Miniature Drawing: Scale Cues and Small-Format Composition

Original tasks 1, 2, 3 / complete keys

Task 1

In a 6 cm by 4 cm frame, draw a hypothetical key 3 cm long. Add a button as a scale cue 1.5 cm wide. State the ratio and one margin check.

Answer: Key: 3 cm long. Button: 1.5 cm wide. Ratio: 1.5 divided by 3 equals 0.5, so the button is half the key length. Margin check: leave at least 1 cm empty on the right side.

Reason: The button is a familiar object with a clear relative size. Drawing it at half the key length gives a simple, checkable scale cue. The margin check keeps the small composition readable.

Check: Measure the key and button with a ruler. Confirm the button is about 1.5 cm and the ratio is about 0.5. Measure the right margin and confirm it is at least 1 cm.

Task 2

In a 7 cm by 5 cm frame, draw a hypothetical leaf 4 cm long. Add a coin as a cue 2 cm wide. Add a second cue: a stem line 1 cm long. Write the two ratios.

Answer: Leaf: 4 cm. Coin: 2 cm. Stem line: 1 cm. Coin ratio: 2 divided by 4 equals 0.5. Stem ratio: 1 divided by 4 equals 0.25. The coin is half the leaf length and the stem line is one quarter.

Reason: Two cues give different scale information: the coin shows width relative to length, and the stem line shows a smaller repeated unit. Both ratios are simple decimals.

Check: Measure each object. Confirm coin is about 2 cm and stem line about 1 cm. Recalculate both ratios and confirm they match 0.5 and 0.25.

Task 3

In an 8 cm by 6 cm frame, draw a hypothetical chair 5 cm tall. Add a cup 2.5 cm tall as a cue. Add a tiny label using lowercase letters with x-height 0.4 cm. State the ratio and check the label height.

Answer: Chair: 5 cm. Cup: 2.5 cm. Ratio: 2.5 divided by 5 equals 0.5, so the cup is half the chair height. Label: lowercase letters drawn from baseline to midline at 0.4 cm. Check: measure one letter from baseline to midline and confirm it is about 0.4 cm.

Reason: The cup is a familiar object that can sit beside a chair. The ratio is simple. The lettering convention is explicit and measurable, allowing different letter styles as long as the height rule is followed.

Check: Measure chair and cup. Confirm ratio is about 0.5. Measure one lowercase letter from baseline to midline and confirm it is about 0.4 cm.

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Original tasks 4 / complete keys

Task 4

In a 7 cm by 5 cm frame, draw a hypothetical book 3 cm wide and 4 cm tall. Add a pencil 1.5 cm long as a cue. Add a surface line 0.5 cm below the book. State two ratios and one margin check.

Answer: Book: 3 cm wide, 4 cm tall. Pencil: 1.5 cm long. Pencil-to-height ratio: 1.5 divided by 4 equals 0.375. Pencil-to-width ratio: 1.5 divided by 3 equals 0.5. Surface line: 0.5 cm below the book base. Margin check: leave at least 1 cm empty on the top side.

Reason: The pencil gives two useful comparisons: against height and against width. Writing both ratios makes the scale cue checkable. The surface line adds a simple spatial cue without extra objects.

Check: Measure book width and height, pencil length, and surface line distance. Confirm pencil is about 1.5 cm and line is about 0.5 cm below the book. Recalculate both ratios and confirm 0.375 and 0.5. Measure top margin and confirm at least 1 cm.

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Source rubric / reflection

- [ ] Frame is drawn and measured, no larger than 8 cm by 6 cm.
- [ ] One focal object is clearly identified and measured in centimeters.
- [ ] Two or three scale cues are present and drawn at the same viewing angle.
- [ ] Ratios between focal object and cues are written and checkable.
- [ ] Negative space is intentional, with at least 1 cm margin on two sides.
- [ ] Lettering convention is defined and followed consistently.
- [ ] Valid alternatives are accepted: different objects, different ratios, and different letter styles are allowed if the convention is stated and checked.

Reflection: What did you check, what did you change, and what will you try next?