Write scientific definitions for words we have studied.

- ☑ Abdomen
- ☑ Adaptation
- ☑ Arachnids
- ☑ Antennae
- ☑ Arthropod
- ☑ Aquatic (Marine)
- ☑ Binomial nomenclature
- ☑ Biological control
- ☑ Cerci
- ☑ Chilopoda
- ☑ Complete
- ☑ Crop
- ☑ Crustaceans
- ☑ Defense Mechanisms
- ☑ Diplopoda
- ☑ Entomology
- ☑ Exoskeleton
- ☑ Ganglions (Ganglia)
- ☑ Gizzard
- ☑ Head
- ☑ Hemolymph
- ☑ Homing
- ☑ Incomplete
- ☑ Insects
- ☑ Insecticides
- ☑ Invertebrates
- ☑ Kingdom
- ☑ Larva
- ☑ Linnaeus
- ☑ Molting
- ☑ Nymph
- ☑ Ocelli (Ocellus)
- ☑ Ovipositor
- ☑ Parasite
- ☑ Pheromones
- ☑ Phylum
- ☑ Proboscis
- ☑ Pupa
- ☑ Siphoning
- ☑ Spiracles
- ☑ Sponging
- ☑ Taxonomy
- ☑ Terrestrial
- ☑ Thorax

Other terms:

- ☑ Domain
- ☑ Diurnal
- ☑ Nocturnal
- ❑ _____
- ❑ _____
- ❑ _____
- ❑ _____
- ❑ _____

GROUP 1 | GROUP 2 | GROUP 3 | GROUP 4

Part E: How do they compare?

Arachnids Crustaceans Chilopoda Diplopoda Insects

Part G on notes

HOW DO THEY COMPARE?	~~Lubber~~ Grasshopper	Hermit Crab
Arthropod Class	Insect	Crustacean
Body Segments - How many? Describe them.	3 segments – Head, Thorax, Abdomen	3, but the first two are fused together
Legs - How many? How big? Describe them.	6 legs Front 2 prs– Walking Last pair - Jumping	5 pairs (10 total) 1st Pair – Pinchers 2nd – 3rd – Walking 4th - 5th - Shell
Mouthparts - What type and how are they used?	Chewing mouthparts for eating plants	Maxilloped for grinding; soft and feathery to pick up food
Locomotion - How does it move?	Walks, crawls, climbs (this species is not able to fly/glide)	Walks, crawls, climbs, burrows
Other Features - Colors? Defenses? Cool appendages?	Spikes on legs/feet for defense or traction Carapace – Shield over thorax	Shell for protection Camo legs to hide Pinchers for defense

Part H: Section 3.20– Insect Reproduction

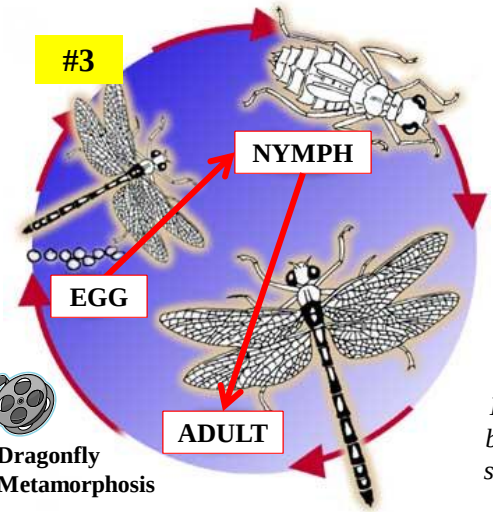
Read pages 122-124.

1. What do we call the physical transformation an insect makes during its life cycle? **METAMORPHOSIS**

2. What type of insects use asexual reproduction?
APHIDS & SCALE INSECTS

Incomplete Metamorphosis = 3 Stages

Young insects look like the adults,
but do not have functional wings and cannot reproduce.



Dragonfly Metamorphosis

http://www.kidfish.bc.ca/images/damselfly_life_cycle.jpg

Examples ★6?

N **Dragonflies** **Crickets**
N **Damselflies** **Milkweed bugs**
Grasshoppers **Praying Mantis**

Add a water droplet with N for nymphs as they have an aquatic nymph stage

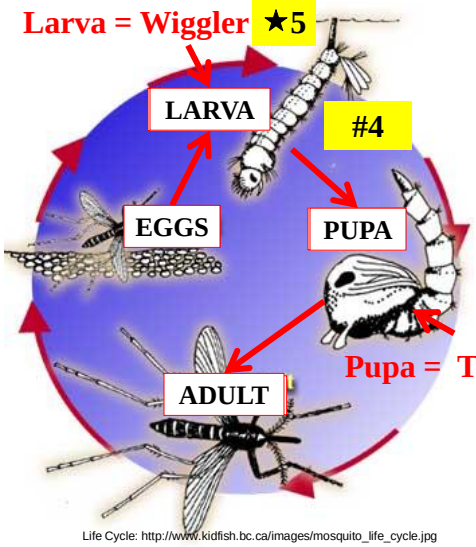
*Insects may **MOLT** several times before becoming adults, which means they have several nymph stages (called **INSTARS**).*

Add to notes ***(stages)***

Complete Metamorphosis = 4 Stages

**Young insects <u>do not</u> look like the adults,
do not have wings, and cannot reproduce.**

Larva = Wiggler ★5



Pupa = Tumbler ★5

Life Cycle: http://www.kidfish.bc.ca/images/mosquito_life_cycle.jpg
Mosquito Images: http://www.hudsonregional.org/mosquito/index.htm

<u>Examples</u> ★6?

Butterflies **Mosquitoes** *L&P*
Flies **Ants**
Bees **Beetles**

Mosquitoes & midges have an <u>aquatic larval and pupal</u> stage**.**

Monarch Metamorphosis

*These insects may have several **INSTARS** during their **LARVAL** stage as they grow.*

What do we call the larval stage of a Japanese beetle?

★5 GRUB WORMS

What do we call the larval stage of a house fly?

★5 Maggots

Add all examples to #5 on your note worksheet …

Other Larva Examples → *Butterfly = caterpillar*

Other Pupa Examples → *Butterfly = Chrysalis*
Moths = Cocoon
Beetles & flies = Pupa case

Beetle Image: http://turf.uark.edu/images/jblifestages%20small.jpg Maggot Image: http://www.abc.net.au/science/news/img/health/maggots180804.jpg

Bug Blitz Time … If your notes & vocab are done!

You will need to use your best bug hunting skills to see what you can find.

Capture pictures rather than bugs if possible.

If you see a Monarch and can catch it, bring it to me to tag before you release it.