

Physics 2A: Mechanics

Week 1: Measurement, Vectors, Linear Motion

AIR TRACK
BALL DROP

Week 2: Motion in Two and Three Dimensions

SIMULTANEOUS FALL
SHOOT THE MONKEY
BALLISTIC CART

Week 3: Newtonian Dynamics

BLACKBOARD MECHANICS SET

Week 4: Newtonian Dynamics, Work and Energy

INCLINED PLANE (WITH FRICTION BLOCKS)
SKATEBOARD REACTION CART
CAR JUMP

Week 5: Work and Energy, Conservation of Energy

BOWLING BALL PENDULUM
BALLISTIC PENDULUM
CONSERVATION OF ENERGY DOUBLE TRACK

Week 6: Systems of Particles, Collisions

NEWTON'S CRADLE
ETHANOL ROCKET
TENNIS BALL AND BASKETBALL
CENTER OF MASS
LEANING TOWER
ROLLING UPHILL ILLUSION

Week 7: Rotational Motion & Dynamics

SPIN THE WINE GLASS
SPINNING LARIAT
MASS ON A SPRING
ROLLING DISK/HOOP/SPHERES
SPINNING STOOL
BIKE WHEEL GYRO

Week 8: Rotational Dynamics, Equilibrium

SPINNING STOOL
BIKE WHEEL GYRO

Week 9. Oscillations

HOOKE'S LAW APPARATUS

Week 10. Gravitation