

Data-Display Replication

Classroom-ready printable pack · Grades 3–8

Pack contents

Blank graph templates, display/data cards, challenges, and answer keys. Two student sets are included.

Teacher directions

1. Give partners the same blank template.
2. The Describer chooses a completed data display.
3. Explain title, labels, scale, categories, and values.
4. Compare structure before individual marks.

Before class

- Print at 100% on US Letter paper. Use cardstock or laminate for reuse.
- Cut on the thick solid borders. Keep Set A and Set B separate.
- Give challenge/model cards only to the Describer.
- Use a folder, book, or tabletop barrier so partners cannot see each other's work.

Accessibility and accommodations

Begin with a four-category bar graph and scale of one. Use the feature checklist.

Storage-envelope labels

Data-Display Replication

Set A — Describer

Count pieces before storing.

Data-Display Replication

Set B — Builder

Count pieces before storing.

Data-Display Replication

Challenge / model cards

Count pieces before storing.

Data-Display Replication

Teacher reference

Count pieces before storing.

Student language supports

Position: above · below · beside · between · near · far · left · right · clockwise**Clarify:** “Please repeat...” · “Is ___ beside ___?” · “What should I place next?”**Compare:** same · different · rotate · move · replace · sequence

Movable pieces

Set A

Cut on the solid borders. This set is identical to the partner set.

TITLE

title

X
LABEL

x label

Y
LABEL

y label

0,1,2...

scale 1

0,2,4...

scale 2

0,5,10...

