

Flutterfly Butterfly



Butterflies have complete metamorphosis—eggs, larvae (caterpillars), pupa (chrysalis), and adult. Just like us—they change and grow from an egg to a grown-up.



Butterflies are insects with three body parts, jointed legs, antennae and exoskeletons. They have wings; scales on the wings make the pretty colors. Butterflies have a *proboscis*—like the birthday blowers—that acts like a straw to suck up nectar.



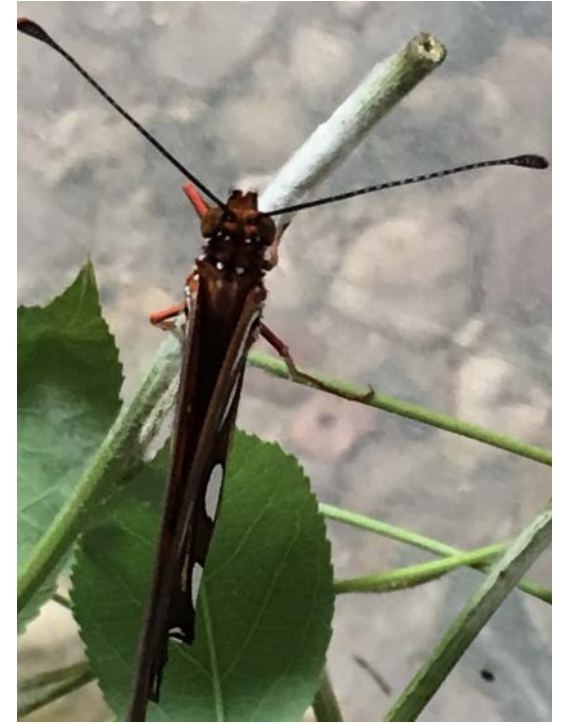
Moths are related to butterflies. They are both Lepidoptera which means *scale wings*.

Butterflies have clubbed antennae, rest with wings closed, make a silky chrysalis and generally are active during the day. Moths have feathery antennae, rest with wings open, make a shiny cocoon and are generally active at night.



Butterfly eyes, proboscis, legs, body parts, and antennae....

- 2 big eyes
- Proboscis rolled up
- Legs
- Thin body
- Clubbed antennae



Larvae and pupae....

...and butterfly emerging!



Butterflies “puddle” to get water and bask to get warm.



How did moths and butterflies evolve?

