Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Period \_\_\_\_\_\_\_\_

 **Flat Stanley**  (the book series)

Stanley Lambchop and his younger brother Arthur are given a big [bulletin board](https://en.wikipedia.org/wiki/Bulletin_board) by their father to display pictures and posters. He hangs it on the wall over Stanley's bed. During the night the board falls from the wall, flattening Stanley in his sleep. He survives and makes the best of his altered state, and soon he is entering locked rooms by sliding under the door, and playing with his younger brother by being used as a [kite](https://en.wikipedia.org/wiki/Kite_flying). This is how the adventures of Flat Stanley began.

In this adventure of Flat Stanley, his world is confined to 2 dimensions just like he is.

 He can move: $\uparrow and \downright $$\leftarrow and \rightarrow $

However, he cannot understand depth! He is missing the 3rd dimension. You must learn to visualize the world from Flat Stanley’s perspective!

**Your assignment**

With your group, complete the three tasks listed below. Use the water station or play dough stations for guidance on these tasks.

**Task 1:** Vessels of Water

Sketch the 2 dimensional views of water flowing through 3 dimensional shapes given. These are cross-sectional views.

**Task 2**: Flowing Water

Match the 3 dimensional shapes to the 2 dimensional pictures in the card set. Draw in the missing 2 dimensional views.

**Task 3:** Vessels of Water (revisited)

Sketch the 2 dimensional views of water flowing through the 3 dimensional shapes given. Cross-sectional views.

**Homework:** Take Flat Stanley on a trip for the next couple of days. By our first class meeting after the weekend, Flat Stanley should have shown you the world from his perspective.

1) Find three objects in your three dimensional world and envision them from Flat Stanley’s perspective. Be creative! Show how he sees 2 different cross-sections in 2 dimensions for each object. For example, he may see a horizontal slice, a perpendicular slice or a diagonal slice. Sketch 2 slices for each object in the chart below:

|  |  |  |
| --- | --- | --- |
| Sketch Object orProvide picture | 1stcross-sectional view | 2ndcross-sectionalview |
| Object #1 |  |  |
| Object #2 |  |  |
| Object #3 |  |  |

2) Use your phone or iPad to take a picture of Flat Stanley showing you his

 perspective of objects. Keep this on your camera roll. We will share these in

 class next week.

3) Have Flat Stanley meet a friend, relative, acquaintance, parent, or other person

 of interest. Explain Flat Stanley’s limited view of objects. Remind them that we

 perceive the world in 3 dimensions. Ask what they think the fourth dimension

 (already proven to exist) might look like. How would they imagine it? Can they

 imagine it? Record their thoughts here.