scale 5

bar

bar

point

point

segment

segment

picture

picture

key

key

VALUE

value

Movable pieces

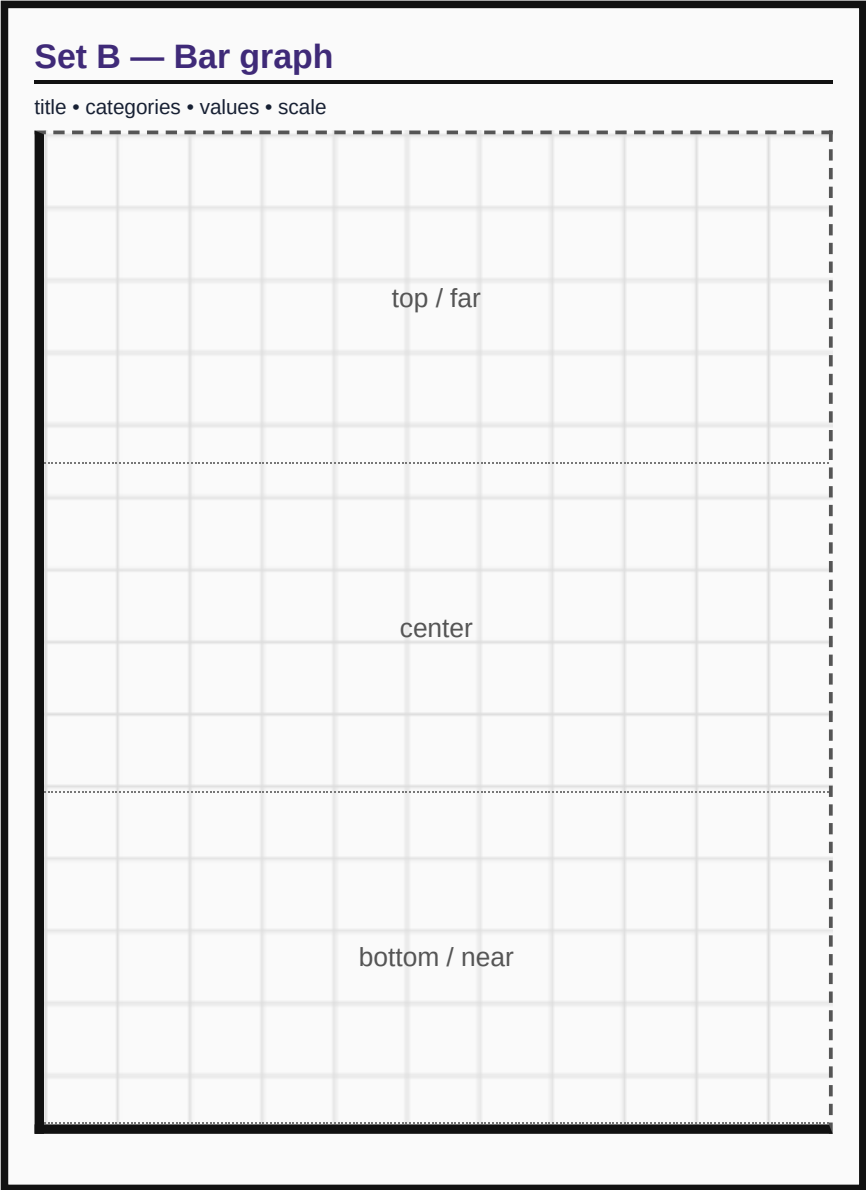
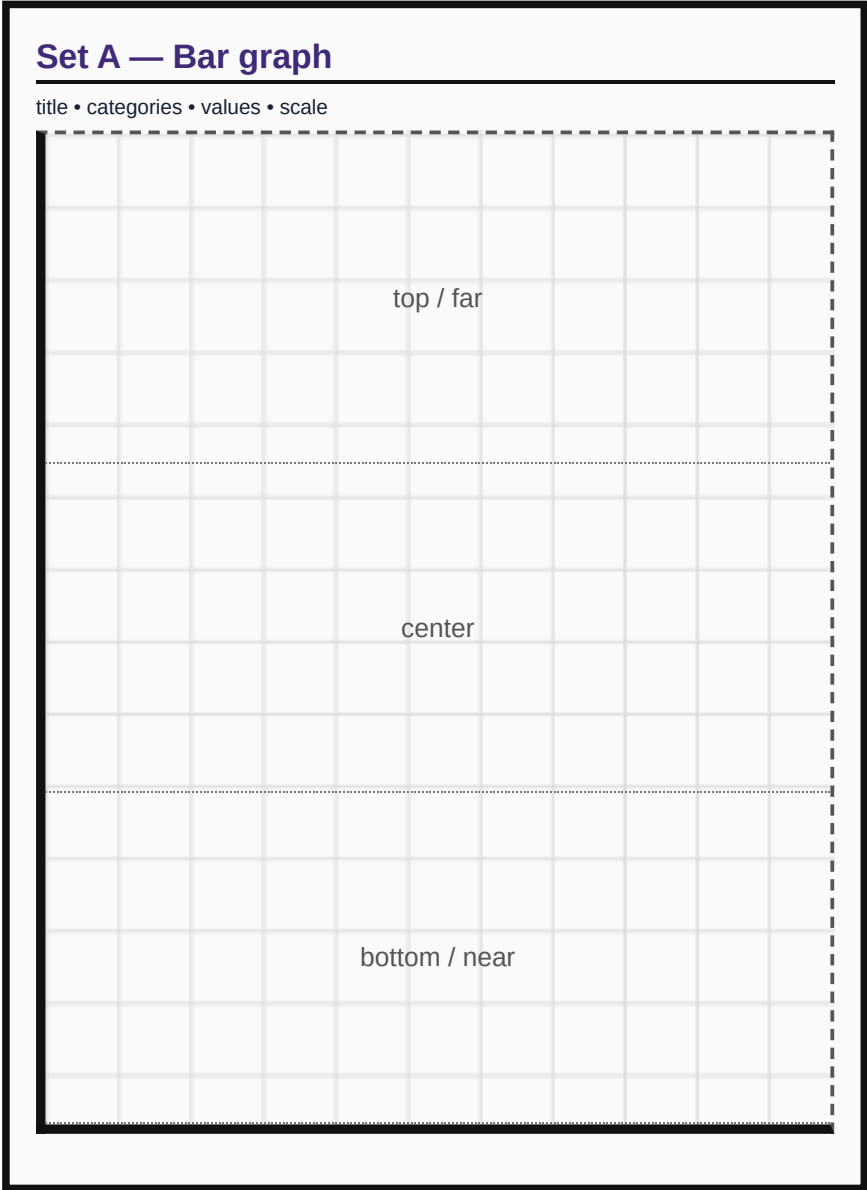
Set B

