

REAL SCIENCE: A LAB EQUIPMENT CER ACTIVITY

INTRODUCTION

Our Lab Equipment CER activity has students record observations about certain pieces of lab equipment that the teacher has set aside. And, from those observations, students make claims about the piece of equipment and connect it to some reasoning as well.

Students can following the guidelines below:

I. Claim

The <piece of equipment> is used for...

II. Evidence

Observe the piece of equipment and note down the shape, size, and details that are either present or missing.

III. Reasoning

Provide an explanation as to why the shape, size, and details (missing or present) are important to the equipment's function.

Ex. Test Tube

Claim: a test tube is used to hold, mix or heat small amounts of chemical

Evidence: the opening to test tube are narrow; test tube are short; there are no volume markings on test tubes; test tubes are made of Pyrex.

Reasoning: narrow openings and short length means that test tubes can hold very little chemical; lack of volume markings indicates test tubes are not for measuring volumes nor is volume an important measurement in test tubes; pyrex is heat resistant.

STATION ACTIVITY SETUP

Time limit at each station: 8 - 10 minutes

Working in pairs

4 stations (we set up multiples of each station to accommodate 30 students)

Station 1: beaker, test tube, graduated cylinder

Station 2: Erlenmeyer flask, volumetric Flask

Station 3: beaker tongs, crucible tongs, utility clamp

Station 4: buret, crucible and lid, wire gauze

STUDENT WRITE UP

At each station, have students record the following

Station #:

Name of equipment

(if students don't know,
have them sketch)

Claim

Evidence and Reasoning