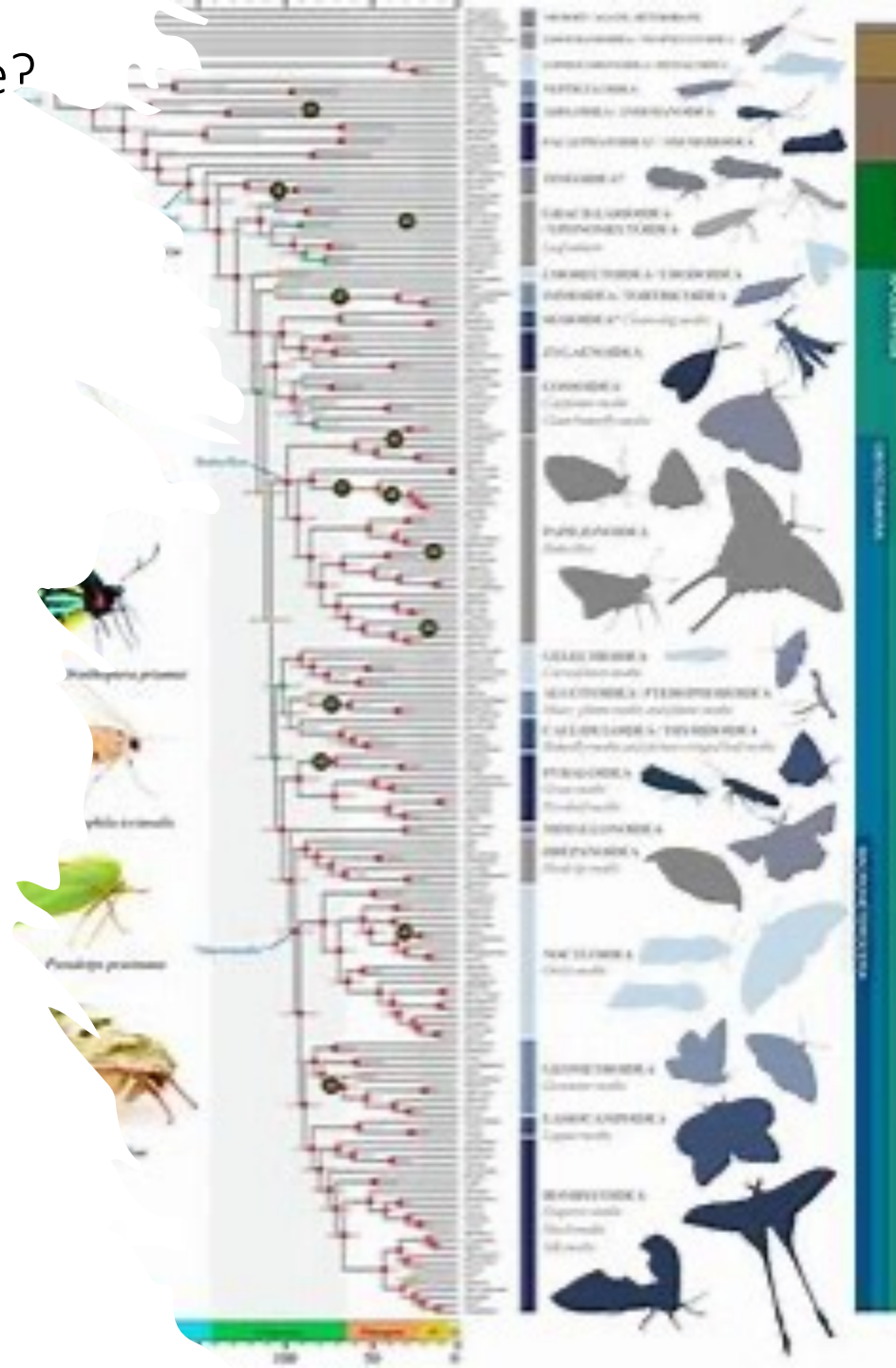
It is thought that moths might have developed from an aquatic insect or crustacean—a mandibulate creature eating nonvascular plants. The common ancestor of Lepidoptera goes back to the late Carboniferous period, around 300 million years ago. The proboscis appeared approximately 240 million years ago in the Middle Triassic period, when flowering plants began to diversify. Then around 100 million years ago some moths became active during the day.

Butterflies first evolved from moths when they were able to feed on new species of flowering plants available during the day. That allowed these insects to become colorful.

Butterflies evolved on the Western side of a splitting Pangaea.

Early butterflies fed on legumes in North America and spread to South America, Antarctica, the Bering Land Bridge to Russia, Asia, Australia, India, Africa and finally, 30 million years ago, Europe.

Moths evolved to have earthy colors to camouflage them while sleeping during the day. Butterflies have both original and structural color which can serve various purposes—camouflage attraction, warning, mimicking. The genetics of color is quite complicated!





You can sing *Head, Thorax, Abdomen* to the tune of *Head, Shoulders, Knees and Toes*.

- Head, thorax abdomen, abdomen, (touching head, chest and tummy)

Head, thorax abdomen, abdomen,

Wings with scales held closed when they land. (arms out wide flapping closed)

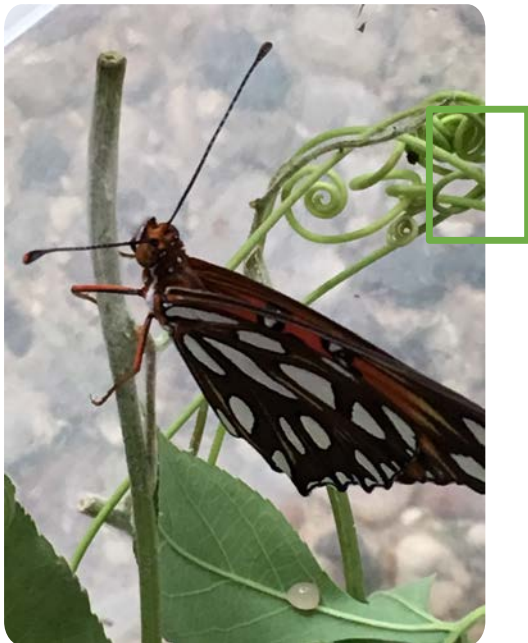
Head, thorax abdomen, abdomen.

