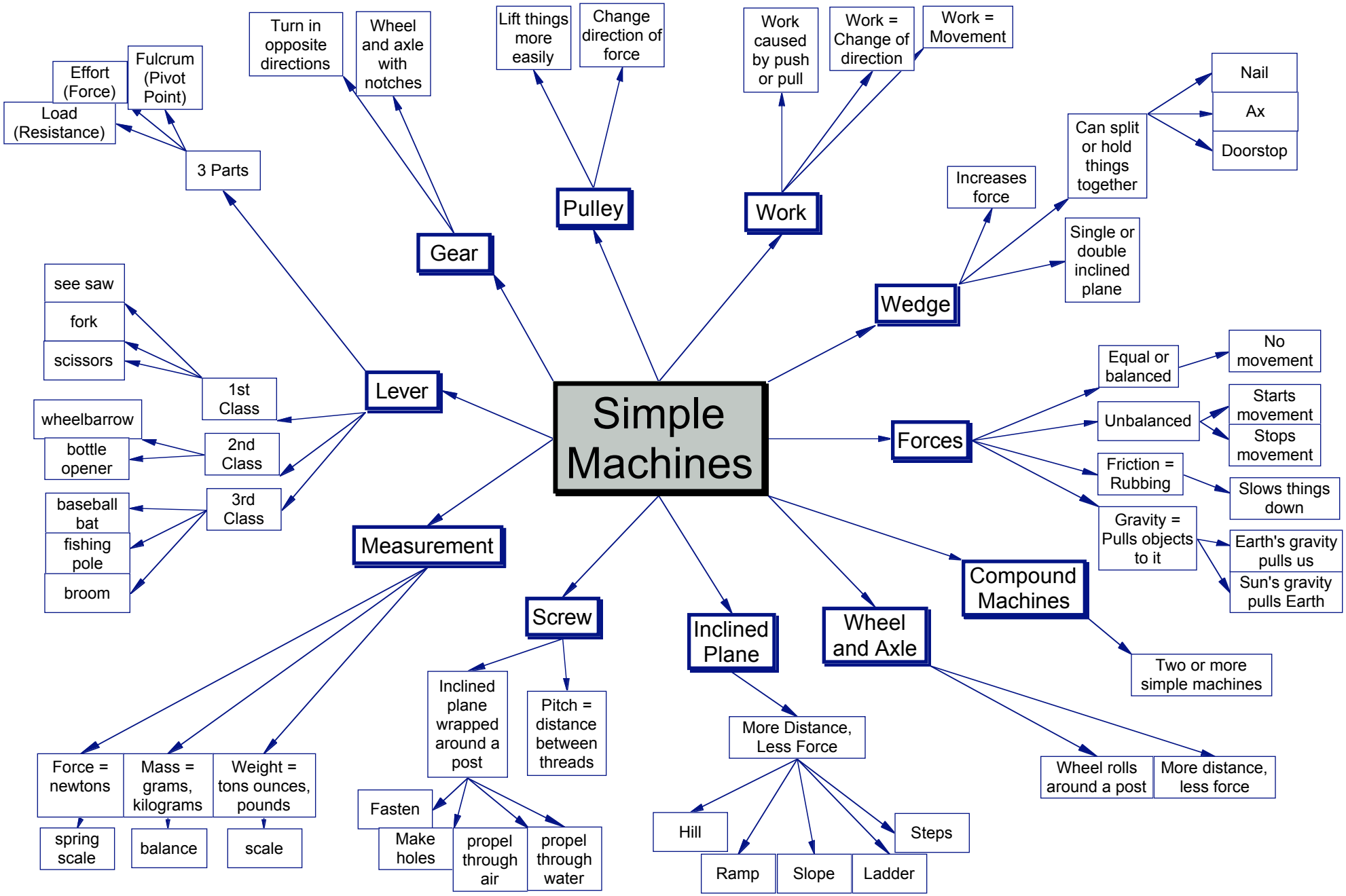
Simple Machines
Lever
3 Parts
Effort (Force)
Fulcrum (Pivot Point)
Load (Resistance)
1st Class
see saw
fork
scissors
2nd Class
wheelbarrow
bottle opener
3rd Class
baseball bat
fishing pole
broom
Gear
Turn in opposite directions
Wheel and axle with notches
Pulley
Lift things more easily
Change direction of force
Work
Work caused by push or pull
Work = Change of direction
Work = Movement
Wedge
Increases force
Can split or hold things together
Nail
Ax
Doorstop
Single or double inclined plane
Forces
Equal or balanced
No movement
Unbalanced
Starts movement
Stops movement
Friction = Rubbing
Slows things down
Gravity = Pulls objects to it
Earth's gravity pulls us
Sun's gravity pulls Earth
Compound Machines
Two or more simple machines
Wheel and Axle
Wheel rolls around a post
More distance, less force
Inclined Plane
More Distance, Less Force
Hill
Ramp
Slope
Ladder
Steps
Screw
Inclined plane wrapped around a post
Pitch = distance between threads
Fasten
Make holes
propel through air
propel through water
Measurement
Force = newtons
spring scale
Mass = grams, kilograms
balance
Weight = tons ounces, pounds
scale