

Lesson 4.7: Principles: Balance, Focal Point, Rhythm, Proportion

Unit: Unit 4, Spaces We Live In (Environmental Design and Management) **Topic:** 4.2 Design: Elements, Principles, Color **Grade:** 6 to 8 (written at grade 7; see Differentiation for the grade 6 support and grade 8 stretch) **Days:** 2 class periods of 40 minutes (days 99 and 100 of the year) **Room:** Either (classroom or FACS lab; Day 2 needs table space for five teams and wall space for a gallery)

Standards

- NYS module line: NYS EDM 2. Environment and Interior Design c) Incorporate the elements and principles of design into a design plan
- NYS module line: NYS EDM 2. Environment and Interior Design a) Design shared environments and living space zones (for home, school, work, and/or community) which show respect for individual privacy needs and appreciation of large group social needs
- CTE theme line: CTE PSI 2. Design Process (Proactive) a) Implement a formal design process to solve a given problem by a. Defining the problem being addressed; d. Brainstorming and examining possible solutions; e. Selecting the best solution for evaluation; g. Testing and evaluating the prototype and model against the design criteria and constraints
- NYS FACS Learning Standard 2 (Intermediate), Key Idea: Students will know the basic principles of home and community safety. They can demonstrate the skills necessary to maintain their homes and workplaces in a safe and comfortable condition. They can provide a safe and nurturing environment for themselves and others.; Performance Indicator: Students know the basics of managing a safe and healthy home.
- CDOS Standard 3a Universal Foundation Skills: Thinking Skills
- National FCS 3.0: 11.2.1 Judge how the elements and principles of design are used in homes and in commercial and residential interiors.
- National FCS 3.0: 11.4.4 Place furniture with design principles, traffic flow, activity, and the room's architecture in mind.

Enduring understanding and essential question

Big idea: The elements are the ingredients. The principles are the recipe. A room that “just feels right” is a room where someone, on purpose or by luck, got the balance, the focal point, the rhythm, and the proportion to agree. **Essential question:** Can a room be balanced and still be boring? Can it have a focal point and still be a mess?

Objectives

By the end of this lesson, students will be able to:

1. (Low: remember or understand) Given the six principles of design (balance, focal point or emphasis, rhythm, proportion and scale, unity or harmony, contrast), define each in a phrase and name the two kinds of balance.
2. (Mid: apply or analyze) Given eight described room layouts, classify each by the principle it shows best and by its balance type, and explain the visual weight in one sentence.
3. (High: evaluate or create) Given a room outline, a furniture card set, and an assigned focal point, create a room arrangement in ten minutes that uses at least four principles, then evaluate two other teams' rooms against the principles checklist with a specific fix for each.

Vocabulary

Tier 2 (general academic): principle, classify, critique, evaluate Tier 3 (FACS): balance (symmetrical, asymmetrical), visual weight, focal point, emphasis, rhythm (repetition), proportion, scale, unity (harmony), contrast, gallery walk. See the unit vocabulary list for Turkish, Portuguese, and Spanish.

Materials and setup

- Handout, one per student: Handout 04.07 - Principles Sort and Focal Point Game Cards.md (the six principles table, the eight-layout sort, the Focal Point Game rules, the furniture card set, the room outline, the critique checklist)
- Day 2: five furniture card sets, cut apart and in envelopes (from the handout's last pages; each set has a couch, two chairs, a coffee table, a rug, a TV on a stand, a bookshelf, a floor lamp, a plant, a side table, a desk, and a small dining table with two chairs), five room outlines printed large (11 by 17 if you can) with a door, two windows, and one blank wall, five focal point cards (a fireplace, a large window, a big painting, a TV, a bookshelf wall), glue sticks or tape, five markers
- A wall or a table row for the gallery
- Slides: Slides 04.07 - Principles Balance Focal Point Rhythm Proportion (Day 1 and Day 2 labeled)
- Timer visible to the class
- Setup notes: cut the five furniture sets the night before, one envelope per team, and put the focal point card inside face down. Day 1 needs nothing but the handout. Allergy check: none needed. *[Sal: laminate the furniture cards once and they last the year and the project.]*

Pre-assessment

Yesterday's exit cards named the element students are still unsure of. Open Day 1 with that one slide again, one minute. The do now today asks about balance in plain words before the word is taught.