Cut on the solid borders. This set is identical to the partner set.

TITLE title	X LABEL x label	Y LABEL y label	0,1,2... scale 1
0,2,4... scale 2	0,5,10... scale 5	bar	point
segment	picture	1★ = _ key	VALUE value

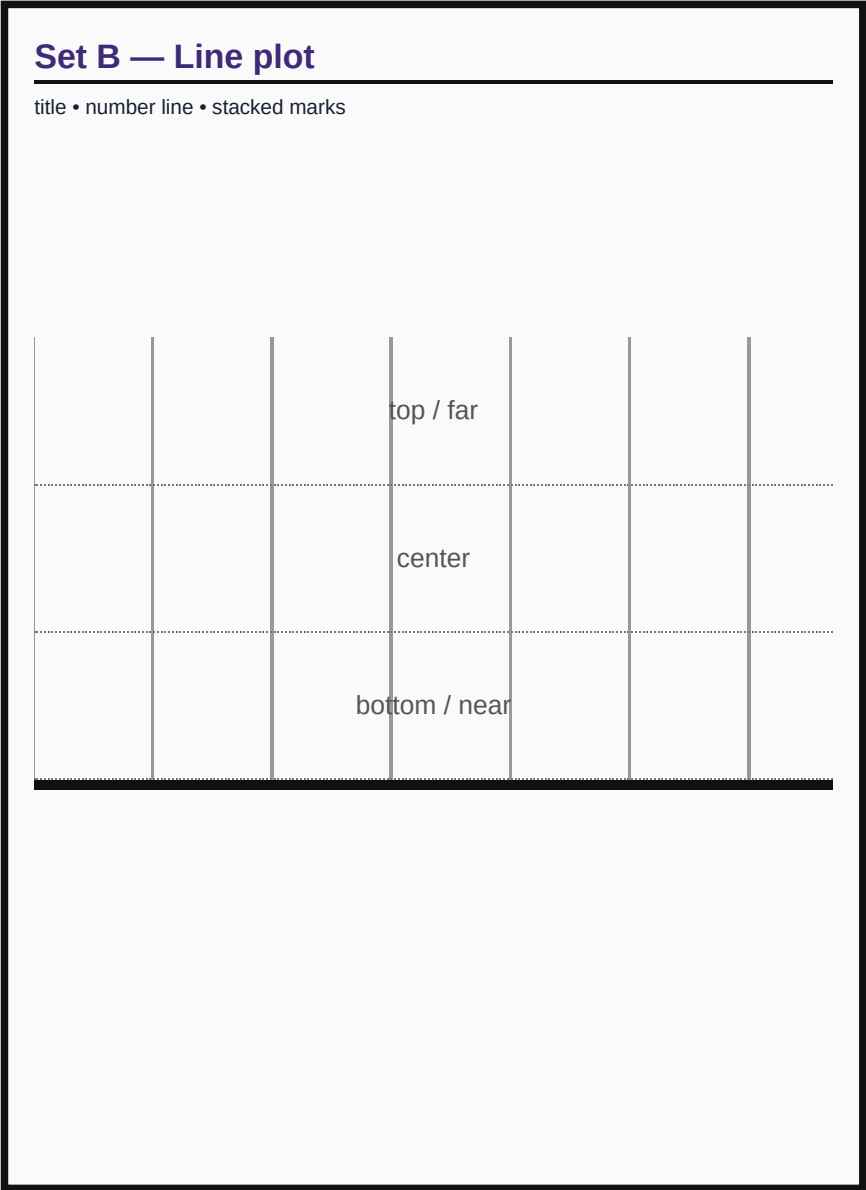
