- Insect collection for class
- Gloves (small, medium and large for class)
- Safety goggles for each student
- Straight or bent probe
- Forceps or scalpel
- 2-3 Petri dishes
- Eye dropper or transfer pipette
- 95% ethanol in squirt bottle
- 5 glass vials (or baby food jars)
- Sharpie, extra fine point permanent
- Labeling tape
- Colored pencils
- Dissecting microscope
- Computer
- Incubator, heat block, or water bath set @ 70˚ C (for class)
- Vortex (per ~6 students)
- Microcentrifuge (to 13K rpm)
- Positive and negative Nasonia controls (from MBL)
- Positive genomic DNA control (from MBL)
- Microtube Pestles (Fisher K749521-0500)
- Qiagen DNeasy Blood and Tissue DNA Extraction Kit (Qiagen #69504)
- Qiagen Proteinase K (Qiagen #19131)
- P20, P200 & P1000 pipettes
- P20, P200 & P1000 pipette tips
- Float racks for water bath
- Waste cups for tips, etc.
- Kimwipes
- Microfuge tube rack (VWR #CBGTR-080)
- 1.5ml microcentrifuge tubes (VWR #20170-333)
- Thermal Cycler for class
- 5 PureTaq PCR Ready Tubes (GE Healthcare # 27-9559-01)
- PCR tube rack (FISHER #05-541-80)
- 1 tube of Wspec-forward and reverse primers (5 micromolar, 20 µl each) (from MBL)
- 1 tube of CO1 forward and reverse primers (5 micromolar, 20 µl each) (from MBL)
- 1 tube of reagent grade H2O (200 µl)
- 5x Loading buffer (BioRad #166-0401) (12 µl)
- DNA ladder (BioRad #170-8356) (10 µl)
- Agarose for 2% gels (Fisher # BP1356-100)
- 1x Sodium Borate (SB) buffer
- Gel casting tray and combs
- Fast Blast DNA stain (Bio Rad# 166-0420EDU) or GelRed DNA stain (Fisher #NC0017761)
- Staining trays for class
- Electronic balance for class
- Weighing dishes or paper
- Spatula
- 500 ml flask
- 100 ml graduated cylinder
- Microwave or hot plate for class
- Oven mitt or tongs for class
- Light box to view gels
- Ethyl Alcohol 95% denatured (Fisher A407-500)
- Absolute Ethanol (200 proof) (Fisher BP2818-500)