



# Procedural Guidelines for Creating a Brass Instrument

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**Read all directions before beginning this project.**

## **Materials Needed:**

1. Garden Hoses (1 for each cooperative group) *The garden hoses may need to be pre-cut to designated lengths to avoid student injury.*
2. Funnel (1 for each cooperative group)
3. Ruler
4. Brass instrument mouthpiece (1 for each cooperative group)
5. Mouthpiece cleaner

## **Step 1: Planning phase**

1. This experiment is different than those you have done in the other lessons because you only have one piece of hose for each length needed for the experiment. You will only have one trombone of each pitch, instead of three or four. Decide within your group how you are going to deal with this situation.
2. For safety and health reasons, only one person should be allowed to play the trombones. If you are using mouthpieces, make sure you sanitize the mouthpiece before and after use.

## **Step 2: Setting up your instrument**

1. Using a ruler, measure your pieces of garden hose.
2. Line your garden hoses from shortest to longest.
3. Insert funnel into one of the garden hose.
4. Insert mouthpiece into the other end of the garden hose.

## **Step 3: Playing your instrument**

1. By “buzzing” into the mouthpiece, you will get a sound out of the bell (funnel) of the trombone.