



THE GREAT WALL CHALLENGE!



Book 3



TeachersDungeon.com



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Growth Pattern for your GREAT WALL!

Photo by Jacqueline Bobeldijk

Photo by val70

Photo by Kym Parry

Section 1

Section 2

Section 3

Each square, star, and triangle counts as one block!



Students Use Growth Patterns to Create Formulas and Solve for Variables!



Includes a Video Tutorial for Each Step of this Problem!



WICKED WASPS, ABOMINABLE ALLIGATORS, AND BRUTAL BISON ARE ATTACKING YOUR SCHOOL!



Will your math skills be enough to save your school?



Build the **GREAT WALL** and protect the students! 🏠🔒



Wicked wasps are buzzing and swarming, ready to **sting unsuspecting children!**



Abominable alligators are **crawling faster than fast**, eager to **snap their powerful jaws** on a tasty leg!



Brutal bison are **swinging their massive heads** and **thrusting their sharp horns**, attempting to **break down the classroom walls!**



But that's not the worst of it—more creatures are on their way! You have just been told that **67 different animals** are **racing toward your school, ready for destruction!**



Luckily for you—your school architects have designed a **powerful wall that grows at the same rate as these attacking animals!**



Your mission as the School Mathematician is to **calculate how many bricks are needed to build the wall** and protect your school!

🎥 📝 On Your Own - Step A 💡 🎥

◆ 📝 On Your Own 💡 🎥 ◆

✅ ✍️ **Complete this problems first** 📝

▶️ Then, 👉 **Click on the photo** to watch the video and check your answer! 🎥 🐾

📝 Follow these Steps:

- 1) **Copy the first three sections** of the GREAT WALL on your paper.
- 2) **Based on the pattern**, figure out the **4th section** of the wall and **draw** that section next to the first three sections.

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◆ 📝 **On Your Own** 💡 🎥 ◆

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📝 **Follow these Steps:**

- 1) **Create a T-Chart** 📊 that shows the number of bricks needed to build the **7th** section.
- 2) Solve for the **Iterative Function**, which is also the **Coefficient**.
- 3) **Color the Coefficient** ● blue on each section that you drew.
- 4) **Color the Constant** ● red on each section that you drew.





On Your Own - Step C




◆ On Your Own ◆

✓  Complete this problems first 


▶ Then,  Click on the photo to watch the video and check your answer!  

Follow these Steps:

 Use Your Strategy:

 Use your iterative function and your drawings to create a formula that will work for any section number.

 Illustrate your formula on your drawings.

? Test your formula against section **5**, section **6** and section **7** to make sure that it agrees with your T-Chart !





On Your Own - Step D





◆ On Your Own ◆

  **Complete this problems first** 

 Then,  **Click on the photo** to watch the video and check your answer!  

New Discovery!

 Your **school scientists** have just discovered **more animals!** There are **67** different types of animals attacking your school.

 How many bricks are needed to build the **67th section?** 