

Part 2: Tessellate your template

On an 8 ½ by 11 sheet of paper (either construction paper or computer paper, do not use lined notebook paper), tessellate your template. It must cover the entire sheet with no gaps or overlapping. It is easier if you begin in the center by tracing your template and then continue the pattern over the entire sheet. After you have filled the entire sheet, add the details of your image. The more creative you are the better your tessellation will look. *Use the image below as an example. It is not drawn to size.*



Part 3: A letter to your friend

Your friend, Miya, was absent and missed the lesson(s) on transformations and tessellations. She is really contagious so you drop off the homework and the tessellation project to her dad. She emails you later that night and is really confused. **Her questions are in bold below.** You have to reply to her email answering her questions. (Even though you are talking to a friend, you need to use proper spelling, grammar, complete sentences, etc. Do not list her question and then write the answer. You need to write your response in paragraph format. *Your explanations should be in your own words. Knowing the “math definition” is not enough evidence that you (and Miya) understand.*)

- a. **What is a transformation?** Be sure to explain it in *your own words*. Knowing the “math definition” is not enough evidence that you (and Miya) understand what a transformation is.
- b. **What are the different types of transformations?** (Be sure to explain what they are *in your own words* and one real-world example of each so that Miya really understands them.)
- c. **What is a tessellation?** (Be sure to give at least one real-world example so Miya understands what a tessellation is. It can not be given in the directions or on this sheet. You might have to use the Internet.)
- d. **Why did we have to make a tessellation?** What does it have to do with transformations? Be sure to explain what type of transformation(s) is/are used in your tessellation.