



PROJECT ROOTS LEARNING LAB

LESSON 1

Fresh vs. Dried — Flavor, Function & Technique

Lesson Title: Understanding Fresh Herbs in Culinary Applications

Grade: 9-12

Time: 60–90 minutes

Tower Crops Used:

Basil, Mint, Parsley, Leaf Lettuce (or whatever is currently ready)

Learning Objectives

Students will:

- Compare fresh vs. dried herbs
- Identify flavor intensity differences
- Practice knife skills (chiffonade, fine mince)
- Understand how harvest timing affects flavor
- Record observations using sensory evaluation

Materials

- Fresh tower-grown herbs
- Store-bought dried versions
- Olive oil
- Lemon juice
- Salt
- Plain rice or simple crostini
- Tasting cups
- Kitchen scale
- Harvest log sheet



PROJECT ROOTS LEARNING LAB

Introduction (10–15 min)

Discuss:

- Why chefs prefer fresh herbs
- Volatile oils in herbs
- How growing conditions impact flavor
- Why harvest timing matters

Have students harvest small amounts themselves (if possible).

Knife Skill Practice (15 min)

Students practice:

- Chiffonade (basil, mint)
- Fine mince (parsley)
- Proper herb handling (no bruising)

Discuss:

- Why sharp knives matter
- How over-handling reduces aroma

Flavor Lab (25–30 min)

Students prepare 3 simple applications:

1. Olive oil + fresh basil
2. Olive oil + dried basil
3. Lemon + parsley dressing

Taste on plain rice or crostini.

Students complete a sensory evaluation chart:

- Aroma
- Intensity
- Texture
- Color impact
- Overall preference



PROJECT ROOTS LEARNING LAB

Reflection & Discussion (10–15 min)

Discuss:

- When dried herbs might be preferred
- Cost comparison (grow vs. purchase)
- How chefs decide which form to use

Students log harvest weight and intended use.

Assessment

- ✓ Completed sensory chart
- ✓ Proper knife technique
- ✓ Participation
- ✓ Reflection response