Do now and hook (Time: 5 min)

Day 1. On the board: “Picture a room where every piece of furniture is pushed against one wall and the other side is empty. Write two words for how it would feel to stand in it. Then: what would you move first?”

Debrief: collect the words on the board (lopsided, weird, empty, crowded). Hook: “You just described a room with no balance. Balance is the first of six rules designers use to fix a room. Tomorrow, you get a room, a pile of furniture, and ten minutes, and the whole class judges your room with these six rules. Today you learn the rules.”

Day 2. On the board (4 minutes today): “Name the two kinds of balance. Which one is matching pairs? Then: what is the focal point of this classroom, and why does your eye go there?” Debrief in one minute; the answers are the check on Objective 1.

Procedure

Day 1

Step	Teacher will	Students will	Time
1. Direct instruction: the six principles	One slide per principle with two described photos each. Balance: visual weight spread so no side feels heavier; symmetrical is matching pairs (two lamps, two chairs), asymmetrical is different things with equal weight (a tall plant on one side, a wide low chest on the other). Visual weight: dark, big, rough, and bold weigh more than light, small, smooth, and pale. Focal point and emphasis: the one thing your eye lands on first; a room with two stars has none. Rhythm: repeating something so the eye moves	Fill in the six-principles table on the handout, Part 1: a phrase, the two kinds of balance, one example.	12 min

	(evenly spaced frames, a color that shows up three times). Proportion and scale: the size of things compared to each other and to the room; a huge sectional in a tiny room, a tiny lamp beside a huge couch. Unity or harmony: everything looks like it belongs together (a shared color family, a shared style). Contrast: something different that makes the rest stand out (a dark shelf on a light wall).		
2. Learning activity: the Principles Sort	Teams of three. Eight described layouts on the handout, Part 2 (from the balance-and-harmony sort, rewritten): two matching wingback chairs facing a fireplace; a large dark sectional on one wall and a single light armchair opposite; identical tables on both sides of a hallway entrance; a tall plant on the left and a tall bookshelf on the right; a heavy dark dresser balanced by two light chairs; three same-size	Classify eight layouts; write the visual-weight sentence for each.	10 min

	frames evenly spaced over a couch; a wide rug on one side and tall artwork on the other; a king bed in a room barely bigger than the bed. Task: for each, the principle it shows best, the balance type if it is a balance example, and one sentence on the visual weight. Circulate with the clipboard check. Students who need the Home Safety and Conservation Quiz retake review meet you at the side table for the second half of this step.		
3. Guided practice: build the critique checklist	Turn the six principles into six yes-or-no questions for tomorrow's gallery: Is there one clear focal point? Does the room balance (which kind)? Is anything repeated so the eye moves? Is every piece the right size for the room and for each other? Does it look like one room, not five? Is there one thing that stands out on purpose? Write them on the board; students copy onto	Copy the six questions; add one of their own.	5 min

	Part 4 of the handout.		
4. Share	Take the two layouts teams disagreed on most (usually the sectional and the king bed). Settle them: the sectional is asymmetrical only if the armchair is heavy enough; the king bed is a proportion and scale problem, not a balance problem.	Report, argue, correct in another color.	4 min

