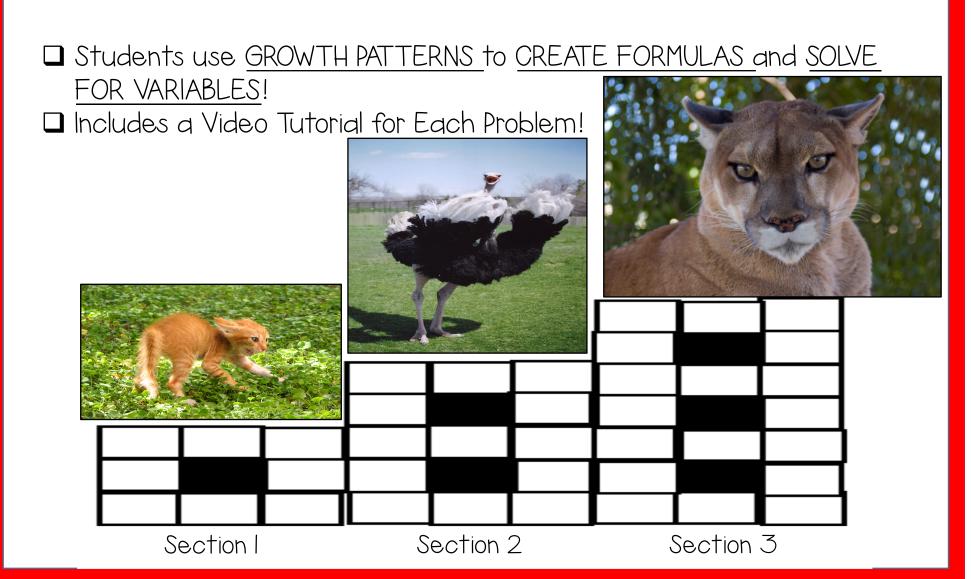
#### THE GREAT WALL

CHALLENGE 4



# THE GREAT WALL How to use this Book

#### **Teachers**

☐ Upload this PDF into your Google Classroom.

#### **Students**

- ☐ Complete each problem.
- ☐ Correct your own work, while watching the video tutorials.
- ☐ After correcting your work, take your paper to your teacher for a final check.

# THE GREAT WALL CHALLENGE 4

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

Killer kittens arch their back and hiss as they scramble toward your school in hopes of scratching the studying students. Outraged ostriches flap their wings as their long legs propel them toward your school. They want to race your fastest classmates, but they cheat. The outraged ostriches use their wing to push their opponents down, so they can win the race. And merciless mountain lions leap from tree to tree as they venture ever closer to the unsuspecting kindergarten class. But that's not the worst of it - more animals are coming! You have just been told that there are 72 different animals racing toward your school in anticipation of destruction.

Lucky for you — your school architects have designed a wall that grows at the same rate that these animals are growing. Your job, as School Mathematician, is to discover how many bricks are

needed to build your wall. If you solve these algebraic

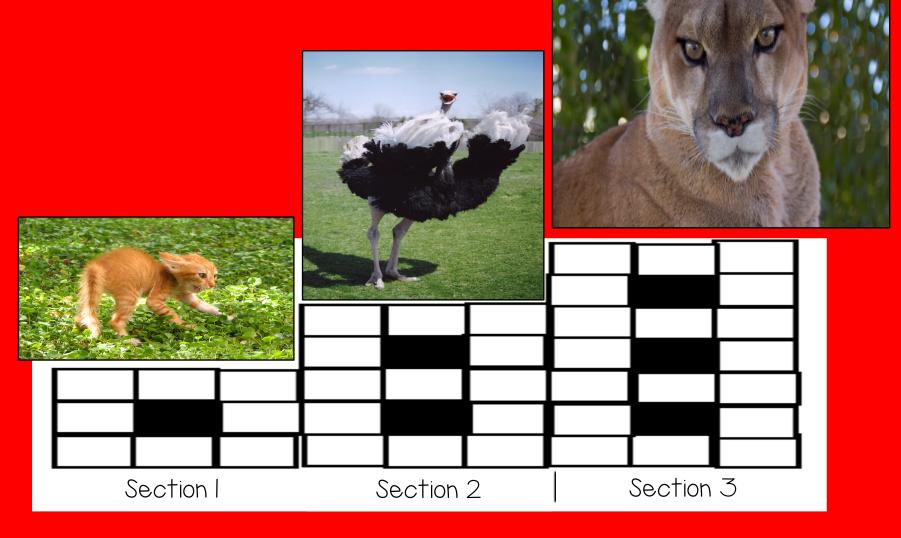
problems, your GREAT WALL will protect all the children within your school!







### Growth Pattern for your GREAT WALL!



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

# ON YOUR OWN Step A

#### Follow these Steps:

- I. Refer to the prior page. Copy the first three Sections of the GREAT WALL on your paper.
- 2. Based on the pattern, figure out the 4<sup>th</sup> section of the wall and draw that section next to the first three sections.

This is an On Your Own problem. Complete the problem.

Then Click the link below.

Click on the Killer Kittens



To Watch This Video

#### ON YOUR OWN

#### Step B

#### Follow these Steps:

- I. Create a T-Chart that shows the number of blocks needed to build the  $7^{th}$  section.
- 2. Solve for the Iterative Function, which is also the Co-Efficient.
- 3. Color the Co-Efficient blue on each section that you drew.
- 4. Color the constant red on each section that you drew.

This is an On Your Own problem. Complete the problem.

Then Click the link below.

Click on the Outraged Ostridge



To Watch This Video

# ON YOUR OWN Step C

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

This is an On Your Own problem. Complete the problem.

Then Click the link below.

Click on the Merciless

Mountain Lion



Watch This Video

#### ON YOUR OWN

#### Step D

Your school scientists have just discovered more animals!
There are 72 different types of animals attacking you school.
You need a section for each animal.
How many blocks are needed to build the

72<sup>nd</sup>

section?

This is an On Your Own problem. Complete the problem.

Then Click the link below.

Click on the Outraged Ostridge



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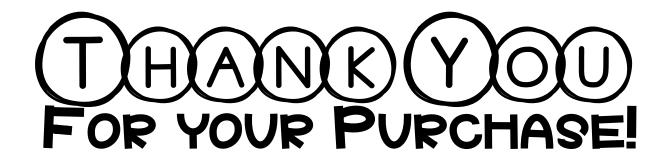
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Thank you Brian McCoy



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I will do my best to fix any issues as soon as possible!

I really want you to enjoy your purchase and come back to my store for future products.



#### Have a Fantastic Day!