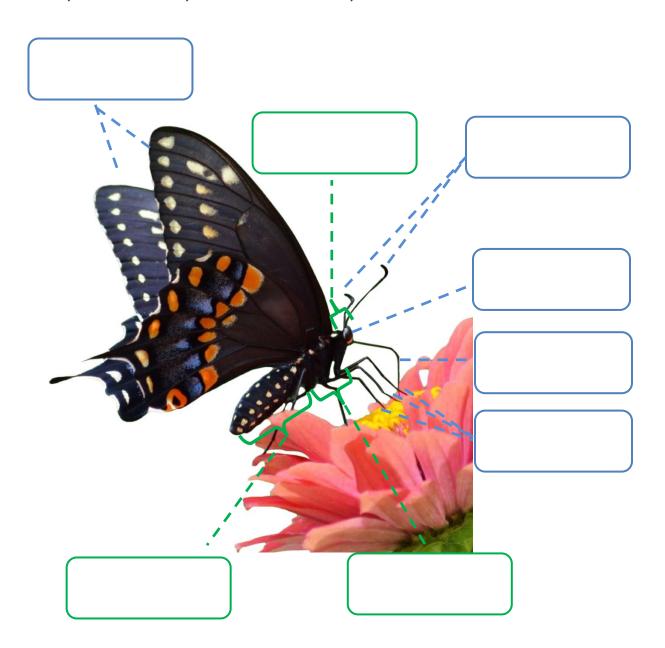


BUTTERFLY WORKSHEETS

Parts of a butterfly

Can you name the parts of a butterfly?



Tips:

Compound Eye Antennae Thorax

Abdomen

Head Wings

Proboscis Legs



Draw a butterfly

Can you sketch and color your butterfly?

How many pairs of wings does a butterfly have?
How many pairs of legs does a butterfly have?
What are on top of butterfly's head?
Can you name the three main body parts of a butterfly body?

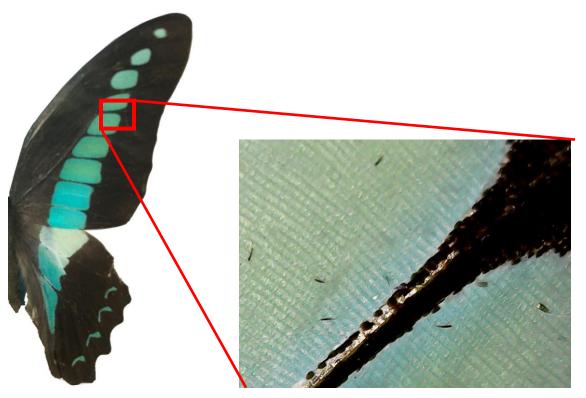
Well, these are the characteristics of an insect. An insect has three main body parts: head, thorax, and abdomen; a pair of antennae on its head; and three pairs of legs. Because butterfly has all these characteristics, it is classified as an insect. **CHALLENGE:** Hmmm, how about spider? Can you go through the questions above and check if a spider is an insect?



Beautiful Wings

Let's take a closer look at its beautiful wings.

Look at the wings through a magnifier or microscope. Do you notice that the patterns on butterfly are made up of small scales? These scales reflect lights and give the wings their striking colors! This is what I see on my butterfly under microscope! How about yours?



The scales on some butterfly wings have hidden ultraviolet pattern. Let's take a look at the same butterfly under normal and UV light.

<u>Human Vision</u>







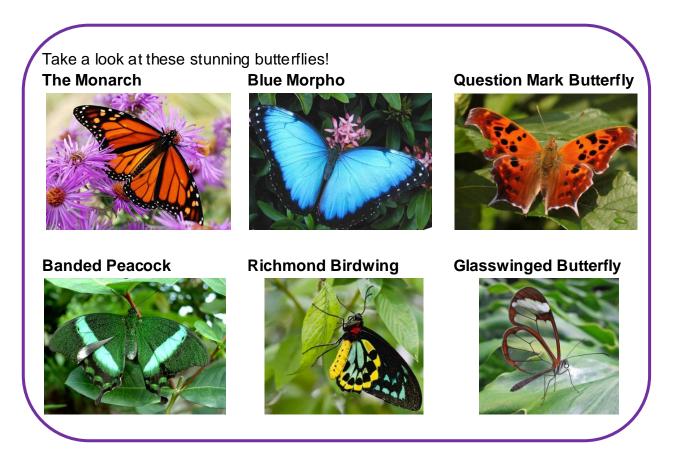
Do you wonder why butterflies have such magnificent colors?

