READING 1

QUESTIONS:

Q1. -- What is a good working definition of what a System is and perhaps what it is not?
Q2. -- For the 4 system definitions you were to look up please give in your own words what they mean and give an example of them for each case.
Q3 -- Give us your definition of what Tessellation means and give an example you encountered, not mentioned in the reading.
Q4 -- What is The difference between ideas of Modularity and Tessellation? What are the properties that are in opposition with each other?
Q5 -- What is the difference between designing something that has Complexity (aperiodic) vs being Uniform (periodic)

ANSWERS:

1. A good definition of what a system is, is essentially a set of things active together as parts of a process.
2. Modularity- parts in a system that can be arranged. Example: a puzzle.
3. Decomposability- The breaking down or decompose of elements that doesnt have any true function afterwards. EX: an atom.
4. Emergence- When something occurs with an action is taken. Also a complex system that appears. Ex: how society works and a snowflake, and termite house
5. Chaos Theory- Within a system, there is still that bit of randomness and patterns within a variable that will give a different result. Ex: Meteorologists can never fully give an accurate reading of the weather due to certain outside variables.
6. Tessellation is a geometric and or mosaic shape that is repeated over and over again with no gaps in between. An example is: kaleidoscope tessellation.
7. The difference between the ideas of modularity and Tessellation is that it has to do with repetition and no gaps in between.. Modularity is closer to the concept of moving and replacing.
8. The difference between designing something that has Complexity (aperiodic) vs being Uniform (periodic) is that complexity is something categorized as difficult and irregular which might give a more organic feel due to its nature whereas periodic might give an organized feel. However, both are interesting.

Group Activity. Each student will need to Bring in a series of 4 diagrams that show evidence of Modularity, Decomposability, Emergence and Chaos Theory.

Specifically :

1. -- One diagram must have more than 100 elements
2. -- One diagram must be something considered living.
3. -- One diagram must represent something that is not visible or physical.
4. -- One diagram must be a system based on modularity.