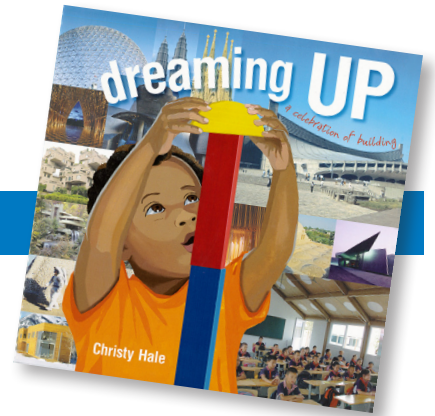


Dreaming Up:

A CELEBRATION OF BUILDING



RIF EXTENSION ACTIVITIES FOR EDUCATORS

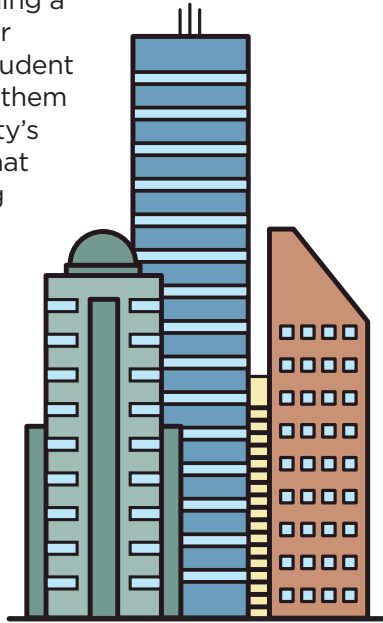
STEAM-THEMED: SCIENCE, TECHNOLOGY, ENGINEERING, ART, MATH

SCIENCE

ADAPTATION STATION

In Los Angeles, tall buildings are designed to withstand earthquakes. Houses near the beach are often built on poles to withstand flooding. As a class, discuss the geography and climate of your area.

What special adaptations might be needed when designing a building there? For older students, assign each student a city to research. Have them list 5 facts about that city's geography or climate that might influence building design. Have students use the list to design a building adapted to the area. Students should label and explain their designs. (Possible cities: Amsterdam, Hong Kong, Cairo, Positano.)



TECHNOLOGY

INTERNET ARCHITECT

Let students go to <https://www.mecabricks.com/> to make online Lego creations. They should try to model one of the buildings in the book or an important building in your town. Older students can visit www.architectstudio3d.org to design a house with the help of a virtual Frank Lloyd Wright.

ENGINEERING

DESIGNING WOMEN

Materials: scrap materials (boxes, plastic bottles, paper towel tubes, etc.), scissors, tape

Have students visit www.mayalin.com or www.zaha-hadid.com to see works famous by female architects Maya Lin and Zaha Hadid. In pairs or small groups, students should pick one design and try to build a model of it using only scrap materials.

ART

Materials: paper, crayons or markers

STORYBOOK BUILDING

Sometimes, a story's setting is as important as its characters. Pick a book passage describing a building. Read the passage aloud, telling students to use the descriptive details to visualize the setting. Then, have students draw what they think the building would look like. (For ideas, visit www.pbs.org/parents/booklights/archives/2009/10/five-favorite-fictional-houses-from-childrens-literature.html.)

SHAPE IT UP

Concrete or *shape* poetry is written in the shape of the object it describes. Let students pick a type of building and write a poem describing that building (how it looks, its purpose, etc.). Students should write their poems on white paper in the shape of the building and decorate the background.

MATH

ANOTHER DIMENSION

Materials: measuring tape or ruler, graph paper, pencils

What are *dimensions*? For younger students, teach basic measuring skills by having students find the length, height, and width of objects around the room in feet and inches. Why do architects need to consider a building's dimensions? For older students, introduce the concept of scale—the ratio of distance in a drawing or model to distance in real life. Give each student graph paper. Tell them 1 square on the paper represents 1 inch in real life. Have students measure the dimensions of 2-3 objects in the room and draw those objects to scale on the paper. Why must architects pay attention to scale?