Day 2

Step	Teacher will	Students will	Time
1. Rules of the Focal Point Game	Five teams of four to six. Each team gets a room outline, a furniture envelope, and a focal point card, face down until the timer starts. Rules: the focal point must be where the card says (fireplace on the blank wall, big window where the window is, and so on); every piece in the envelope must be used or set aside with a written reason; the door has to open and a person has to be able to walk from the door to the window without climbing anything;	Open the envelope, read the focal point card, plan for one minute before touching the cards.	4 min

	ten minutes; tape when you are sure. The design process on the slide in four words: define, brainstorm, choose, test.		
2. Learning activity: the build	Start the timer. Circulate. Answer no questions about whether a layout “is good.” At eight minutes, call “tape.” At ten, call “hands off” and have teams carry the room to the gallery wall or table row and label it with the focal point.	Build the room around the focal point using the principles; tape it down; label it.	10 min
3. Practice: gallery walk and critique	Teams rotate to the next two rooms, five minutes each, with the checklist on Part 4 of the handout. For each room: score all six questions yes or no, then write one specific fix (“move the bookshelf to the left of the window so the two sides balance”). Rotate on the reset cue.	Critique two rooms with the checklist; write one fix each.	12 min
4. Debrief	Each team gets its two critique sheets back and reads the fixes. Ask three teams: which fix would you take and which would you argue with? Close on the essential question: which	Read their critiques, defend or accept, answer the essential question with a hand vote.	6 min

	room was balanced and still boring? Which had a focal point and was still a mess?		
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Questions to ask

Monitor understanding:

- Which weighs more to the eye, a dark blue couch or a pale yellow one of the same size? Why?
- Two matching lamps on two matching tables: which principle, and which kind?
- A room has a fireplace, a huge TV, and a bright red couch. What is its focal point?

Deepen learning:

- Most modern rooms use asymmetrical balance. Why would a designer choose the harder kind?
- Can a room be perfectly balanced and still feel dead? What is missing?
- Your team put the couch facing the fireplace. Where does a person walking in from the door go? Did the focal point cost you the traffic path?

Check for understanding

Day 1: clipboard checklist during Step 2, for each team a yes or no on “principle named correctly,” “balance type correct where it applies,” and “visual weight sentence names a reason (dark, big, rough, bold).” Three yeses on the first four layouts is “got it.” Day 2: the Day 2 do now (two kinds of balance, the classroom’s focal point) is the Objective 1 check; the critique sheets are the Objective 3 check, read for a fix that names a piece and a place.

Closure (Time: 4 min)

Day 1. 3-2-1 exit card: 3 principles you can define, 2 kinds of balance with an example each, 1 principle you want to see again tomorrow. Three students read line 3.

Day 2. Exit card: the principle your room did best, the principle your room did worst, and the one fix you would make if you had two more minutes. Sort into “got it” and “needs more.” The “needs more” principle is the first slide of Lesson 4.9’s vocabulary check practice.

Differentiation and supports

- ELL: each principle slide has two photos and the word in Turkish, Portuguese, and Spanish (see Vocabulary 04.md); the eight layouts are one sentence each; the critique checklist is six yes-or-no questions with a picture cue; sentence starter for the fix: “Move the ___ to ___ so that ___.” Pair each ELL student with a partner during the build; building needs no language.

- IEP and 504 (general): the furniture cards make the game physical, so a student who struggles to draw or write can lead the build; the critique can be done orally to a teammate who writes; the sort has a checkbox column for the balance type; extended time by finishing the last two layouts as homework; fidgets allowed; a fixed role in the team (the placer, the taper, the reader, the writer).
- Grade 6 support: the sort uses five layouts (the first five); the game uses three principles on the checklist (focal point, balance, proportion); the critique asks for one yes-or-no and one fix.
- Grade 8 stretch: the sort adds a ninth layout students write themselves for a partner team to classify; in the game, the team must also write which piece they would remove to improve proportion and why, and which principle they gave up to keep the traffic path (this previews the traffic flow work in Lesson 4.10).
- UDL checkpoint used: multiple means of action and expression (the room is built with cards, not drawn) and multiple means of engagement (a timed team build with a class critique).
- No-kitchen or no-machine alternative: not a lab. If the furniture cards cannot be printed, run the build on the whiteboard with magnets and sticky notes labeled with the furniture names; the checklist is the same.

