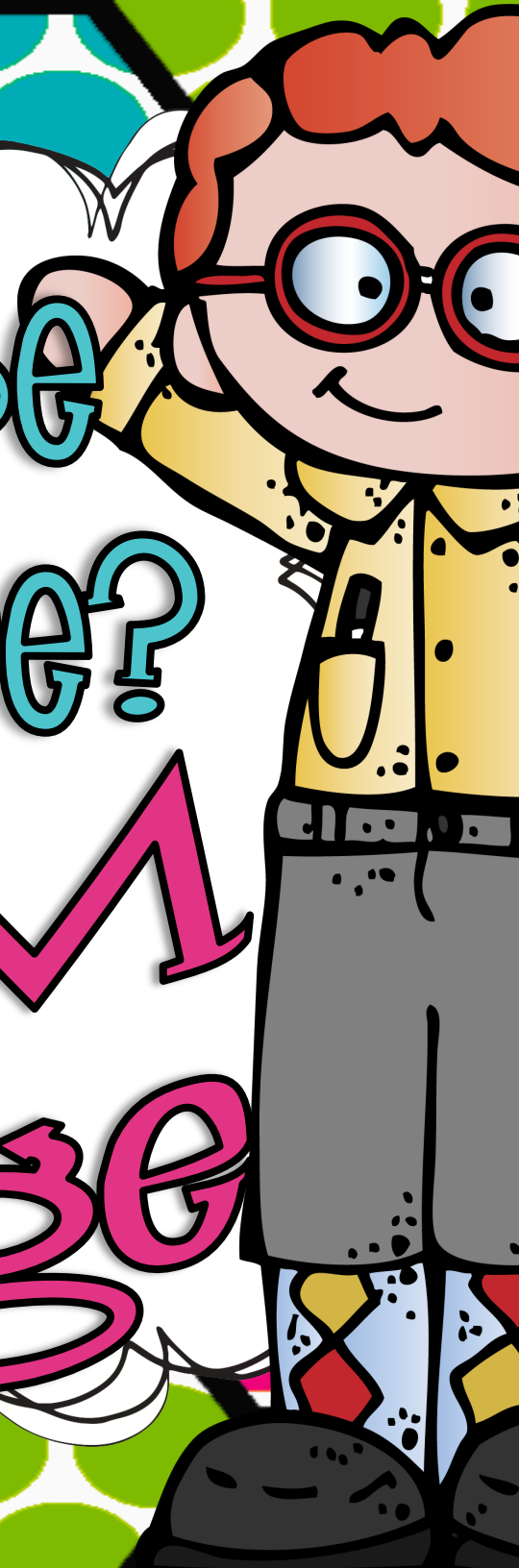


Which Shape
Holds More?
S.T.E.M
Challenge

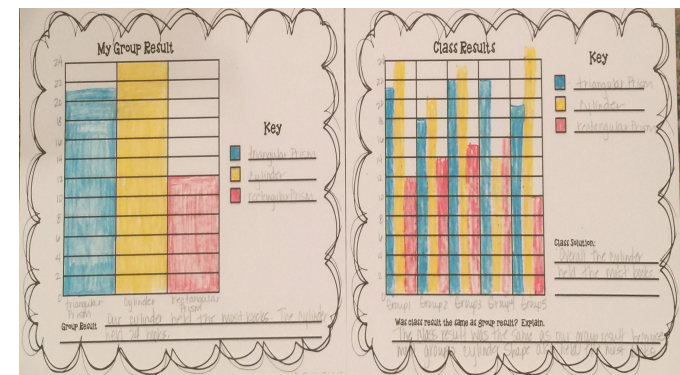


Teacher Tips

Materials Needed Per Group: 3 pieces of 12 X 12 card stock & 1 yard of masking tape (there is not a rule or limit to how much tape can be used on each shape, but when the tape runs out, it is OUT! The students are only limited to 1 yard of masking tape.

The 3D shapes that work best for construction are: triangular prism, cylinder, and rectangular prism. I did not draw any lines for folding on the paper. That is part of the designing process. The groups need to figure out the best way to construct the shapes and still meet all the requirements. The requirements are to have a free standing 3D shape with the correct vertices, faces and edges.

There instruction cards on the following page can be given to each group. These are helpful for the groups to refer back to if they have any questions.






Which Shape Holds More?

Task: Design and test 3-D shapes using the supplies.

Materials: You may only use the card stock and tape provided.

Constraints: The shapes must have the correct edges, faces and vertices. The shapes must be freestanding. The shape may not be cut. You may only use one piece of card stock for each shape.

Recording: Track your thinking and designing process. Your final shapes will be presented to the class and tested with books.




Which Shape Holds More?

Task: Design and test 3-D shapes using the supplies.

Materials: You may only use the card stock and tape provided.

Constraints: The shapes must have the correct edges, faces and vertices. The shapes must be freestanding. The shape may not be cut. You may only use one piece of card stock for each shape.

Recording: Track your thinking and designing process. Your final shapes will be presented to the class and tested with books.



Group Members:

Which Shape Holds More?

Name _____
Date _____
Number _____

The 3D shapes I am testing: _____

Name of Shape	Number of Edges	Number of Vertices	Number of Faces	Draw Shape

I predict _____

Average Weight of Book: _____



Imagine:

What did you do to prepare for the task?

Plan:

Tell how you are going to construct your 3D shapes using only cardstock paper and tape.

Create:

How did the creating process go? What happened? Describe what could have made it easier to design.



Terms of Use

1. You may use these in your classroom to help aid in teaching.
2. You may not alter, resell, or share images "as is".
3. You may not post images to a blog or website, unless credit is given.
4. These digital files are intended for personal use. Purchasing does not mean you own the digital files and may not claim them as your own. Teaching Tidbits and More With Jamie retains the copyright to all digital files.

Please contact me if you have any questions about proper use of item. Due to the digital nature of this product, no returns or refunds are available.

Thank you,
Jamie Knefely

jamieknefely@gmail.com

<http://www.teachingtidbit.blogspot.com>



Thank YOU FOR PURCHASING THIS PRODUCT AND SUPPORTING MY TPT STORE!!!! I HOPE YOU AND YOUR STUDENTS ENJOY THIS PRODUCT. PLEASE FOLLOW ME ON MY BLOG AT teachingtidbit.blogspot.com, INSTAGRAM, PINTEREST, AND FACEBOOK.

CREDIT:

