

SI Pharmacy Technician - Full Discipline Demo

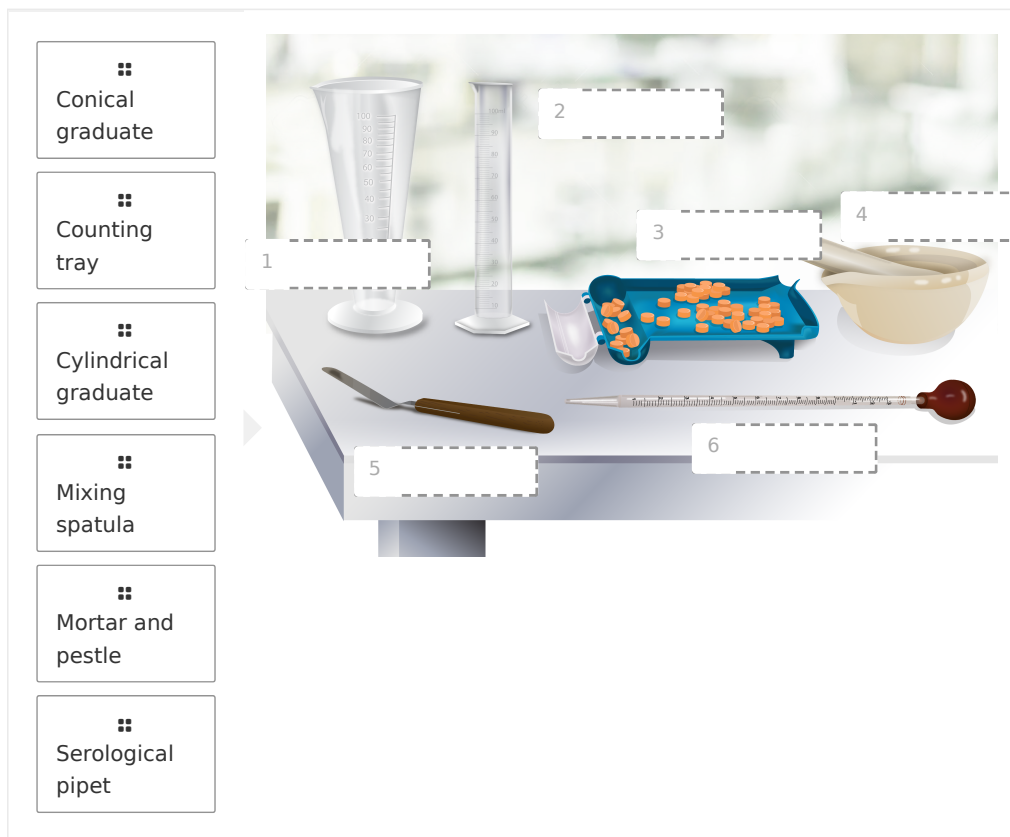
Equipment Practice

Final Report - Answer Guide

Institution	Science Interactive University
Session	SI Pharmacy Technician - Full Discipline Demo
Course	SI Pharmacy Technician - Full Discipline Demo
Instructor	Sales SI Demo

Test Your Knowledge

Identify the pieces of commonly used pharmacy equipment in the picture.



Correct answers:

- 1 Conical graduate 2 Cylindrical graduate 3 Counting tray
4 Mortar and pestle 5 Mixing spatula 6 Serological pipet

Match the name of each piece of pharmacy equipment with the best description of its use.

Mixing spatula	Container used to measure and hold liquid substances ideal for providing accurate measurements.	1
Serological pipet	Used to mix ingredients and reduce particle size.	2
Cylindrical graduate	Container used to measure and hold liquid substances ideal for pouring and mixing different substances.	3
Conical graduate	Used to mix two substances together, such as the ingredients for ointments and creams.	4
Mortar and pestle	Used to relocate liquids from one container to another using the "vacuum-assisted pipet" method.	5
Counting tray	A type of manual pill counter used to measure out a specific number of pills.	6

Correct answers:

- 1 Cylindrical graduate 2 Mortar and pestle 3 Conical graduate
 4 Mixing spatula 5 Serological pipet 6 Counting tray

Exploration

When counting pills using a counting tray, the pills are typically separated into units of ____.

- ☐ one
- ☐ two
- ☒ five ✓
- ☐ ten

Cylindrical graduates provide more accurate measurements of volume than conical graduates.

- ☒ True ✓
- ☐ False

The volume in a graduate should be read at the lowest point of the meniscus.

