The Great Pomegranate Count

Standardized Classroom Counting Protocol | Version 1.1

Research question: How many seeds, on average, are in a pomegranate? Each student investigates one fruit. Count individual **arils** (the fleshy, seed-containing units), including pale or imperfect ones.

Materials

One whole fruit per student; one labeled bowl per fruit; clean counting tray; cups for groups of 100; container for discarded rind and membranes; pencil and student sheet. Optional: kitchen scale and measuring tape.

Step-by-step method

1. Label and document. Give each fruit a unique ID. Record the date, classroom code, and region. Teacher records purchase store and stated growing country if known. Weigh the whole fruit now if doing the optional measurement.

2. Open carefully — adult only. Wash the exterior. Over the fruit's labeled bowl, make shallow cuts through the outer rind around the crown and along natural ridges. Avoid cutting into the seed-filled interior. Gently pull apart by hand along the white membranes. Keep all pieces and loose arils together.

3. Students separate arils. Students work around the white membranes and remove arils gently by hand. Count all colors and conditions, including small, pale, and damaged arils. If a damaged aril is identifiable, count it once; never count its pieces twice.

4. Make groups of 100. Count in small batches (e.g., tens) on a clean tray. Transfer each full group of 100 into a separate cup and mark a tally. Keep counted and uncounted arils separate. Count the final remainder.

5. Inspect and verify. Check rind, white membranes, bowl, and workspace for overlooked arils. Total = 100 × complete groups + remaining arils. A partner or teacher should check when practical. Flag any lost arils or uncertainty.

6. Submit results. Teacher reviews and sends the anonymous classroom summary to danit@ncri.io. No eating until counting and checking are complete. Follow school food-safety rules.

Data-quality rule: Mark complete counts separately from potentially incomplete counts. Never invent an estimate for missing arils.

Knife safety: Only a responsible adult cuts. Shallow scoring and hand separation reduce the risk of slicing arils. Never use a knife to extract individual arils.

Student Observation Sheet

One sheet per pomegranate | No student names needed

Pomegranate ID _____

Date counted _____

School / classroom code _____

City / region / country _____

Store / market (if known) _____

Country grown (if known; otherwise unknown)

_____

Whole-fruit weight in grams (optional) _____

Counting tracker

Mark one box for each completed group of 100 arils.

100	200	300	400	500
■	■	■	■	■
600	700	800	900	1000
■	■	■	■	■

Completed groups of 100: _____ Remaining arils: _____

Total arils = (groups × 100) + remaining = _____

Count quality: ■ Complete / no known loss ■ Potentially incomplete / uncertain

What happened if incomplete? _____

Verification: ■ Independently checked ■ Not checked

Optional: variety _____ circumference (cm) _____ taste rating after counting _____

Other observations: _____

Teacher Classroom Summary

Record one row per fruit. Send anonymous observations to danit@ncri.io.

School/class code: _____ Date: _____ City/region/country: _____

Purchase store / market: _____ Country of fruit origin (if known): _____

Fruit ID	Seed count	Complete? Y/N	Verified? Y/N	Weight (g) optional

For additional fruit, duplicate this summary page. Include notes about lost arils, uncertainty, or known growing origin in your email.

Contact: danit@ncri.io | thegreatpomegranatecount.org