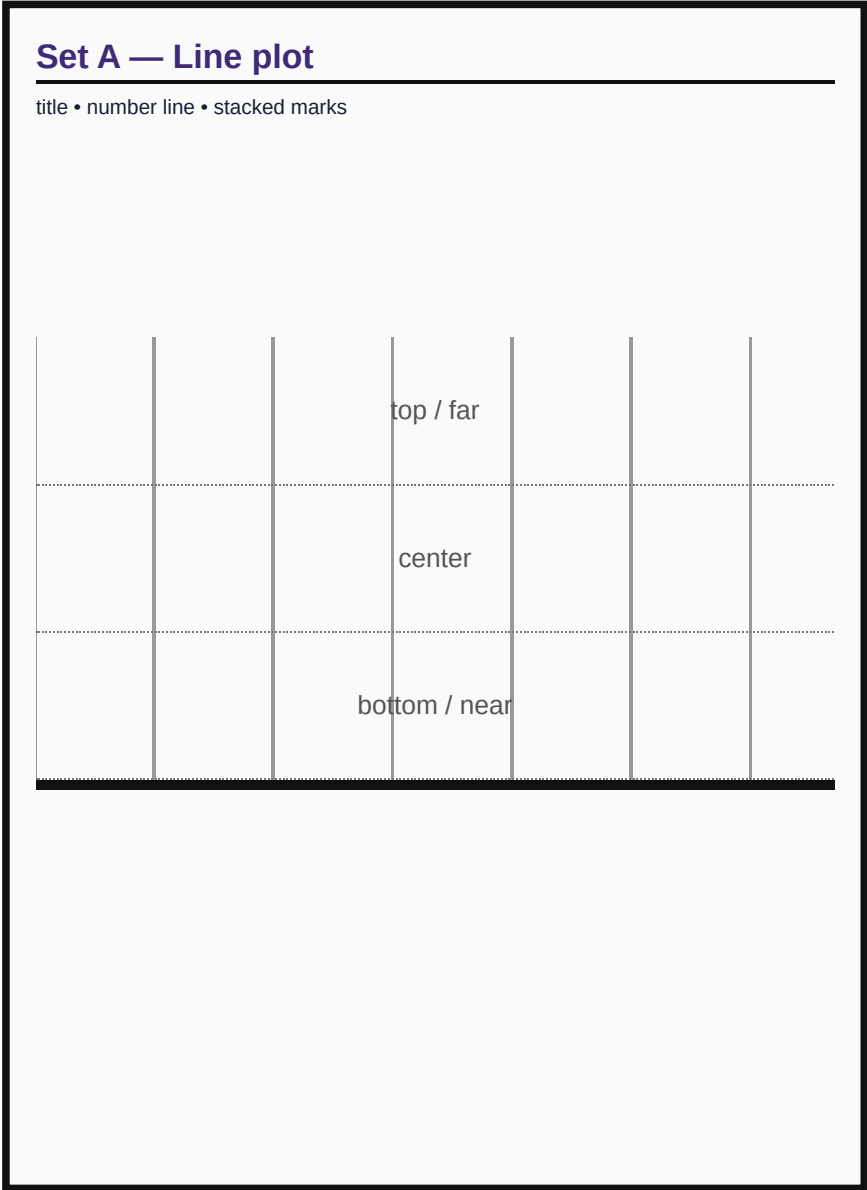
Bar graph

Cut the page in half. Both partner mats are identical.



Line plot

Cut the page in half. Both partner mats are identical.



Pictograph

Cut the page in half. Both partner mats are identical.

