

Inspired by Maria Sibylla Merian, scientific illustrator and entomologist.

a person that studies insects.

ECO-PUZZLE



ARTIST or SCIENTIST ?

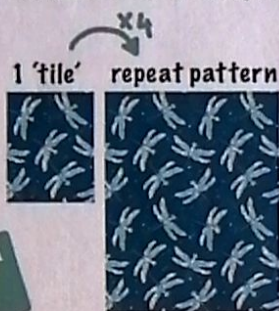
Maria Sibylla Merian was first an artist, and this profession also gave her the means to support her family on her own.

Because of Maria's observations and insect collections, we now understand insect life cycle and ecological relationships.

BOTANICAL PATTERNS AND DESIGNS

have always been considered beautiful, even today... Modern design often contains a form of repetition.

A repeat pattern is made by placing 1 'tile' side-by-side with copies of itself.



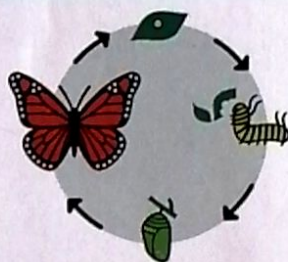
Find the repeat in the pattern!

ECOSYSTEMS = the interactions between organisms amongst each other, and their environment.

In Maria's time, people thought insects were 'born from mud'.

Can you find:

- the caterpillar, pupa, and butterfly?
- the host plant, food for the caterpillar?
- the parasitic wasp that preys on the caterpillars?



Ecosystems slot together perfectly !!!

CAN YOU MAKE A PATTERN OR 'ECOSYSTEM' THAT FITS TOGETHER PERFECTLY?

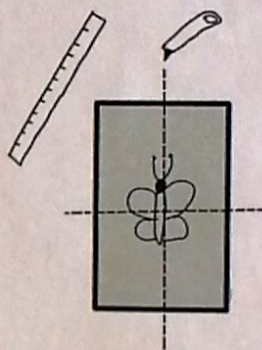
1

Draw a relatively big drawing in the middle of your page. Do not draw near the edges of your page.



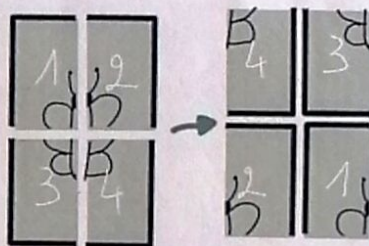
2

Measuring carefully, draw 4 exact quarters on your page in light pencil. Then cut into quarters with a sharp knife.



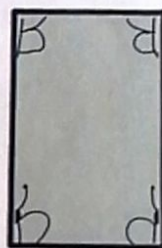
3

Re-arrange these 4 quarters by switching the pieces around diagonally.



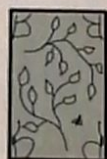
4

Using tape on the back of your paper, stick the 4 pieces together again. Make them fit perfectly!



5

Add extra designs, for, instance plants, into the blank space on your paper. Again, do NOT draw on the outside edges of your paper.



6

- photocopying your finished pattern tile. Using tape, attach your copies to each other.
- take a picture of your pattern tile (crop it to the edges). Then use an online 'seamless pattern generator', such as www.laurentvw.com/tools/seamlesspatterngenerator/.



Is your pattern perfect? You should practically not see the edges of your individual papers! *

Use this trick to make your own book wrapping paper!

CONGRATULATIONS !

This is your finished pattern tile !

* To make a pixel perfect pattern, you should ideally use graphic editing software, such as Photoshop or Procreate.