

When you visited Taliesin West, you experienced Frank Lloyd Wright's desert laboratory, a place where he and his students experimented with many of the principles of organic architecture, building in harmony with a harsh desert environment. As you learned from your visit, Wright and his apprentices were respectful of the landscape, as the buildings there do not damage the environment, but instead blend into the desert, withstanding the harsh climate both structurally and comfortably for the people inside of them.

PART 1

Attached are images of a few different Frank Lloyd Wright-designed buildings. Please keep the students in their engineering design groups from the field trip, and assign each group one of the following buildings to review.

FRANK LLOYD WRIGHT-DESIGNED BUILDINGS: Fallingwater, Cedar Rock House, Robie House, Walker House, and David and Gladys Wright House.

PART 2

Pass out images to groups.

PART 3

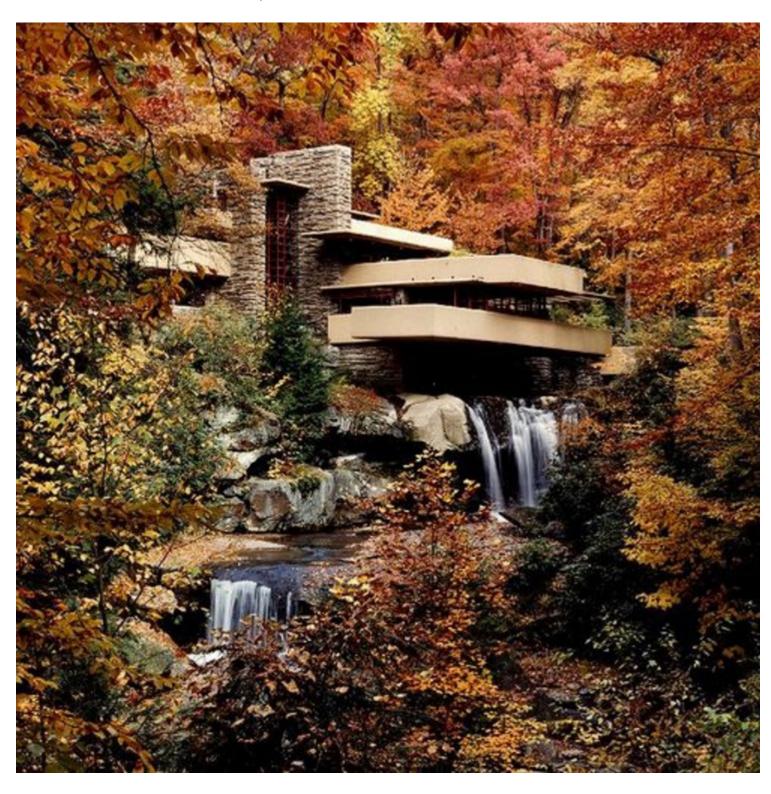
While the groups study and review these images please have them answer the following questions.

- What is the purpose of this building? For example, is it a home, theatre, mall?
- Which region do you think your building is located in? What is the reasoning behind your group's decision?
- Did Frank Lloyd Wright make it fit into its environment properly? If so, what materials do you think he used to build the structure in the image?
- Does this building look like it has withstood the weather and other environmental impacts over the years?
- Can your group identify the geometric shapes that make up the building? If so, please count how many shapes make up the total structure.

PART 4

Have each group present their findings to the class.

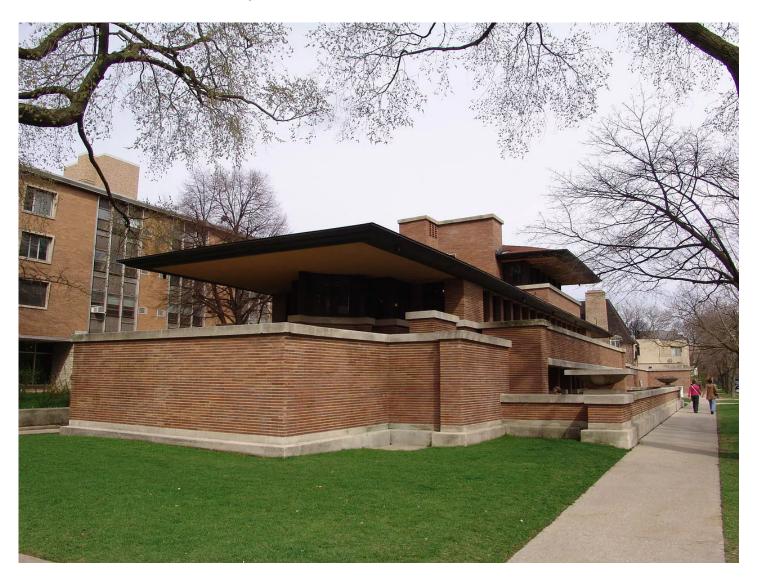
FALLINGWATER: MILL RUN, PENNSYLVANIA



CEDAR ROCK HOUSE: IOWA



ROBIE HOUSE: CHICAGO, ILLINOIS



WALKER HOUSE: CARMEL-BY-THE-SEA, CA



DAVID AND GLADYS WRIGHT HOUSE: PHOENIX, AZ



Building with a Purpose

AZ STANDARDS

NGSS STANDARDS

FRANK LOYD WIGH FOUNDATIONS TH FOR LEARNING

Kindergarten: K.G.A.2; K.G.A.1; ETK-S₃C₂-PO₄; ETK-S₄C₂-PO₁

First Grade: ETo1-S3C1-PO2: ETo1-S4C1-PO1; ETo1-S4C2-PO1,2; ETo1-S1C1-PO1; 1.G.A.1

Second Grade: ETo2-S1C1-PO1; ETo2-S3C2-PO2; ET-S4C1-PO1; ETo2-S4C2-PO1,2

Third Grade: ETo3-S3C2-PO1,2: ETo3-S1C1-PO1

Fourth Grade: ETo4-S1C1-PO1; ETo4-S3C2-

Fifth Grade: ETo6-S3C2-PO1

Sixth Grade: ETo6-S3C2-PO1

Seventh Grade: ETo7-S2C2-PO1; ETo7-S3C1-

PO1; ET07-S4C1-PO1

Eighth Grade: ETo8-S2C2-PO1; ETo8-S3C1-

PO1; ET08-S4C2-PO1

High School: ETHS-S2C2-PO1; ETHS-S4C2-

PO₂

Kindergarten: K-2-ETS1,2,3

First Grade: K-2-ETS1

Second Grade: K-2-ETS1

Third Grade: 3-ESS3; 3-5ETS1

Fourth Grade: 4-ESS3-2; 3-5-ETS1-3

Fifth Grade: 5-ESS3-1; 3-5ETS1-3

Sixth-Eighth Grade: MS-ESS3-3; MS-

ETS1-1,2,3,4

High School: HS-ETS1-1,2,3,4