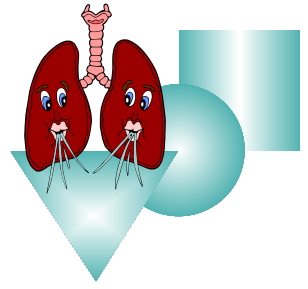


## Measuring Peak Expiratory Flow

**Peak expiratory flow** (PEF) rate is a measure of how quickly a person can exhale air and is an indicator of how well your airways work. PEF is measured using a **Peak Flow Meter**, which is a hand-held device used to measure your ability to push air out of your lungs in one “fast blast”. Using the **Peak Flow Meter**, a personal peak PEF can be established.



### Activity Materials:

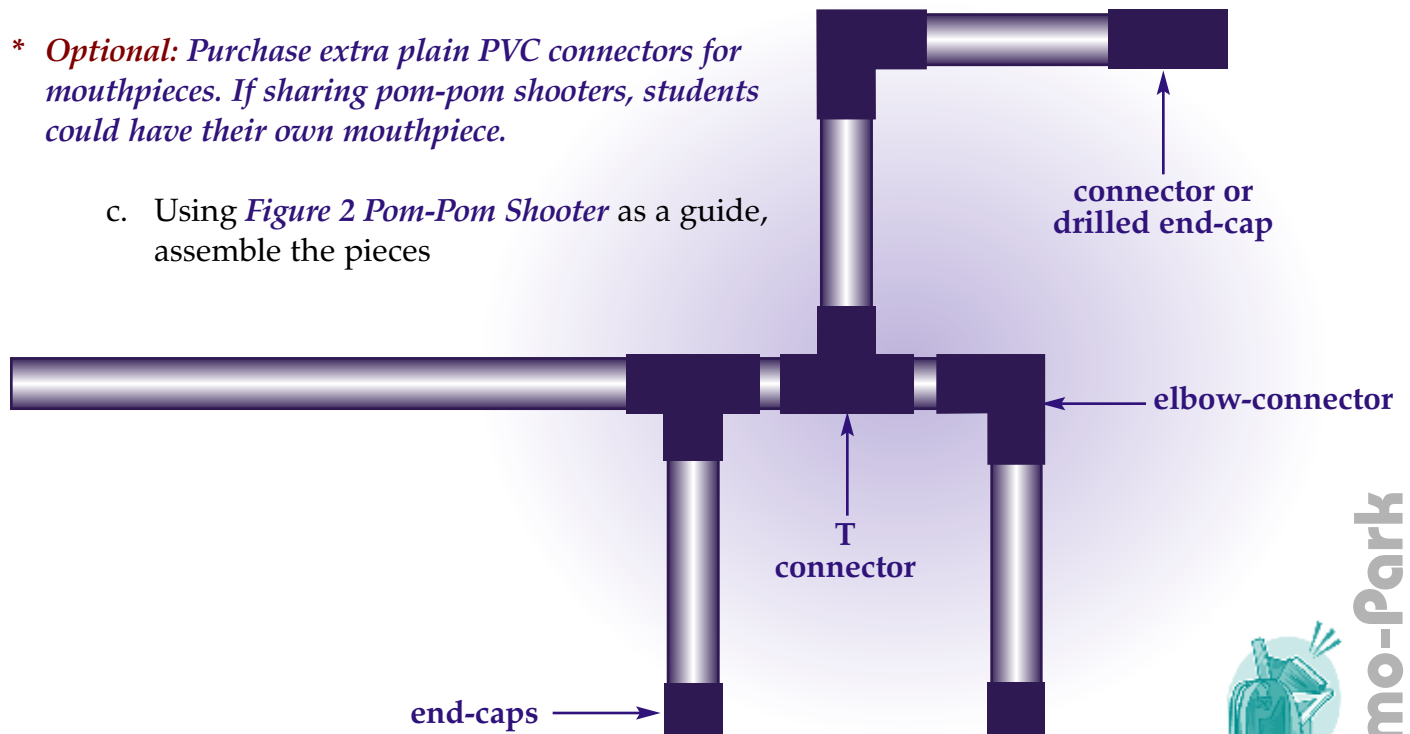
Your materials list is included in the **Station Instruction Card** provided by your teacher at each station through which you will rotate during this activity.

### Activity Instructions:

1. If the **pom-pom shooter** is not already assembled, you can construct it using the following directions.
  - a. Using a PVC pipe cutter, cut a 27” length\* of 1/2” PVC pipe into the following pieces:
    - 4 4” pieces of 1/2” PVC pipe
    - 2 2” pieces of 1/2” PVC pipe
    - 1 7” piece of 1/2” PVC pipe
  - b. Assemble the following connectors:
    - 2 elbow connectors for 1/2” PVC
    - 2 T connectors for 1/2” PVC
    - 3 end-caps for 1/2” PVC, drilled to restrict air flow
      - 1 25% restriction (drill hole with 7/16” bit)
      - 1 50 % restriction (drill hole with 3/8” bit)
      - 1 75% restriction (drill hole with 1/4” bit)

\* **Optional:** Purchase extra plain PVC connectors for mouthpieces. If sharing pom-pom shooters, students could have their own mouthpiece.

- c. Using **Figure 2 Pom-Pom Shooter** as a guide, assemble the pieces



**Figure 2 Pom-Pom Shooter**