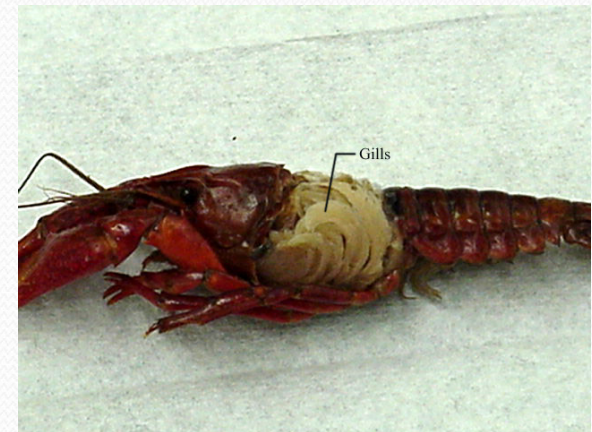
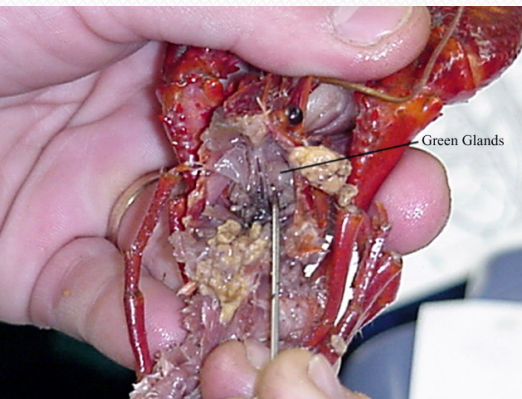
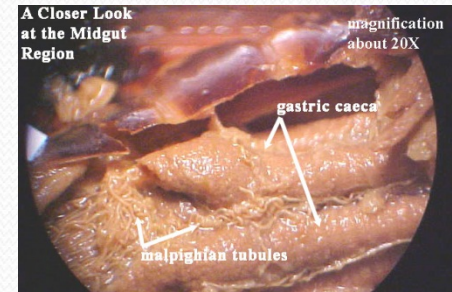


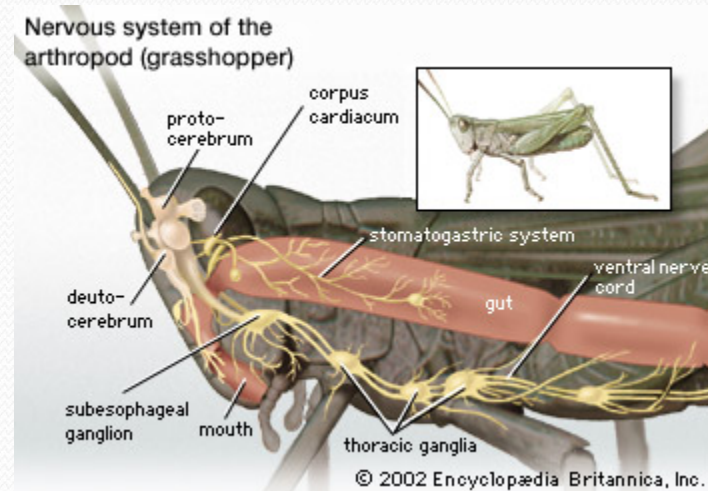
G. Excretion

1. Solid waste: *Leaves through the anus*
2. Metabolic waste eliminated by:
 - a) *Malpighian tubules*
 - *filter nitrogen based waste from blood*
 - b) *Diffusion through the gills*
 - c) *Green glands*
 - *filter blood at base of antennae*



H. Response

1. Nervous system composed of:
 - a) *Brain (with 2 ganglia in the head)*
 - b) *A pair of nerves that runs around the esophagus and connects the brain to a ventral nerve cord*



2. Have sense organs such as:

- a) *Statocysts*
- b) *Chemical receptors*
- c) *Compound eyes*
- d) *Taste receptors*
- e) *Sensory hairs*
- f) *Ears*

3. Defense against predators:

a) *Venomous stings and bites*



b) *Attack with powerful claws, chemicals*



c) *Create a diversion (ex. Drop a body part)*

d) *Visual trickery (ex. camouflage)*



I. Reproduction

1. Fertilization is internal
2. Males transfer sperm directly or drop a packet of sperm that is picked up by the female

Cockroaches

