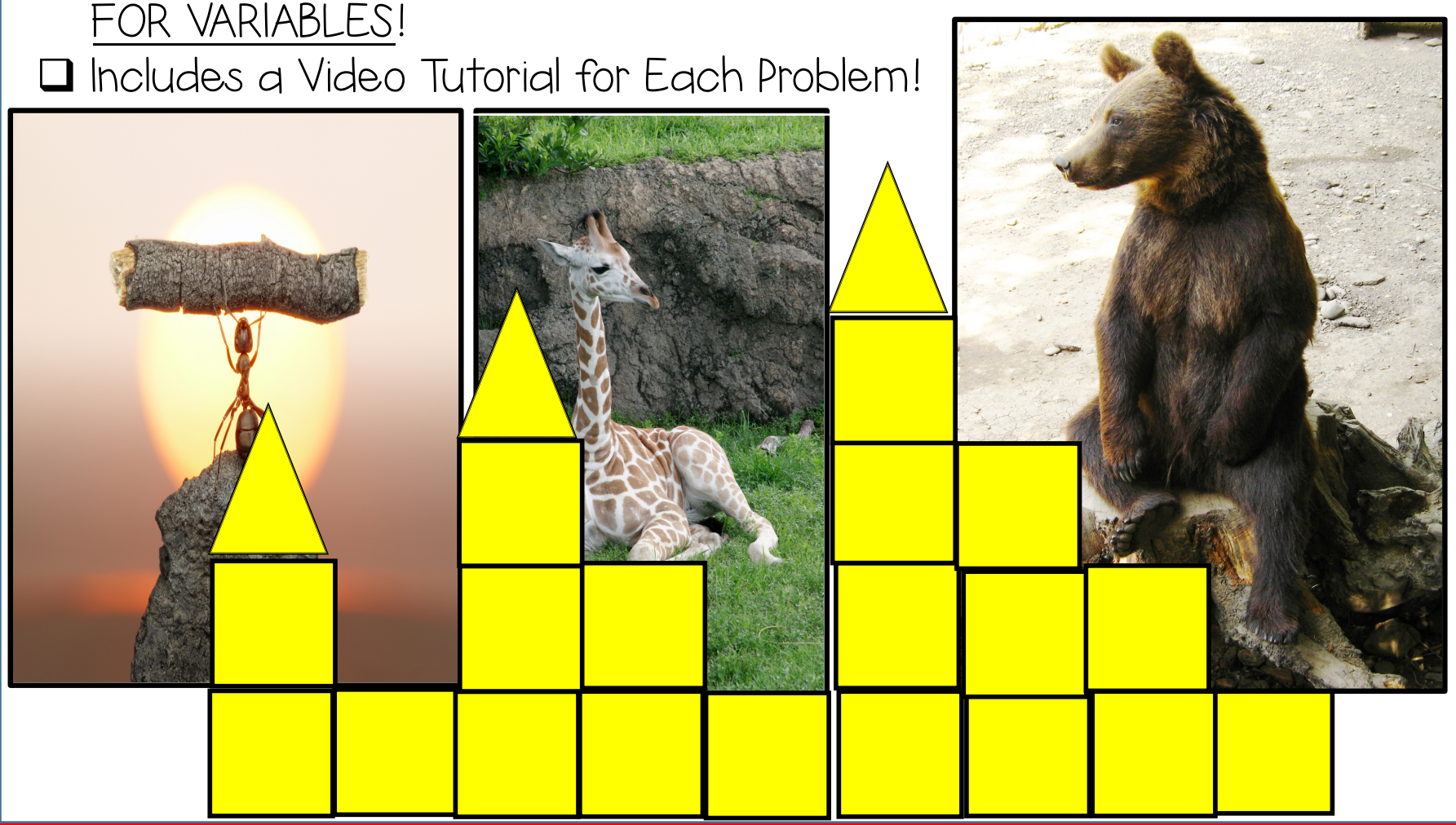
The Great Wall

Challenge 10

- Students use GROWTH PATTERNS to CREATE FORMULAS and SOLVE FOR VARIABLES!
- Includes a Video Tutorial for Each Problem!



© 2020, Brian McCoy

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.