- Head, thorax abdomen, abdomen,

Head, thorax abdomen, abdomen,

Clubbed antennae and long proboscis too, (2 fingers on forehead and pointing to mouth, finger sticking out)

Head, thorax abdomen, abdomen.



You can sing butterfly songs.

You can sing this song to: *Twinkle, Twinkle, Little Star*

How beautiful the butterfly,
Flying through the air so high. (hands up high)
Wafting breezes flying free, (flapping hands)
Fluttering so happily. (flapping hands)
Lovely, merry butterfly,
Flying way up in the sky. (hands up high)

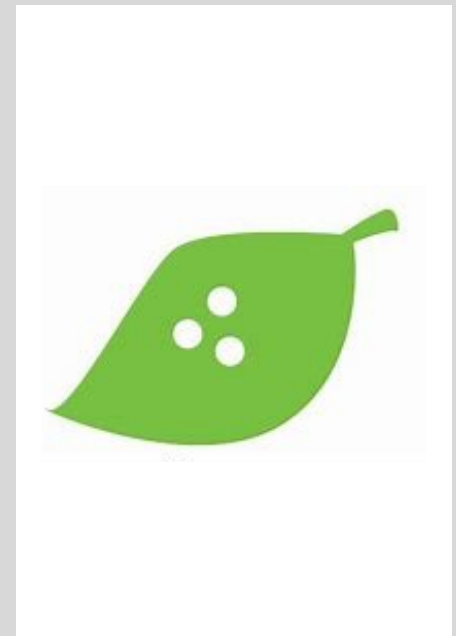
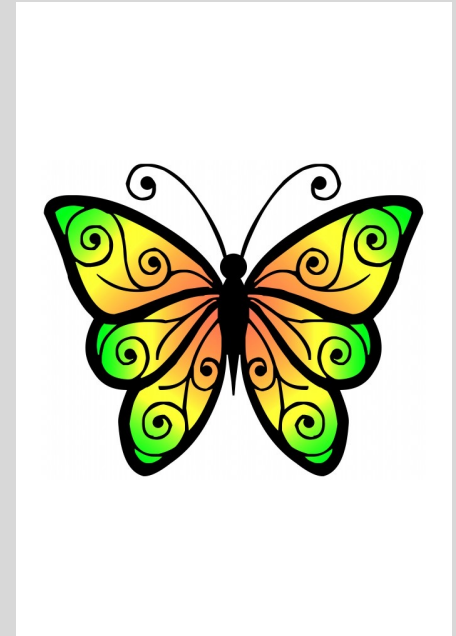


You can sing this song to *I'm A Little Teapot*

Brightly colored butterfly,
with 4 wings, (4 fingers)
flying around (hand circling)
Seeing things. (pointing to eyes)
Glancing at a flower (holding pretend flower)
Looking grand,
I think that might be (pointing to head)
A place to land. (finger on fist)



- You can be finger butterflies!
- Eggs hatch to caterpillars, caterpillars grow (scrunching down and puffing up),
- Then spin a chrysalis (turning) and butterfly (flapping wings) just so!



You can be a butterfly detective!



- Cut out the eggs, larvae (caterpillars) and pupae.



- Cut out the three sizes of butterflies.

- Make a butterfly trail going from the eggs, larvae and pupae,

then from the smallest butterfly to the largest to find the giant butterfly.

You can find eggs, larva, pupa on the butterfly detective trail, and....



...the smallest butterflies,



medium butterflies, and



largest butterfly!

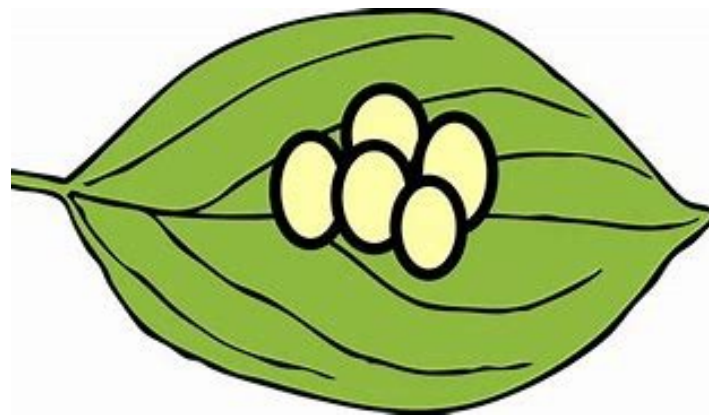




How to Butterfly

You can read a story.

