

# Mr Newman's Beautiful Butterflies

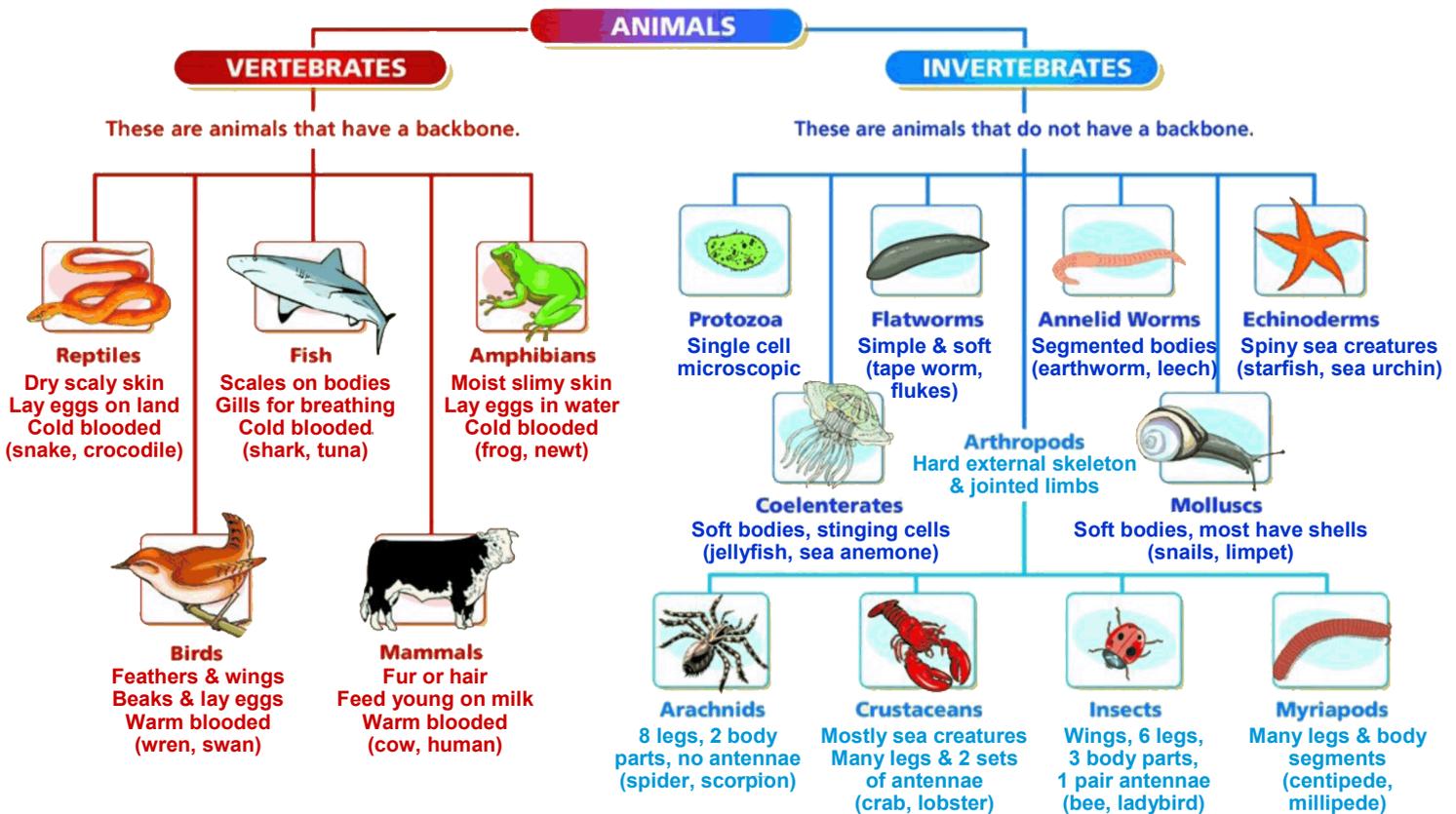
Adaptations Symmetry Life cycles Classification  
Maths Local history Anatomy Scientific investigation

A **lepidopterist** [lep-i-dop-ter-ist] is a scientist who studies butterflies and moths.

Mr L Newman and his son Hugh were **world famous lepidopterists**. They had a butterfly farm in Old Bexley from 1890s - 1960s. When the butterflies died, they preserved them as specimens for collectors and museums.

## Scientific investigation

To help identify all the millions of animals in the world, scientists group them into families that all have things in common (characteristics). This is called **Classification**

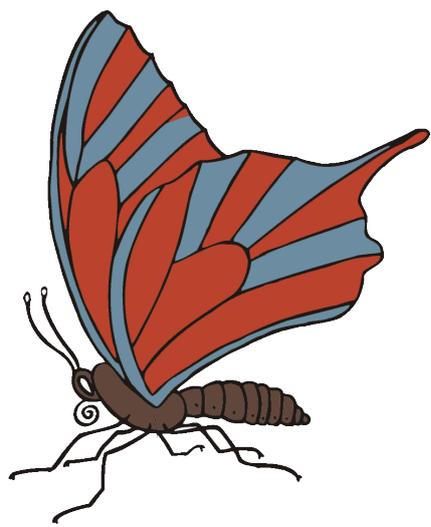


Read the animal family tree above and look at the museum specimens on your table. **Where would you place butterflies? Draw one in where you think it should be.**