Hmmm... Look at the two pictures below. Can you spot the butterfly in each picture?



Do you realize that it takes a while before you can make out the whole butterfly? Right, it is because the colors of their wings are similar to the surrounding. This is what we call camouflage.

The camouflage patterns help the butterfly avoid their predators, such as birds. The beautiful colors are also used to attract mate.





Now take out the butterfly specimen carefully and observe the pattern at the underside. Are the patterns the same?

They are NOT exactly the same!

Take a look at my butterfly. Can you spot the differences?



Upper (dorsal) side



Under (ventral) side

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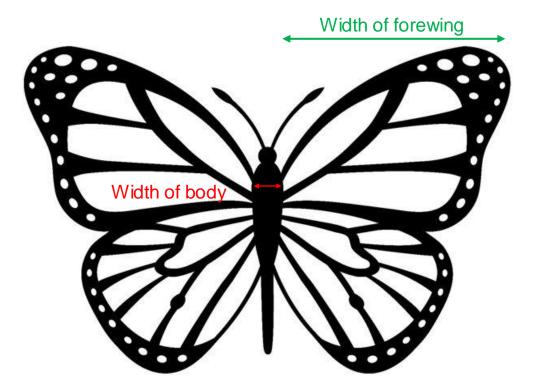
See Me Fly!

Which part of the body are the wings connected to? _____

Measure the width of forewing and the width of the body.

Width of forewing: _____

Width of body: _____



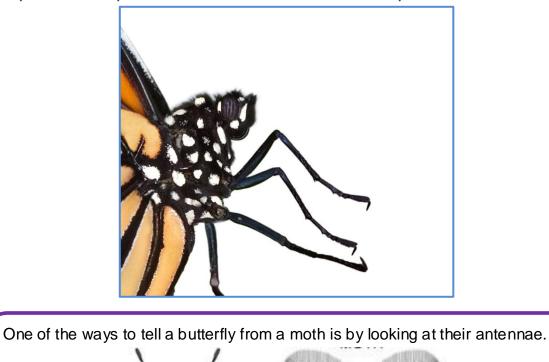
Wow. The width of forewing is many times larger than the body! These large wings help propel butterfly in its flight.





Butterfly or Moth?

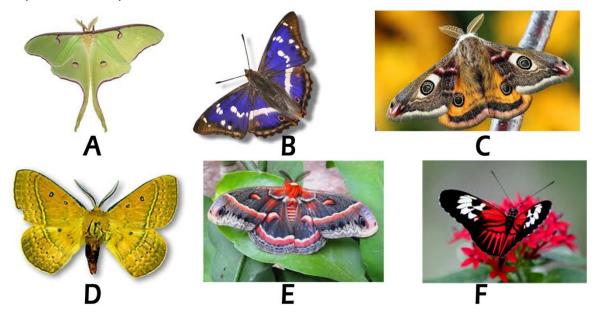
Can you draw a pair of antenna for this butterfly?



BUTTERFLY MOTH A butterfly's antennae look like golf clubs while a moth has feathery antennae.

Can you identify the butterflies?

Can you identify the moths?





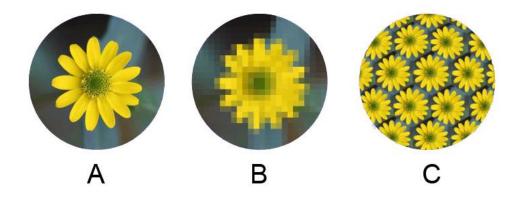
Eyes of a butterfly

Let's zoom into your butterfly's eye



A butterfly's eye is made up of 12,000 small eyes. It is called a compound eye.

Can you guess what a butterfly sees?



