

## **A WORKING CHALLENGE**

**Objective:** After completing this activity, students will be able to visualize what work is and what mechanical advantage is.

### **Materials:**

Four pieces of tagboard with an instruction on them. Two are examples of work. Two are not examples of work.

“Push against the wall with your hand”

“Hold 2 books for 10 seconds”

“Push the chair across the floor”

“Lift a light object 3 times”

### **Procedure:**

1. Start off by telling students that they will learn what work is. Ask them if any of them know what work is. Record their answers on the board/chart paper.
2. Demonstrate the 4 stations and divide the students into 4 groups. (Don't tell them which stations are work and which ones aren't work!!!) (FYI Station # 3 & # 4 are examples of work!) Tell them that after doing these 4 stations, they will have a better idea of what work is. Have the students do each activity. Have them discuss with their group if think they are doing work or not.
3. When all groups have had a chance to do all stations, bring the class back for discussion. Have them share their findings. Give them a hint that 2 of the stations were examples of work and the other 2 aren't work. Hopefully through your guidance and questioning, the students will develop a decent definition of work. (Basic Definition of Work—Work occurs when force is applied to an object and the object moves/stops)
4. Write the definition of work on chart paper. Have the students tell you which stations are examples of work and which ones aren't. Write these on the chart paper too.