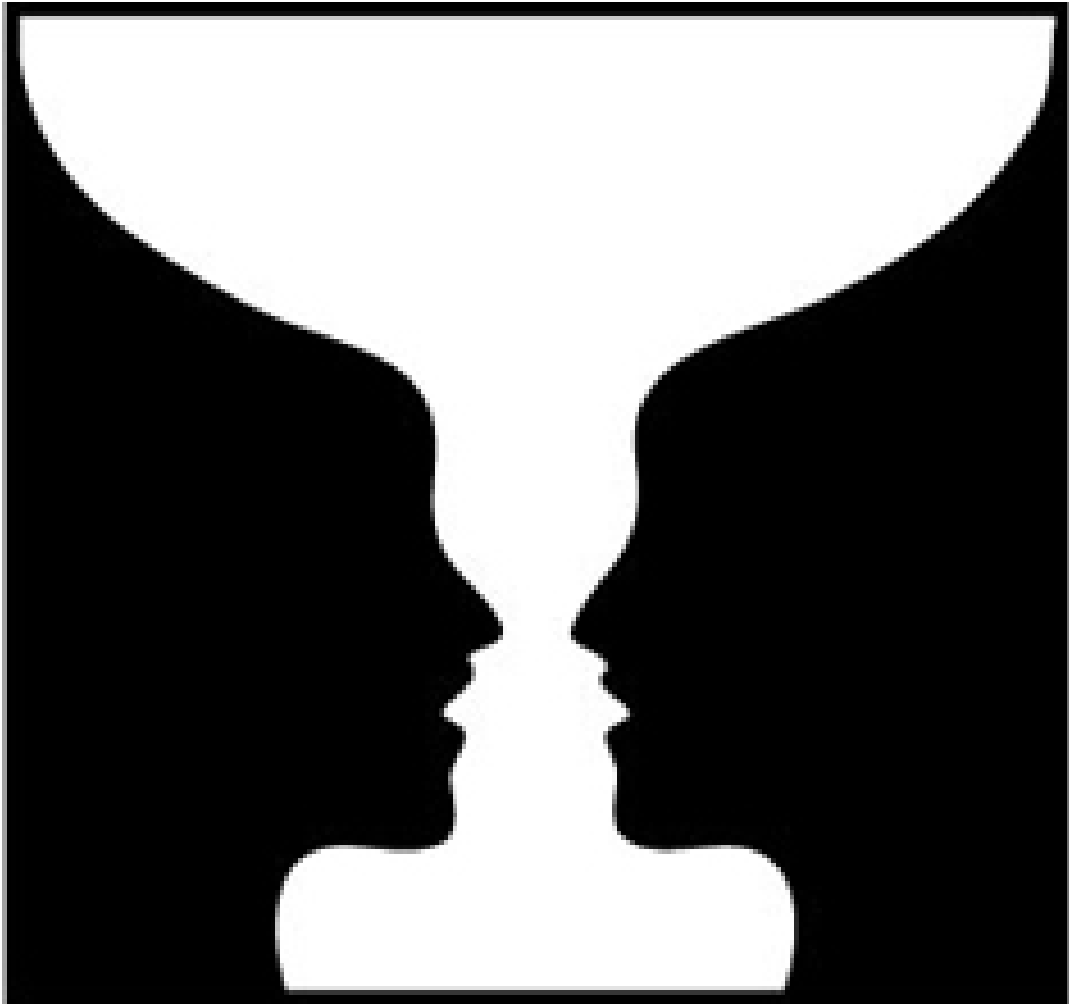


FIGURE & BACKGROUND

- We are able to differentiate figures as distinct from the backgrounds.
- Figures seem to have a shape as opposed to the background, which is relatively formless.
- Figures tend to have more meaning as it may appear closer to the ground.