Set A — Pictograph

title • categories • symbols • key

top / far

center

bottom / near

Set B — Pictograph

title • categories • symbols • key

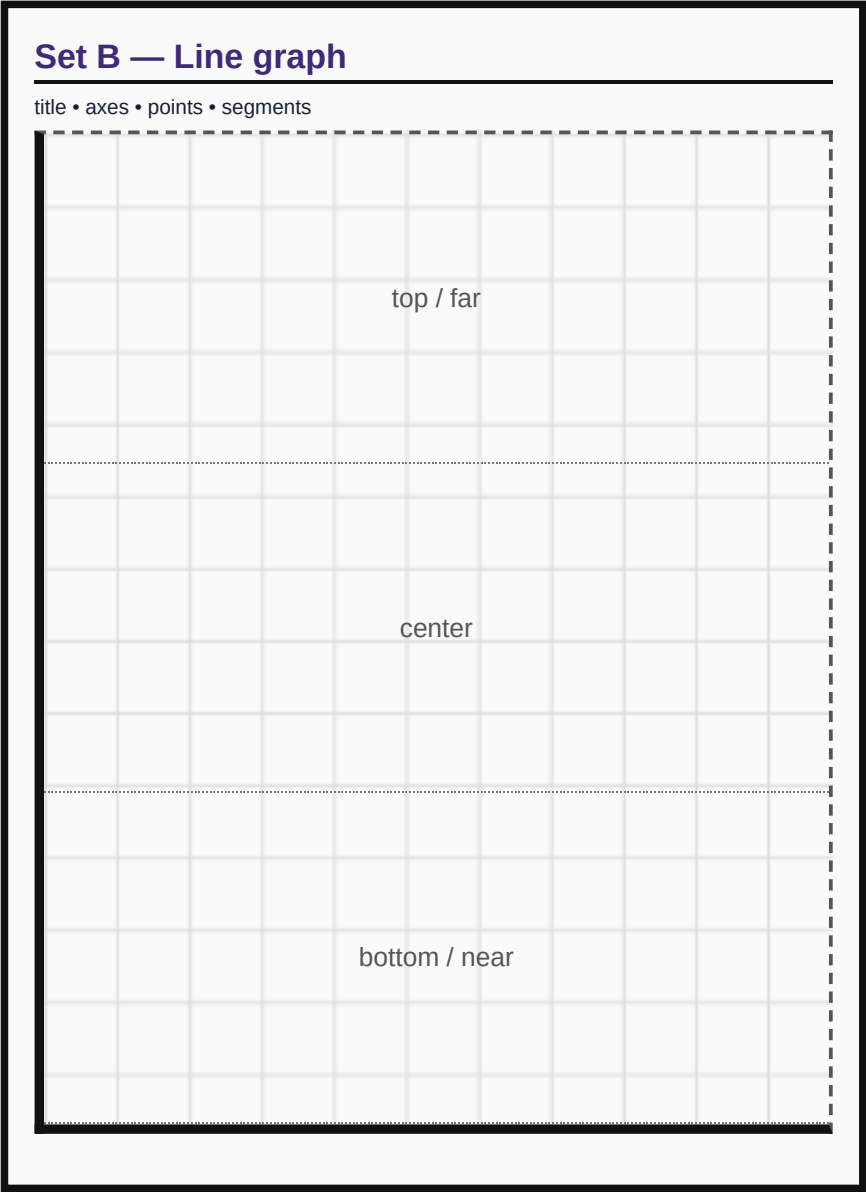
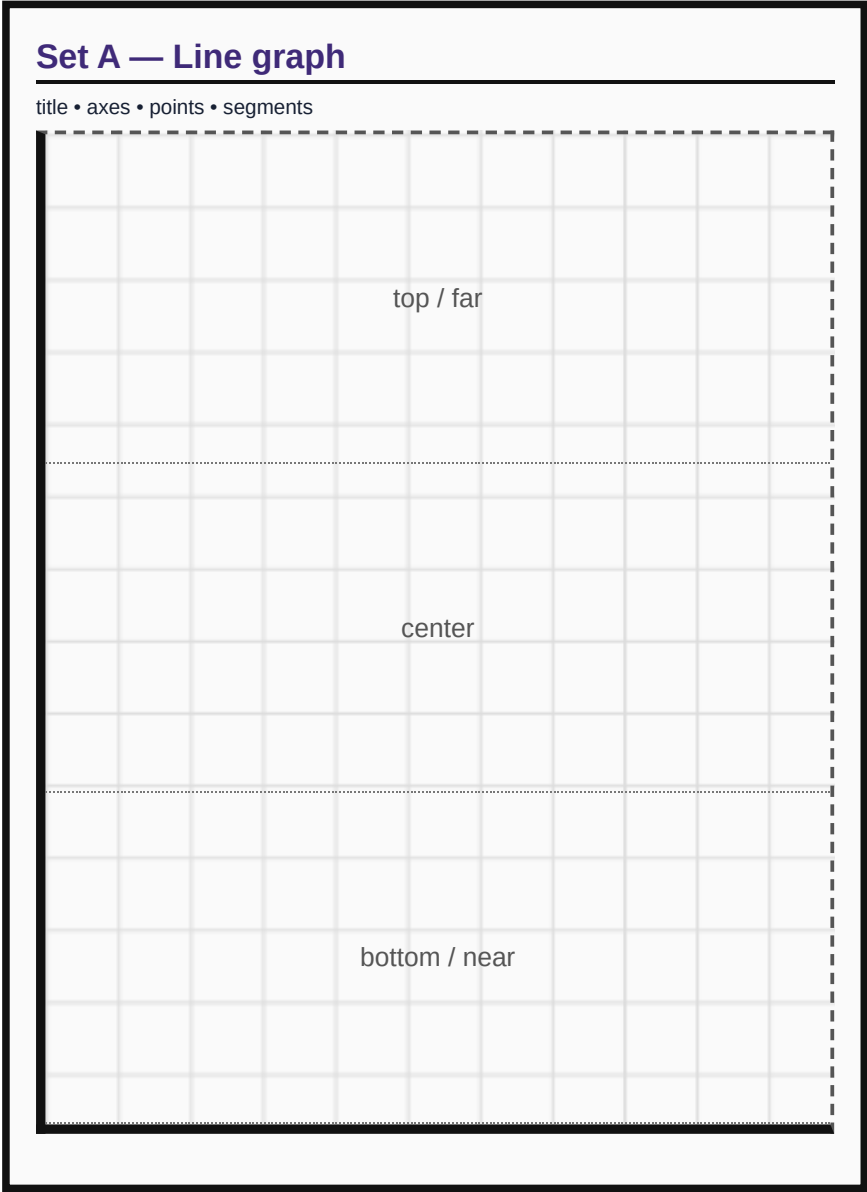
top / far

center

bottom / near

Line graph

Cut the page in half. Both partner mats are identical.



Describer-only challenge cards

Keep these cards hidden from the Builder.

Challenge 1: Bar graph

Books: A=4, B=7, C=5, D=8.

scale 1

Challenge 2: Line plot

1, 2, 2, 3, 3, 3, 4.

stack X marks

Challenge 3: Pictograph

Plants: A=2, B=4, C=3.

one symbol each

Challenge 4: Line graph

**8am=60, 10am=66, noon=72,
2pm=74.**

temperature °F

Data-Display Replication reference

Display checklist

Include an accurate title, labels, consistent scale, and values. Pictographs need a key. Line graphs show ordered change, often over time; line plots show frequency above a number line. Never imply an unmarked broken axis.

Quality check after a round

- Can each student identify pieces by shape or label without relying on color?
- Do both models match in pieces, order, orientation, and relative position?
- Which direction was most precise? Which should be revised?