All butterflies have certain things (characteristics) in common - like parts of the body

**Shared characteristics**

<b>Abdomen</b>	is the segmented tail of an insect containing the heart and most of the stomach
<b>Antenna</b>	2 antennae are attached to the head and used for smell and balance
<b>Compound Eye</b>	insect compound eyes are made up of many hexagonal lenses 
<b>Fore wing</b>	is the fore (front) wings
<b>Leg</b>	all adult insects have six legs
<b>Head</b>	contains the brain, the eyes and mouth
<b>Hind wing</b>	is the hind (behind) wings
<b>Proboscis</b>	is the straw-like tongue adult butterflies sip liquids (nectar) with
<b>Thorax</b>	is the main body section that the legs and wings attached to



Can you label this butterfly with the important characteristics in the table above?

## How can you tell a moth from a butterfly?

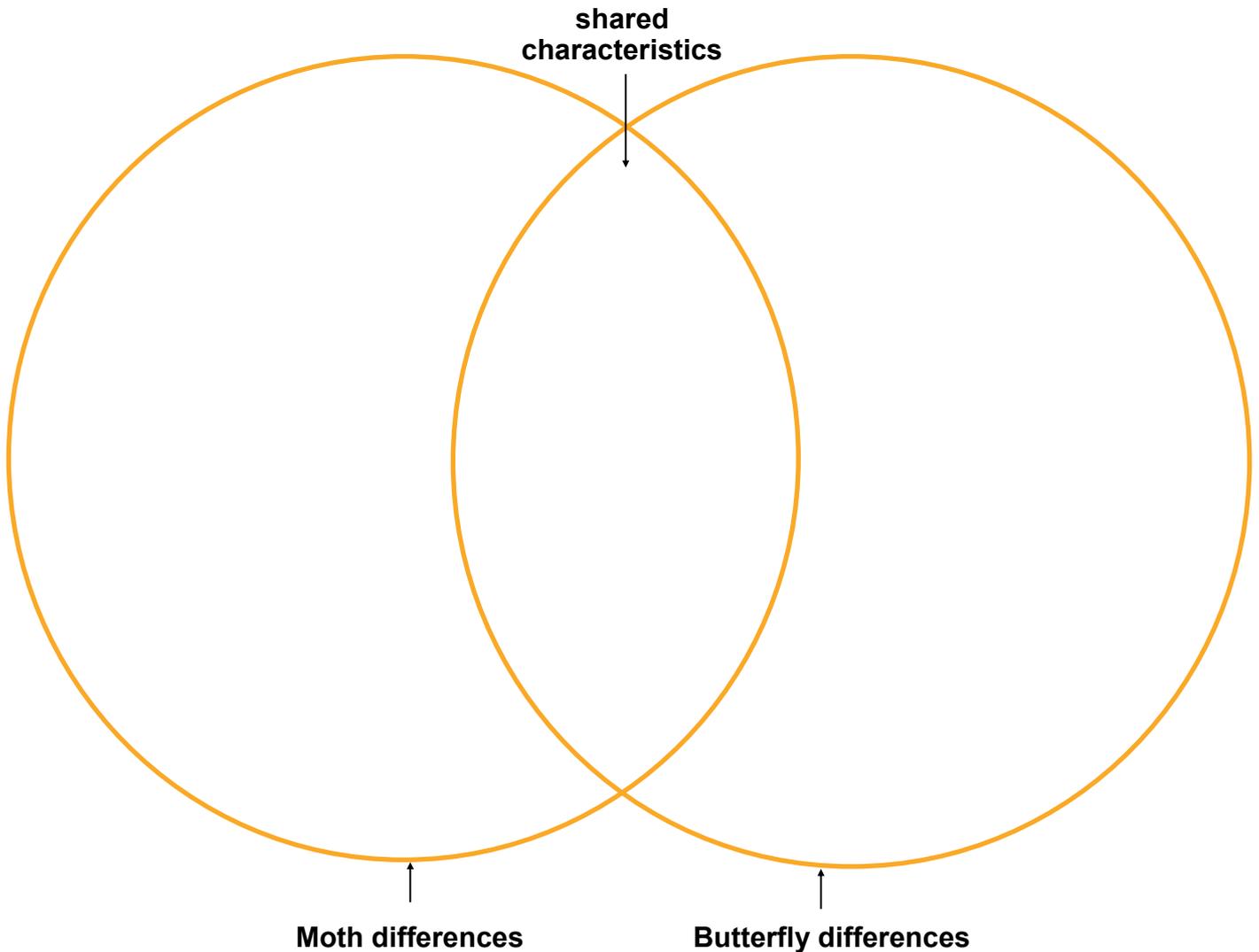
Easy. They share the same body characteristics as butterflies, but with some important differences because they live different lives.

**Adaptation  
butterfly or moth?**

### Differences

Moths 	Butterflies 
feathery antennae	swollen tipped antennae
dull colours	bright colours
hairy body	slender body
rests its wings open or folded onto its back	rests its wings upright
active at night	active at daytime
<u>cocoon</u> on the ground or underground	<u>chrysalis</u> hanging from a branch

Can you fill in this Venn diagram to show the differences and shared characteristics between moths and butterflies?



# Lifecycles

Looking at the museum specimens, can you label all the stages of the lifecycles pictured below?