Eggs hatch to caterpillars,





caterpillars grow.



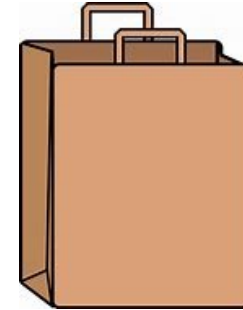
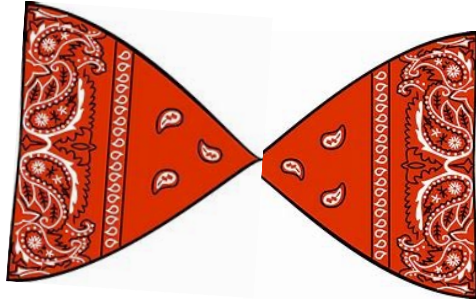
Then spin a chrysalis

and butterfly just so!

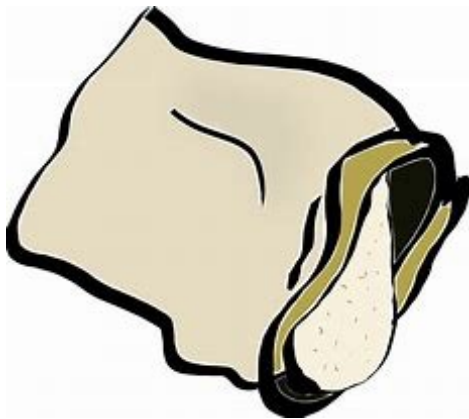


Be a Butterfly!

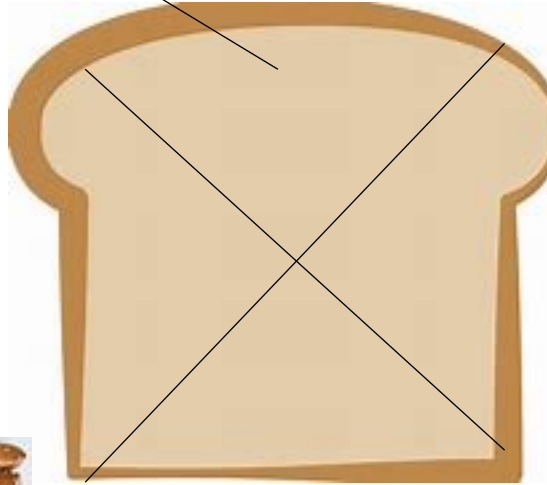
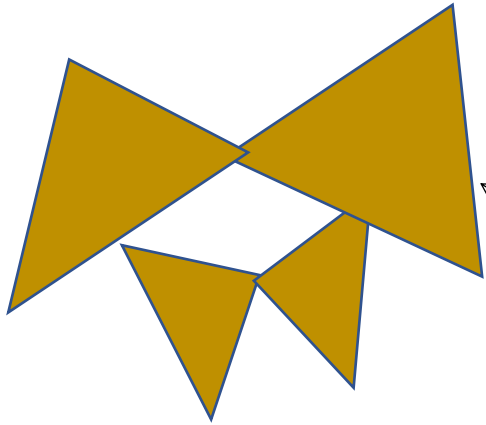
- Pretend to be a butterfly with wings made from 2 kerchiefs tied together or cut from a paper bag.



- Use flour or rice or popcorn to be pollen and carry the “pollen” to flowers around your house.



You can be a butterfly engineer and improvise. What can you use for butterfly wings, head, thorax, abdomen, antennae, legs?





Butterfly yummy imagination!

How will you imagine your butterfly??????

....and
another
butterfly!

....pretzels, cereal,
corn chips and
licorice!