© 2020, Brian McCoy

The Great Wall

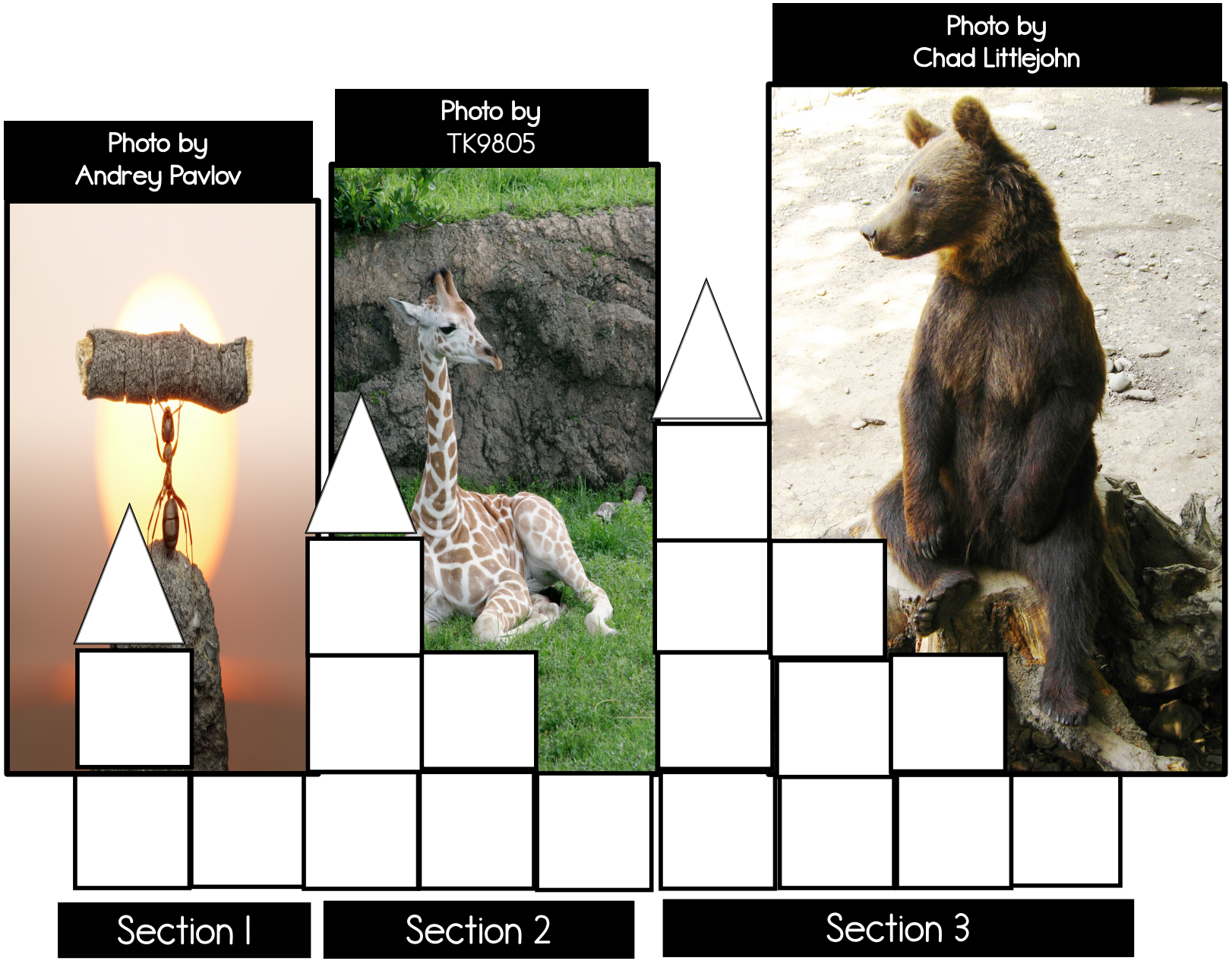
Challenge 10

Amos the Pumping-Iron Ant, Ginny the Love-Sick Giraffe, and Comfortable Ted the Comfort Seeking Grizzly are headed toward your school!

Amos the Pumping-Iron Ant is friendly enough, but he is constantly lifting heavy items like chairs, desks, and lunch tables over his head. Ginny the Love-Sick Giraffe is sweet to the boys, but mean to the girls. She is constantly winning the hearts of boys away from their girlfriends. Comfortable Ted the Comfort Seeking Grizzly endlessly tries to find the perfect chair to relax within. The problem is that he weighs 547 pounds, and breaks ever chair he sit on. But that's not the worst of it- more animals are coming! You have just been told that there are 33 different kinds of animals headed toward your school.

