

# Phenomenal Physics Lab

What goes up must come down! The physics lab is where kids can learn about cause and effect in our world and how God turned our upside-down world right side up by sending Jesus!

## Level 1

- Use these easy decorating supplies, available from Gospel Light. Attach **Decorating Posters, Bible Teaching Posters**, preprinted **Wall Murals** and **Wall Cutouts** to the walls. Also use extra-large posters from the **NEW! MEGA Decorating Pack**. Add color with **Daily Plan Pennants, Publicity Posters** and **Test Tubes**.
- Write physics formulas on a whiteboard, and draw diagrams to illustrate principles, or write on butcher paper and attach to the wall. See **Physics Whiteboard Equations** (p. 40) for example.

## Level 2

- Hang **five or more tennis balls or plastic balls** securely from the ceiling to simulate a “Newton’s Pendulum” experiment. Screw a **small eye screw** into each ball. Cut identical lengths of **string** for each ball. Attach strings to the balls and then securely to the ceiling, aligning balls in a row so they will hit each other when one ball is pulled back and released.
- Set out play **foam blocks or large wooden blocks** in a corner. Prop one or more **plastic rain gutters** on blocks to form ramps. Place **balls of various materials and weights** to release down the ramps.

- Set out a variety of **mechanical toys, building sets and items that illustrate physics concepts, such as levers, windmills, magnets, gears, pendulums, etc.**

## Level 3

- Create a giant chain out of **foam pool noodles**. Cut noodles to desired length to form circles when bent. Thread a straightened **wire coat hanger** through the center hole in each noodle. Bend one foam noodle to form a circle, and tuck wires into opposite ends. Tape ends together with **duct tape**. Link another foam noodle to the circle in the same manner, securing ends with tape. Continue adding links to the chain to make your desired length. Hang from the ceiling with **fishing line** or drape across a wall.
- Enlarge and trace **Gears and Cogs** (p. 40) on various sheets of **colored butcher paper**. Cut out and attach to the wall.
- Enlarge and trace **Physics Lingo** on p. 38 (also in *MEGA Decorating Pack*) to illustrate various concepts demonstrated in your room. Cut out and attach to walls next to concept examples.
- Set an exercise ball on the floor in front of a wall. Cut arcing strips of butcher paper and attach to the wall to suggest the ball is falling. Attach **Gravity Arc** (p. 40) to the wall.