The Answer is "B".

Each of its small eyes registers a pixel and product a mosaic view of the scene around it.

Do you wonder how butterflies sleep?

Well, they don't sleep like humans as they do not have eyelids to close their eyes. They simply rest with their eyes open!



Let's eat!

Butterfly has a long mouthpiece, or what we call proboscis.

In your butterfly specimen, you may see the long proboscis coiled up, like a curly drinking straw!

Check out proboscis I observed in my butterfly below.



CHALLENGE: Why do butterflies need a long mouthpiece? Tip: think about the food a butterfly feeds on



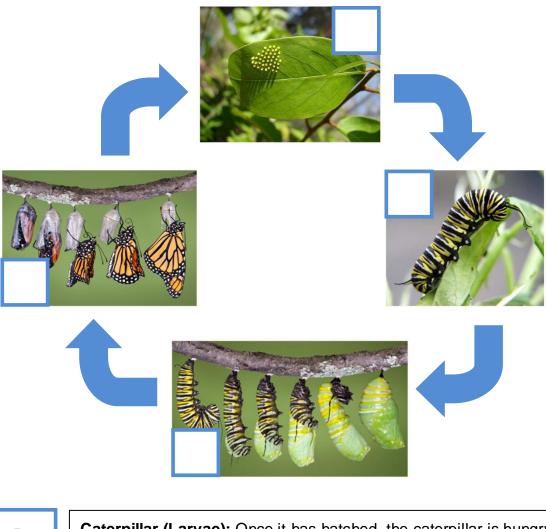






Butterfly Life Cycle

Write the correct letter of a butterfly's stages of growth.



Α	Caterpillar (Larvae): Once it has hatched, the caterpillar is hungry. It starts to eat leaves and flowers. It eats a lot and grows really fast.
В	Eggs: A female butterfly lays eggs on a leaf. About five days after the egg is laid, a tiny worm-like creature will hatch from the egg.
С	Butterfly (Adult): When the chrysalis opens, a butterfly comes out. After resting, it will start flying to look for food. When it finds a mate, it will lay eggs and the lifecycle will start all over again.
D	Chrysalis (Pupa): The caterpillar makes a chrysalis that has the same color as its surrounding to keep away from enemies. It starts to change to grow into a butterfly.



Butterfly Word Search

Can you find the following terms in the grid below?

ANTENNAE	PROBOSCIS	CATERPILLAR
CHRYSALIS	INSECT	THORAX
ABDOMEN	WINGS	MOTH
COMPOUND		





Microscope Lab Observation	Report
Specimen:	
Magnification:	
Observations:	
Specimen:	
Magnification:	
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Observations:	



Microscope Lab Observation	Report
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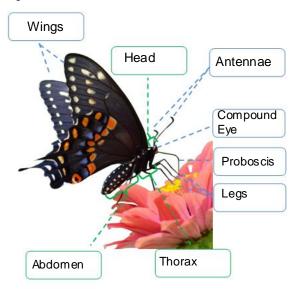
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Microscope Lab Observation I	Report
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ANSWERS

<u> Page 1</u>



<u>Page 2</u>

Three Three

A pair of antennae head, thorax, abdomen

Challenge: Spider has FOUR pair of legs; NO wings or antennae; only TWO body parts. It is an arachnid and not an insect.

Page 5

There are some red spots at the bottom wing when looked from the underside.

Page 6

Thorax

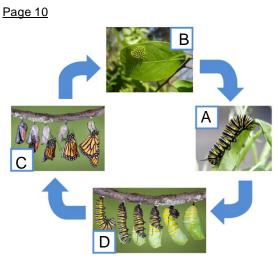
Page 7



Butterflies: B, F Moths: A, C, D, E

<u>Page 9</u>

The long proboscis is like a drinking straw for the butterfly to reach deep into flowers for nectar.



<u>Page 11</u>

С	Н	F	A	С	Н	K	V	Q	R	В	\vee	L	J	Ν
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V	5	H	M	Е	Ν	Ν	W	M	W	L	Ρ	A	Ν	V
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н	F	T	G	L	5	C	Η	0	R	A	X	т	Т	V