

# Grand Ronde Plankhouse

The Confederated Tribes of Grand Ronde built a traditional plankhouse in 2010. When the tribe built the plankhouse they wanted to make sure it could accommodate a large amount of people for ceremonies and events. In order to accomplish that goal, the tribe had to use real world math to make sure the building would be big enough. The plankhouse is 90 feet long, 50 feet wide and the walls are 7 feet tall. The peak is 26 feet above ground.

1. Using the information above, label the plankhouse with its dimensions.

Width= 50' Length= 90' Height of walls= 7' Total height= 26'

1. Next find the area, volume and surface area of the plankhouse. Make sure to show your work.

## AREA

Rectangle (lw) 4500sq ft Triangle (1/2bh) 475sq ft Total= 4975sq ft

## VOLUME

Rectangular prism (lwh) 31500 Pyramid (1/3Bh) 28500 Total= 60000

## SURFACE AREA

Rectangular prism (2lw+2lh+2wh) 10960 Pyramid (1/2ps+B) 8840 Total= 19800