Function and Design Strategy: Roof

What are the functions of the roof on a house?

Pick one function. Now write down the design strategy for how the roof meets the function. That is, if you were to describe to someone how the roof works, what would you say?

Draw the design strategy.
Answer Key

Suggested Functions
Keep water out
Keep heat in
Protect from sun
Provide structural support for the walls

Design Strategy

Here’s one way to write a design strategy for a typical shingle roof in the United States:

“The roof keeps water out by having a slanted structure that sheds water and being covered by pieces of waterproof material that overlap top-to-bottom and side-to-side so that water doesn’t seep into spaces between.”

Note: Other types of houses and roofs will likely have different design strategies!

Draw the design strategy.

Note: The design strategy sketch doesn’t have to be sophisticated, but should provide enough detail to make clear how the strategy works.