Assessment

Objective	Standards met	Learning task	Assessment (formative or summative; tool)
1. Define six principles and two kinds of balance	EDM 2. c); National FCS 11.2.1	Part 1, Day 1 Step 1; Day 2 do now	Formative; table checked; summative on the Design Vocabulary Check in Lesson 4.10
2. Classify eight layouts with a visual-weight sentence	EDM 2. c); CDOS 3a Thinking Skills; National FCS 11.2.1	The Principles Sort, Day 1 Step 2	Formative; clipboard checklist; handout scored complete, partial, or missing
3. Build a room around a focal point and critique two others	EDM 2. a), 2. c); PSI 2. a) a., d., e., g.; National FCS 11.4.4; Std 2 KI	The Focal Point Game, Day 2 Steps 2 and 3	Formative; the built room is scored on the six-question checklist by the teacher (out of 6) for daily work; the two critique sheets are scored on whether the fix names a piece and a place

Homework

None. Optional: pick one wall at home and decide whether it is balanced. If not, name one thing you would move. No photos.

Connections

Art: the art teacher's principles list overlaps (balance, emphasis, rhythm, proportion, unity, contrast) and may add movement or variety; a shared word wall between the two rooms stops the double-teaching. Math: proportion and scale are ratio language; the math teacher can borrow the king-bed layout as a ratio problem. *[Sal: your Brentwood packets had a Marcus and a Destiny story for balance and focal point; use one as a two-sentence hook if you want a story, and keep the names fictional and unrepeated.]*

Sources

- NYS Middle Level CTE FACS Content Module 04, Environmental Design and Management (nycotecenter.org, June 2018), lines 2. a) and 2. c). Copy in 02 Standards/NYS Module PDFs/.
- NYS Middle Level CTE Theme Module, Problem Solving and Innovation, line 2. a) with sub-lines a., d., e., and g. Text per 02 Standards/NYS ML CTE FACS Modules - verbatim extract of all twelve.md.
- NYS Learning Standards for Health, Physical Education, and Family and Consumer Sciences (1996), Standard 2, Intermediate. Wording per the crosswalk, Part A.6.
- National Standards for Family and Consumer Sciences Education 3.0 (LEAD FCS Education, 2018), competencies 11.2.1 and 11.4.4, per 02 Standards/STANDARDS SOURCES - web research.md.
- Sal's own materials: the "Balance and Harmony" Brentwood packet supplied the eight layouts in the Balance Detective table, rewritten here; "The Focal Point Game" packet supplied the focal point finder and the design-around-a-focal-point task, which is now a timed team build with cards, a gallery, and a critique checklist.

Teacher notes

- If Day 1 runs short, cut Step 3 and hand out the six checklist questions pre-printed on Day 2 (they are on the handout anyway). If Day 2 runs short, cut the gallery to one rotation and do the debrief with three teams instead of all five. Never cut the build time; ten minutes is already tight.
- Common mistake: calling every uneven room "asymmetrical." Asymmetrical means balanced with different things. Uneven with no balance is just uneven. The pushed-to-one-wall room in the do now is the example.
- Common mistake in the game: teams put the couch with its back to the door so it faces the focal point, and nobody can walk in. That is the traffic argument you want; do not solve it for them. Lesson 4.10 does traffic flow properly.
- The "every piece used or set aside with a reason" rule is what makes proportion real. A team that sets aside the dining table because "the room is too small" has learned scale.



- Keep the built rooms taped and photographed. The photos are the review slides for the Design Vocabulary Check and the “before” examples for the project.
- *[Sal: the retake review for the Home Safety and Conservation Quiz happens at your side table during Day 1 Step 2. Items 7, 8, and 11. Five minutes per group of three or four.]*