Identification Made Simple
Adrienne Brundage

"You think you have problems! Try being a male ladybug."
Exoskeleton
3 Body Regions

- Head
- Thorax
- Abdomen

- Head:
  - Pincher
  - Eye
- Thorax:
  - Feeler
  - Sharp Claw
- Abdomen:
  - Stinger
  - Poison Sac
6 Legs (3 pairs)
6 Legs (3 pairs)
6 Legs (3 pairs)
6 Legs (3 pairs)
Mouthparts

- Sponging Mouthparts
- Siphoning Mouthparts
- Sucking Mouthparts
- Chewing Mouthparts
No Metamorphosis

Ametabolous Development

Egg    Young    Adult
Simple Metamorphosis

Life Cycle of a Leaf-Footed Bug

(Eclectoglossus spp.)

Eggs → Nymphs → Adult

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http://aggie-horticulture.tamu.edu/galveston
Complete Metamorphosis:
Life Cycle of the Lady Beetle

- Larva
- Eggs
- Pupa
- Adult

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http://aggie-horticulture.tamu.edu/galveston
Thysanura

- Tysan=fringed
- -ura=tail
- Silverfish
Odonata

- Black-winged damselfly
- Green darner
Orthoptera

- Ortho = straight
- -ptera = wing
- Long-horned grasshopper
- Field cricket
Blattodea

• American cockroach
Mantodea

- Praying mantids
Phasmatodea

- Walkingsticks
Phthiraptera

- Head louse
Hemiptera

Hemi = partial
ptera = wing

Harlequin Bug

“True Bugs”
Hemiptera

Hemi = partial
ptera = wing

Harlequin Bug

“True Bugs”
Neuroptera

- **Neuro** = nerve
- **-ptera** = wing
- **Antlions**
Antlion
Coleoptera

Coleo=sheath
-pteran=wing
Diptera

Di=two -ptra=wings

Housefly
Diptera

Diptera Wing
Diptera

Diptera Wing
Diptera

Diptera Wing

Not Diptera Wings
Lepidoptera

Lepido=scaly
- ptera=wing

- Black swallowtail
- Luna moth
Hymenoptera

Hymeno=membrane  
-pter=wing

- Honeybee
- Red imported fire ant
- Velvet ant
- Yellowjacket
Hymenoptera

Hymeno=membrane
-pteran=wing

- Honeybee
- Red imported fire ant
- Velvet ant
- Yellowjacket
Hymenoptera

- 2 pairs of wings
- very thin “waist”
Hymenoptera

- 2 pairs of wings
- very thin “waist”
Any Questions?

Son...
do you know how fast you were going?
Quiz! Tell me the order of the insects as they come up
Quiz! Tell me the order of the insects as they come up.
Quiz! Tell me the order of the insects as they come up
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Quiz! Tell me the order of the insects as they come up
Quiz! Tell me the order of the insects as they come up.
Quiz! Tell me the order of the insects as they come up.
Quiz! Tell me the order of the insects as they come up
kiss me, i prince

srsly