Math 8 LG 6

VOLUME



We live in a 3-dimensional word... Check out Chapter 7 Opener on pages 242 & 243.

V LEARNING GUIDE EXPECTATIONS:

On the completion of this learning guide you will be able to:

- 1) understand the concept of volume
- 2) calculate the volume of a prism
- 3) calculate the volume of a right cylinder
- 4) solve problems involving prisms and cylinders



You are ready to progress to the next learning guide when you can demonstrate your understanding of the above expectations. Please refer to your Mathematics 8 Marks Record Sheet to determine the assessment.





THSS Math 8 Learning Guides and Math 8 Journal Entries Package



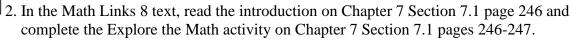
LEARNING ACTIVITIES:



Expectation #1: Understand the concept of volume.



1. Watch and take notes on instructional video on Volume.



- 3. In the Math Links 8 text, work through Example 1 on Chapter 7 Section 7.1 pages 247-248. Now complete Chapter 7 Section 7.1 #3, 4 on page 250.
- 4. In the Math Links 8 text, work through Example 2 on Chapter 7 Section 7.1 page 248. Now complete Chapter 7 Section 7.1 #5, 6 on page 251.



5. Read Key Ideas on Chapter 7 Section 7.1 page 249. In your math journal, complete the journal entry for LG6 Expectation 1.



Expectation #2: Calculate the volume of a prism.



- 1. Watch and take notes on instructional video on Volume of a Prism.
- 2. In the Math Links 8 text, read the introduction on Chapter 7 Section 7.2 page 254 and complete the Explore the Math activity on Chapter 7 Section 7.2 pages 254-55.
- 3. In the Math Links 8 text, work through Example 1 on Chapter 7 Section 7.2 page 255. Now complete Chapter 7 Section 7.2 #4, 5, 6 on pages 258-259.
- 4. In the Math Links 8 text, work through Example 2 on Chapter 7 Section 7.2 page 256. Now complete Chapter 7 Section 7.2 #7, 8 on pages 259.
- 5. In the Math Links 8 text, work through Example 3 on Chapter 7 Section 7.2 pages 256-57. Now complete Chapter 7 Section 7.2 #9, 10 on page 259.
- 6. Read Key Ideas on Chapter 7 Section 7.2 page 257. In your math journal, complete the journal entry for LG6 Expectation 2.
 - 7. In the Math Links 8 text, complete Chapter 7 Section 7.2 #11, 12, 14, 16, 19, 22 on pages 260-61.



Expectation #3: Calculate the volume of a right cylinder.



- 1. Watch and take notes on instructional video on Volume of a Cylinder.
- 2. In the Math Links 8 text, read the introduction on Chapter 7 Section 7.3 page 262 and complete the Explore the Math activity on Chapter 7 Section 7.3 pages 262-63.
- 3. In the Math Links 8 text, work through Example 1 on Chapter 7 Section 7.3 page 263. Now complete Chapter 7 Section 7.3 #4, 5 on pages 265.
- 4. In the Math Links 8 text, work through Example 2 on Chapter 7 Section 7.3 page 264. Now complete Chapter 7 Section 7.3 #6, 7 on pages 265-66.
- 5. Read Key Ideas on Chapter 7 Section 7.3 page 264. In your math journal, complete the journal entry for LG6 Expectation 3.
 - 6. In the Math Links 8 text, complete Chapter 7 Section 7.3 #9, 12, 14, 16, 18 on pages 266-67.



Expectation #4: Solving Problems Involving Prisms and Cylinders.



- 1. Watch and take notes on instructional video on Solving Problems with Prisms and Cylinders.
- 2. In the Math Links 8 text, read the introduction on Chapter 7 Section 7.4 page 268 and complete the Explore the Math activity on Chapter 7 Section 7.4 pages 268-69.
 - 3. In the Math Links 8 text, work through Example 1 on Chapter 7 Section 7.4 page 269-70.
 - 4. In the Math Links 8 text, work through Example 2 on Chapter 7 Section 7.4 page 270. Now complete Chapter 7 Section 7.4 #4, 5, 6 on pages 273.
 - 5. In the Math Links 8 text, work through Example 3 on Chapter 7 Section 7.4 pages 271-72. Now complete Chapter 7 Section 7.4 #7 on page 273.



- 6. Read Key Ideas on Chapter 7 Section 7.4 page 272.
- 7. In the Math Links 8 text, complete Chapter 7 Section 7.4 #8, 11, 13, 15, 18, 20, 21 on pages 273-75.

REVIEW AND CHALLENGE



1. In the Math Links 8 text, complete Chapter 7 Review pages 276-77 #1-4, 5, 9, 10, 11, 13, 14, 17, 19, 20.