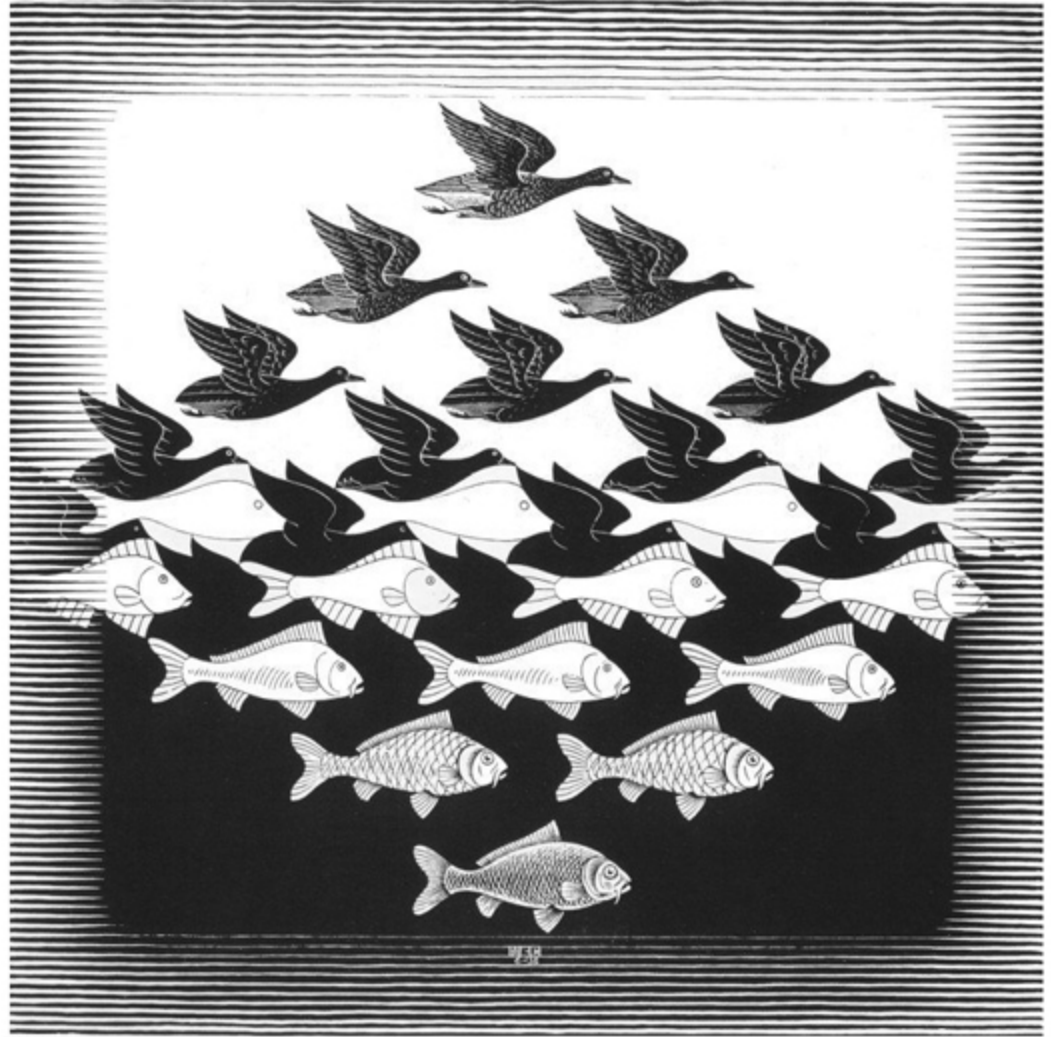
TESSELLATIONS

- The word 'tessera' in latin means a small stone cube. They were used to make up 'tessellata' - the mosaic pictures forming floors and tiling in Roman buildings.
- When figures are repeated alternately with ground without overlapping, it is called a tessellation.
- Tessellation can be thought of as figures that fills a plane surface with no overlaps and no gaps.
- Since the figures are repeated alternatively with the background, we are able to see the background as figures or the figures as background.



TESSELLATIONS

- Dutch artist [M C Escher](#) (1898-1972) created some of the most interesting tessellations.



