

Lunar Habitat and What's The Difference (WTD)  
Student Worksheets for Case Study III

Instructional Curriculum

Mathematics: Grades 6-9

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## **Moon Math Case Study III**

### **Case Study III: Level A Student Worksheet - Assignment**

On a sheet of graph paper create a scale model of a single-cylinder shaped lunar habitat. Consider the following:  $h = 30$  m,  $r = 4$  m. Use the following scale:  $1$  m =  $1$  cm.

### Case Study III: Level B Student Worksheet- Assignment

: On a sheet of graph paper create a scale model of a triple-cylinder shaped lunar habitat. Consider the following:  $h = 4.2$  m,  $r = 10.8$  m. Use the following scale:  $1$  m =  $2$  cm.

### Case Study III: Level C Student Worksheet - Assignment

On a sheet of graph paper create a scale model of a single-cylinder shaped lunar habitat. Consider the following:  $h = 32.3$  m,  $r = 4.1$  m.

Also, create a scale model of a triple-cylinder shaped lunar habitat. Consider the following:  $h = 3 \frac{7}{9}$  m,  $r = 11 \frac{3}{7}$  m.

Use the following scale for both models:  $1$  m =  $1.2$  cm.

**Case Study III: Findings Sheet**

Name(s): \_\_\_\_\_  
Level: \_\_\_\_\_  
Period: \_\_\_\_\_  
Date: \_\_\_\_\_

Directions: Fill out this sheet completely and turn it in with all work to your teacher.

<b>Question</b>	<b>Answer</b>	<b>Reasoning</b>
<i>Question 1:</i> What did you learn by creating a floor plan of your house or apartment?		
<i>Question 2:</i> What did you learn by creating a scale model of the lunar habitat?		