



THE GREAT WALL CHALLENGE!



Book 4



TeachersDungeon.com

Growth Pattern for your GREAT WALL!

The black square is NOT there!
Each square counts as one block!



TeachersDungeon.com



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



Includes a Video Tutorial for Each Step of this Problem!




KILLER KITTENS, OUTRAGED OSTRICHES, AND MERCILESS MOUNTAIN LIONS ARE ATTACKING!



Will your math skills be enough to save your school?


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

 **Killer kittens** arch their backs and hiss, scrambling toward your school in hopes of **scratching the studying students!**

 **Outraged ostriches** flap their wings and sprint forward, eager to **race your fastest classmates**—but **they cheat!** They use their wings to **push opponents down** to win!

 **Merciless mountain lions** leap from tree to tree, stealthily advancing toward the **unsuspecting kindergarten class!**

! **But that's not the worst of it**—more creatures are on their way! You have just been told that **72 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:

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

Growth Pattern for your GREAT WALL!

Section 1 Section 2 Section 3

The black square is NOT there!
Each square counts as one block!

🎥 📄 On Your Own - Step B 💡 🎥

◆ 📄 On Your Own 💡 🎥 ◆

✅ ✍️ Complete this problems first 📄

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

📄 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** 💡 🎥 ◆

✅ ✍️ **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 **72 different types of animals attacking your school.**

? How many bricks are needed to build the  72nd section?

