



# Form 3 Botany Seed & Seedling Workflow

Below is every lesson that involves planting, tending, observing, replanting, or using seedlings, along with when students may discontinue care.

## 1. FIRST SET OF SEEDS — Lesson 1 Plantings

**Seeds:** bean, pea, corn, pumpkin, sunflower, buckwheat (6 pots, 4 seeds in each)

**Started:** Lesson 1

**Used:** Lessons 5-7

### Where they appear

- Lesson 1: Plant seeds; begin daily observation.
- Lesson 2: Tend/observe; note first germination.
- Lesson 3: Continue daily observation and drawings.
- Lesson 4: Continue observation.
- Lesson 5: Use seedlings to mark stem segments.
- Lesson 6: Use a pot of these seedlings and lay it on its side for geotropism.
- Lesson 7: Final observation reminder.

**When they are no longer needed — After Lesson 7.**

## 2. SECOND SET — Lesson 3 (Behind-Glass Germinator)

**Seeds:** bean, pea, corn, pumpkin, sunflower, buckwheat

**Started:** Soaked in Lesson 2, placed in jar in Lesson 3

**Used:** Lessons 5-7

### Where they appear

- Lesson 3: Main germinator setup.
- Lesson 4: Observe; draw progress.
- Lesson 5: Use seedlings to mark stem segments.
- Lesson 6: Use two seedlings for tip-cutting and horizontal placement.
- Lesson 7: Final observation reminder.

**When they are no longer needed — After Lesson 7.**

### 3. THIRD SET — Lesson 12 Plantings

**Seeds:** bean, pumpkin, sunflower, buckwheat (4 pots in light, 4 in darkness)

**Started:** Lesson 12

**Used:** Lessons 14-16, 19, 22

#### Where they appear

- Lesson 12: Plant and begin measurements.
- Lesson 13: Continue tending; observe and measure plants in light vs. dark.
- Lesson 14: Use seedlings to examine roots (pull up several); observe and measure plants in light vs. dark
- Lesson 15: Use seedlings to compare leaf venation and characteristics (non-destructive); observe and measure plants in light vs. dark
- Lesson 16: Wilt/rigidity experiments. (If needed, plant new seedlings for use in Lesson 22.)
- Lesson 17-18: Care reminders.
- Lesson 19: Used for root-pressure demonstration.
- Lesson 22: Used for transpiration activity.

**When they are no longer needed — After Lesson 22.**

### 4. FOURTH SET — Lesson 28 Plantings

**Seeds:** bean, pumpkin, sunflower, buckwheat (8 pots, 4 seeds in each)

**Started:** Lesson 28

**Used:** Lesson 32

#### Where they appear

- Lesson 28: Plant seeds.
- Lesson 29-31: Care reminders.
- Lesson 32: Phototropism comparisons.

**When they are no longer needed — After Lesson 32.**

## 6. Miscellaneous Single-Use Plant Materials

**Balsam Plant or something similar:** Lesson 19 (started in Lesson 7 or purchased)\*\*

**Potatoes:** Lesson 12, 24 (can be discarded or transplanted after use).

**Corms/Bulbs:** Lesson 13 (can be discarded or transplanted after use).

**Carnation/Celery:** Lessons 23 (discard after use).

**Two plants (e.g., house plants):** Lesson 24

**Aquatic Plants:** Lesson 26

**Pea Seeds:** Lesson 27 (Soaked 24 hours before use)

**Various Flowers:** Lesson 31

## Summary Table — Seed Groups & Their End Dates

Seed Set	Planted	Used In Lessons	Final Use	Safe to Discard After
Set 1 (Lesson 1)	Lesson 1	1–7	Lesson 7	After Lesson 7
Set 2 (Jar seeds)	Lesson 3	3–6	Lesson 6	After Lesson 6
Set 3 (Lesson 12)	Lesson 12	12–16, 19, 22	Lesson 22	After Lesson 22
Set 4 (Lesson 28)	Lesson 28	28–32	Lesson 32	After Lesson 32
Respiration Peas	Before Lesson 27	27	Lesson 27	After Lesson 27