

ENTOMOLOGY PRACTICE TEST

Names: Cool kid #1, Cool kid #2, ^{optional cool kid #3} Team no: Awesome

1) (a) identify species and family, (b) distinguish three differences between these bugs, and (c) give the common name for the predator bug that is specifically known for making these bugs it's prey.

a) fig. 1: *Cyclochila australasiae* family: Cicadidae

fig. 2: *Magicicada septendecim*



b) fig. 1 is periodical, fig. 2 is seasonal, fig. 1 is not native to N. America like fig 2, fig 1 is green.

c) cicada killer [wasp]

2) (a) what is the common name for this bug? (b) What is its antenna shape? (c) Determine which form is male or female.



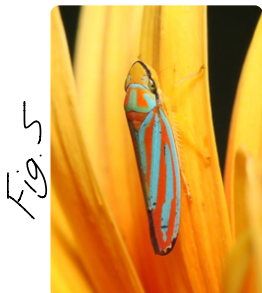
a) scissors-turtle bug or shield bug or Hasamitsuno-kamemushi (ハサミツノカメムシ)

b) thread-like

c) fig. 3: M. Or F
fig. 4: M. Or F



3) (a) Identify order and species, and (b) where is this bug native to?



a) order: Hemiptera

species: Graphocephala coccinea

b) central and eastern North America

4) is the metamorphosis of *Hexagenia limbata* complete or incomplete?
(Circle the right answer)

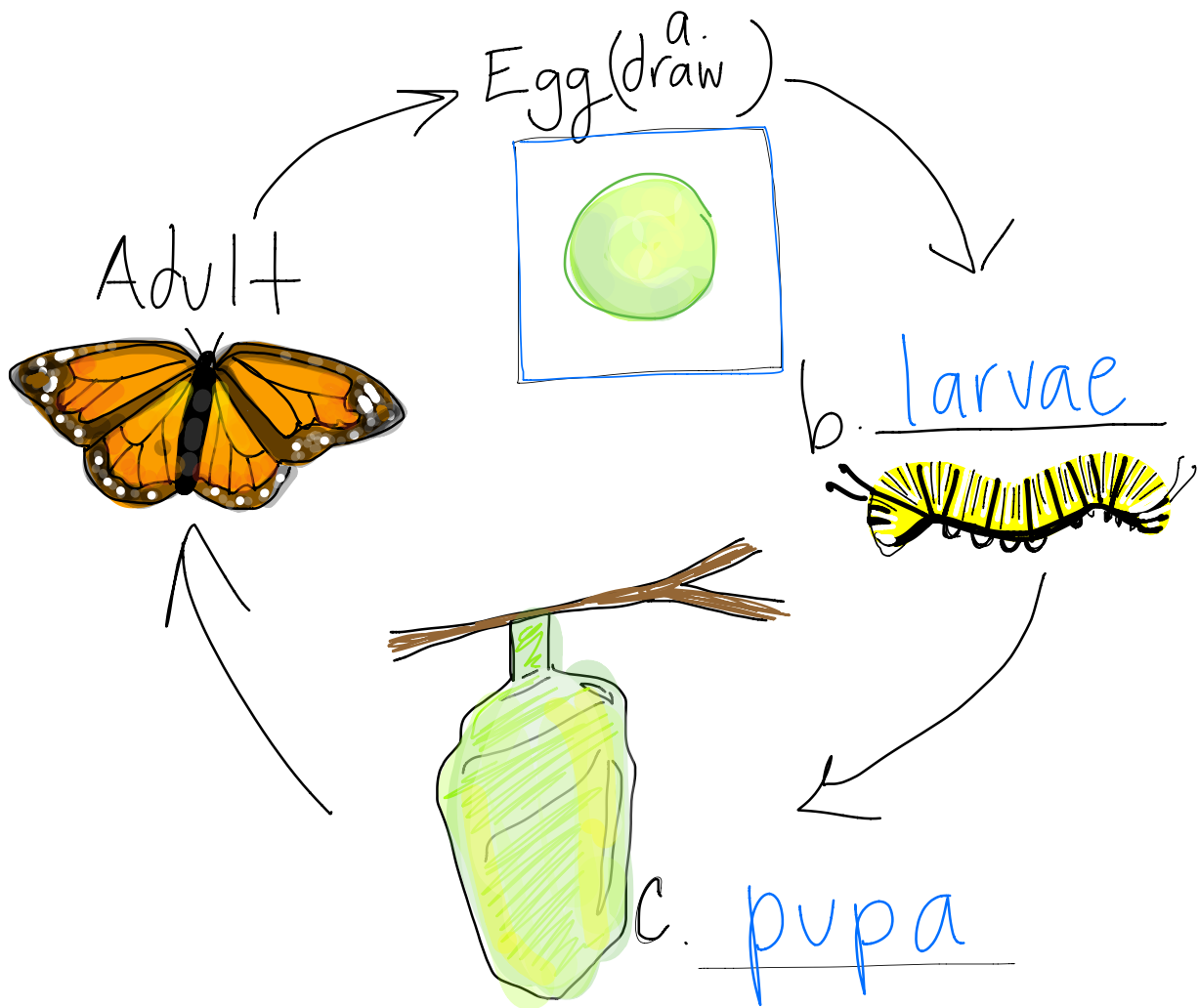
5) what order does this bug belong to?

- a) Mantodea
- b) Mantispidae
- c) Neuroptera
- d) Orthoptera

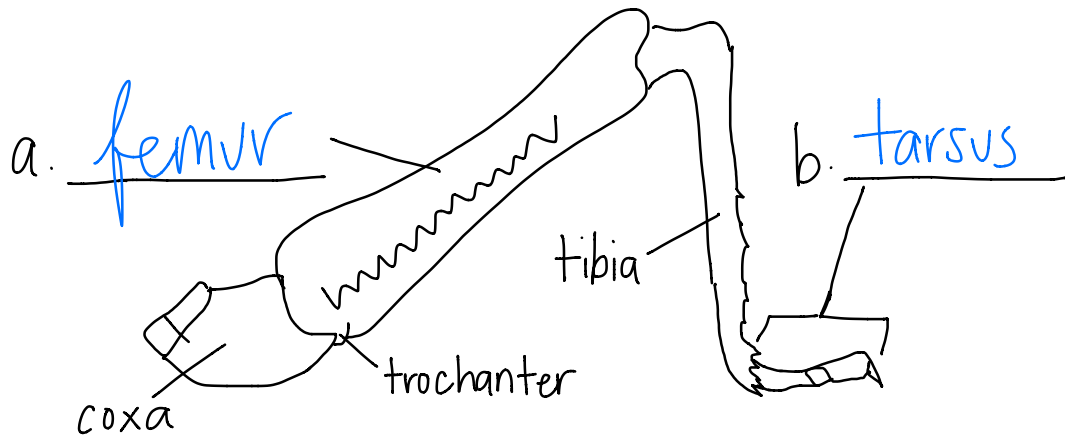


fig. b

6) complete the life cycle of a butterfly.



7) identify the missing labels of the leg.



8) Make a dichotomous key for all of the bugs of the order Hemiptera mentioned on this test. (Should include bugs from 1, 2, and 3)

extra credit: name the species and common name of the butterfly that was used for the life cycle.

Monarch butterfly (*Danaus plexippus*)