Sky and Water





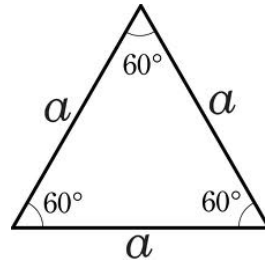




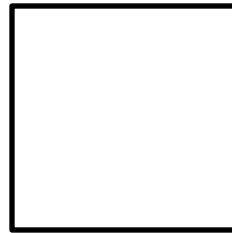


They are only three polygons that can tessellate a plane without being combined with other polygons.

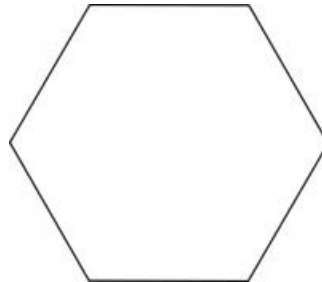
[1] Equilateral triangles



[2] Squares and

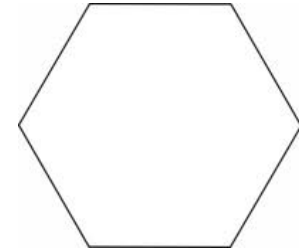
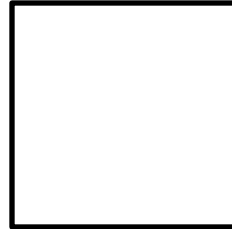
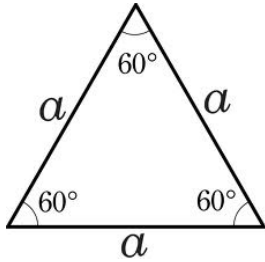


[3] Regular hexagons



In addition any triangle or quadrilateral will tessellate

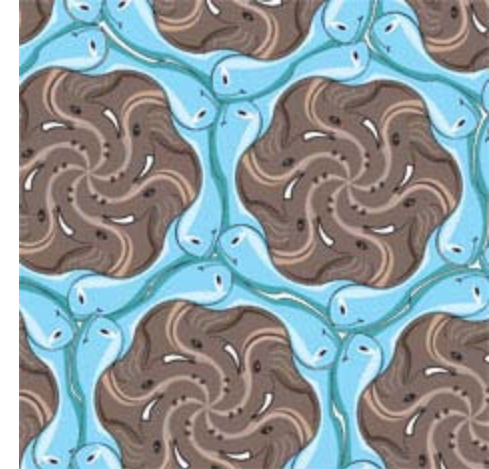
TESSELLATIONS



Tessellations using
Equilateral triangles



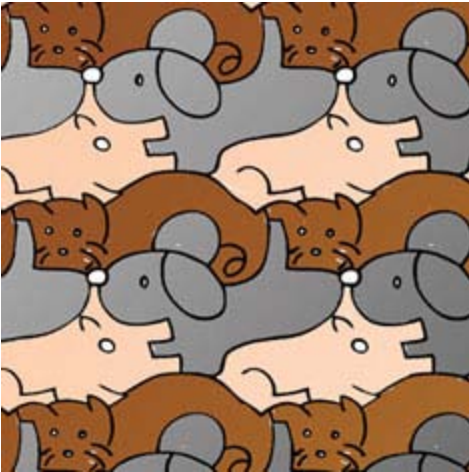
Tessellations using **Squares**



Tessellations using
Regular hexagons

TESSELLATIONS

SLIDING



Tessellations by **Translation**

TURNING



Tessellations by **Rotation**

FLIPPING



Tessellations by **Reflection**

EXERCISE

This is an exercise in exploring Figure and ground relationships.

- . Choose a visual element.
- . Use this as the basic unit for repetition and create patterns

Experiment with the following:

- . Transition in Size, Orientation or Position
- . Transition in Shape, Color or Texture
- . Transition in Translations (sliding), Rotations (turning) and Reflections (flipping)

Submission:

Submit 3 hard copies of color printouts measuring 20 x 20 cm, trimmed from an A4, without any borders showing tessellations by translation, rotation and reflections.

AUG 23 – Experiment manually and with digital painting programs
(<http://www.tessellations.org/methods-diy-line-1-1.shtml>)

AUG 30 – HARI RAYA PUASA. No tutorial

SEP 6 – Continue working during class and outside of class.

SEP 13 – Tessellation postcard and exercise due.