

Science Standard III Previously Taught at the Elementary CORE Academy

Objective 1 – How forces cause changes in speed or direction

- a. Objects at rest **Bump On A Log (2005), Rock-A-Bye Pendulum (2005), It’s Un-Can-ny (2005), Peaceful Penny (2004), Peaceful Washers (2003)**
- b. Push & pull **It’s Un-Can-ny (2005), Moving Possibilities (2004), Riddles and Charades (2003), Zoom Balls (2003)**
- c. Simple machines **Simple Machines Song (2003)**
 - i. Pulley – lift (flagpole, crane) **Lifting the Load (2005), Flag Raiser – Fixed Pulley (2004)**
 - ii. Wheel & axle – spin to move (wheel, doorknob) **Lifting the Load (2005) All Geared Up – Wheels and Axles (Gears) (2004), Rolling Along (2003)**
 - iii. Inclined plane – move loads (ramp, slide) **Uphill – Inclined Plane (2004)**
 - iv. Lever – lift (seesaw, scissors) **Weighty Mistakes (2003)**
 - v. Screw – hold together (screw, drill) **Twirling Helicopter – Screw (2004)**
 - vi. Wedge – cut or split (ax, shovel) **Soap Carving – Wedge (2004)**

Objective 2 – greater force = greater change

- a. Force applied to object **Rock-A-Bye Pendulum (2005), Peaceful Penny (2004)**
- b. Same force, different weight **Move It, Sir Isaac! (2005), Over the Edge (2003)**
- c. Different force, same weight **Move It, Sir Isaac! (2005), Rock-A-Bye Pendulum (2005), Sudden Stop! (2004), Wind Wheel (2004), Marshmallow Launcher (2004), What A Load (2003), Straw Rocket (2003)**