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 create and use an algebraic formula to discover the number of blocks needed for your GREAT WALL!

Growth Pattern for your GREAT WALL!



Each square or triangle counts as one block!

On Your Own

Step A

Follow these Steps:

1. 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 4th 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 Amos the Pumping-Iron Ant

To Watch This Video

© 2020, Brian McCoy

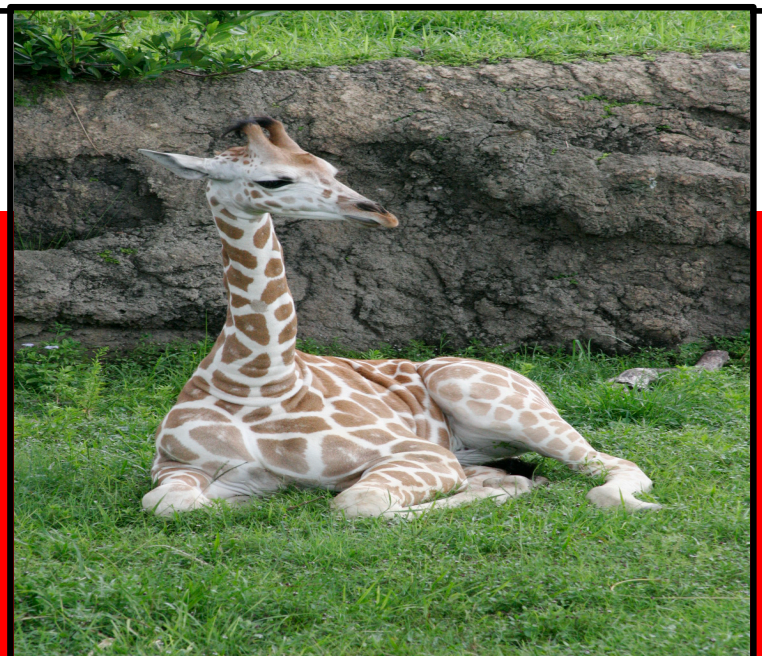
On Your Own

Step B

Follow these Steps:

1. Create a T-Chart that shows the number of blocks needed to build the 7th 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 Ginny the Love-Sick Giraffe

To Watch This Video

© 2020, Brian McCoy

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 Comfortable Ted the Comfort Seeking Grizzly

To Watch This Video

© 2020, Brian McCoy

On Your Own

Step D

Your school scientists have just discovered more animals!
There are 33 different types of animals attacking your school.
You need a section for each animal.
How many blocks are needed to build the

33^{rd}

section?

This is an On Your Own problem. Complete the problem.
Then Click the link below.

Click on Amos the Pumping-Iron Ant

To Watch This Video

© 2020, Brian McCoy

Terms of Use

Thank you for your purchase! By purchasing this resource, you are agreeing that the contents are the property of Brian McCoy and **licensed to you only for classroom/personal use as a single user**. I retain the copyright, and reserve all rights to this product.

YOU MAY:

- Use items (free and purchased) for your own classroom students, or your own personal use.
- Reference this product in blog posts, at seminars, professional development workshops, or other such venues PROVIDED there is both credit given to myself as the author and a link back to my TPT store is included in your post/ presentation.
- Distribute and make copies of **free items only** to other teachers PROVIDED there is credit given to Brian McCoy and a link back to my TPT store.

YOU MAY NOT:

- Claim this work as your own, alter the files in any way, or remove/attempt to remove the copyright/watermarks.
- Sell the files or combine them into another unit for sale/free.
- Post this document for sale/free elsewhere on the internet (this includes
- Google Doc links on blogs).
- Make copies of purchased items to share with others is strictly forbidden and is a violation of the Terms of Use, along with copyright law.
- Obtain this product through any of the channels listed above.

Thank you for abiding by universally accepted codes of professional ethics while using this product.

If you encounter an issue with your file, notice an error, or are in any way experiencing a problem, please contact me and I will be more than happy to help sort it out!

Thank you Brian McCoy

© 2020, Brian McCoy

THANK YOU FOR YOUR PURCHASE!

I LOVE TO HEAR YOUR FEEDBACK!

I value positive feedback and appreciate kind ratings and comments.
If you have any issues, questions, or see a small mistake, please email me at brian@teachersdungeon.com, before leaving negative feedback.

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!

© 2020, Brian McCoy