- ☒ True ✓
- ☐ False

The filler bulb is a hollow tube with markings to indicate the liquid volume.

- ☐ True
- ☒ False ✓

_____ mortar and pestle units are commonly used for crushing and mixing hard ingredients into powders.

- ☒ Porcelain ✓
- ☐ Wedgewood
- ☐ Glass

Exercise 1

What advantages do you think automated pill counters would have over manual pill counters such as the counting tray used in this exercise? What are some possible disadvantages?

Was the right type of mortar and pestle used for this exercise? Why or why not?

Why is it important to read volumes in a graduated cylinder at the meniscus?

When should you use a pipet to measure liquids instead of a graduated cylinder?

0 Word(s)

Photo 1: Filled Tray-Well
(SAMPLE ANSWER BELOW)





Photo 2: Blended Cinnamon and Cocoa Butter
(SAMPLE ANSWER BELOW)





Photo 3: Triturated Powder
(SAMPLE ANSWER BELOW)

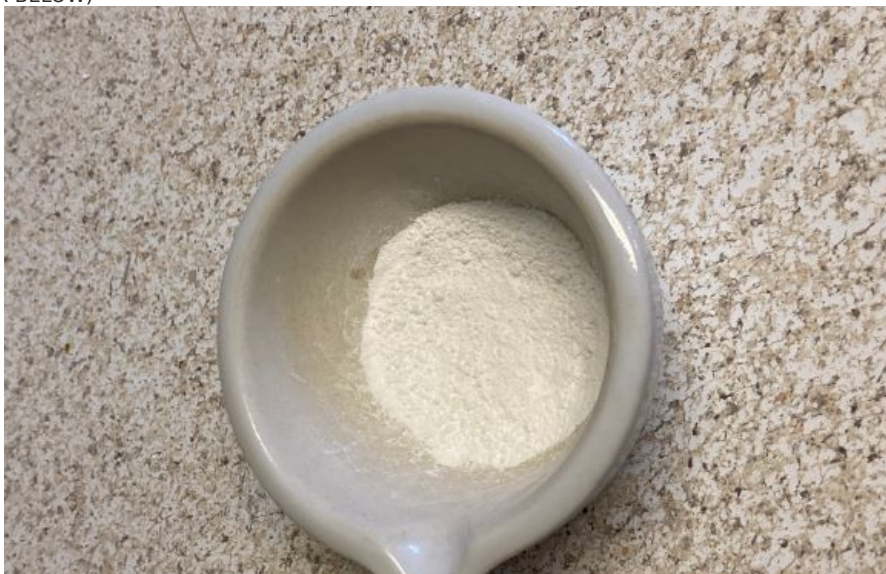




Photo 4: Initial Graduated Cylinder Volume
(SAMPLE ANSWER BELOW)



Photo 5: Final Graduated Cylinder Volume
(SAMPLE ANSWER BELOW)



Competency Review

What piece of pharmacy equipment would be ideal to transfer a sterile-dependent solution?

- ☒ Serological pipet ✓
- ☐ Conical graduated
- ☐ Cylindrical graduate
- ☐ Mortar and pestle

Automated pill counters are much larger than manual pill counters and can handle large volumes of tablet or capsule-form prescriptions efficiently.

- ☒ True ✓
 - ☐ False
-

A _____ has a short, heavy shaft for a handle and a round, firm bulb at the end used for grinding or mixing materials together.

- ☐ mortar
- ☒ pestle ✓
- ☐ spatula
- ☐ pill counter

_____ involves mixing solid ingredients into a cream or ointment until a homogeneous blend is created.

- ☐ Trituration
- ☐ Reading a meniscus
- ☐ Blow-out
- ☒ Spatulation ✓

To deliver the full measurement of liquid within a volumetric pipet, the pipet must be blown out to release this remaining liquid into the container.

- ☐ True
- ☒ False ✓

The ideal material for a mortar and pestle depends on its intended use.

- ☒ True ✓
- ☐ False

When using a counting tray, count all the pills you need, then move them into the well tray.

- ☐ True
- ☒ False ✓

When using a pipet, you should always draw liquid all the way to the cotton at the top of the pipet to make sure you have enough liquid.

☐ True

☒ False



Extension Questions

What are some of the benefits to replacing some manual tools (pill counters, pipet fillers, etc.) with their automatic counterparts? Are there any potential drawbacks? (SAMPLE ANSWER BELOW)

Benefits include increased accuracy and decrease in time spent performing tasks. Potential drawbacks include high cost of automated equipment.