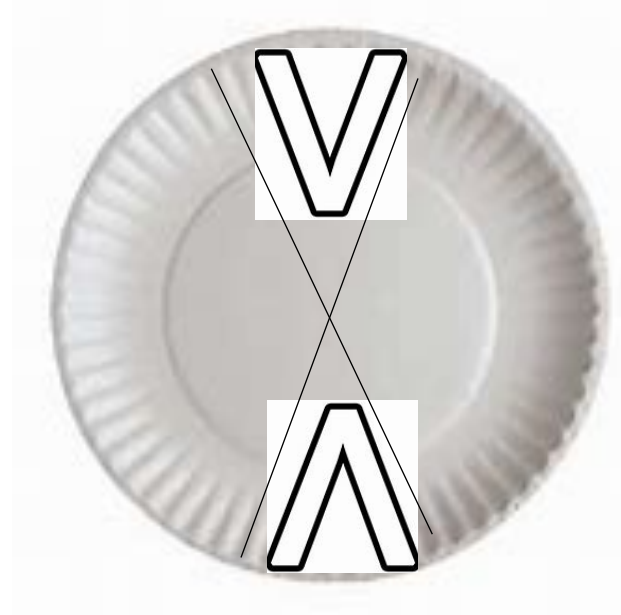


Butterflies
by a plant!

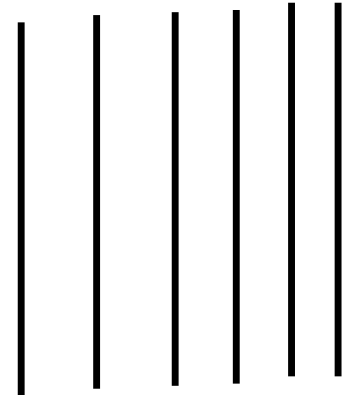
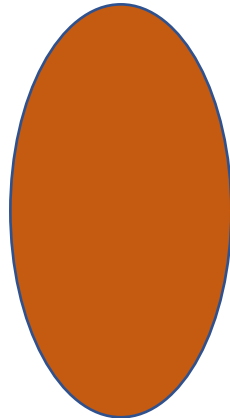
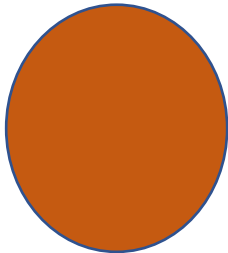
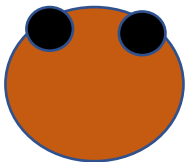


You can be a butterfly designer. What can you use for butterfly wings?

- You can make butterfly wings. Color a coffee filter, paper plate or muffin cup and cut out to Vs.



- Now add a head, thorax, abdomen, 6 legs and 2 antennae.





caterpillar

egg

What can you use to make a butterfly, chrysalis or larva?

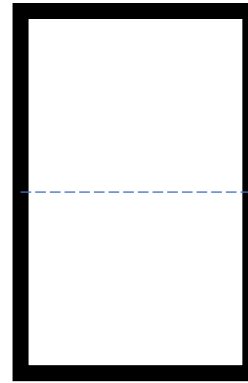
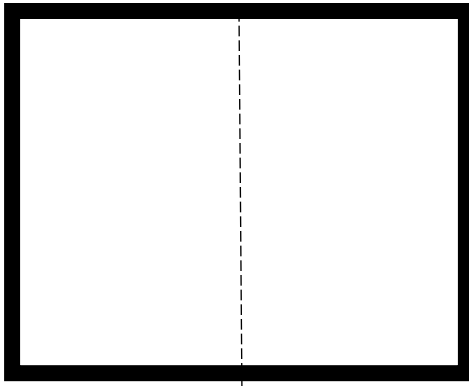
Chrysalis

Paper cup, paper plate, muffin cup?????

Butterfly

You can make a mini-book!

- Fold the paper in half
- Then in half again.





Waiting for Wings teaches about the complete metamorphosis of a butterfly. Ten Wiggly, Wiggly Caterpillars is another example of a counting structure.

<https://www.youtube.com/watch?v=h4tImWDoK20>

<https://www.youtube.com/watch?v=-HhY6YI8gIY>

Waiting for Wings Lois Ehlert



Colorful Counting Crunching Fun! Ten Wiggly, Wiggly Caterpillars

