



LESSON

Design & Materials: Homes for Different Climates



Ways and how are houses different around the world? Here are homes and shops in Yangshuo, China.

Summary

Students learn about some of the different climate zones in China and consider what would be appropriate design, construction and materials for houses in those areas. This prepares them to conduct the associated activity(ies) in which they design, build and test small model homes for three different climate zones.

This engineering curriculum aligns to Next Generation Science Standards (NGSS).

Climate and Latitude-Specific Design

China

A detailed understanding of variations in weather patterns and site's location lets designers take advantage of specific phenomena like seasonal winds, sun angles and total insolation.

Innovative Weather P

Bioclimatic design

Passive cooling

9 INDUSTRY, INNOVATION
AND INFRASTRUCTURE



11 SUSTAINABLE CITIES
AND COMMUNITIES

