

DIVE Biology

Lab Instructions & Supply List by Lab

IMPORTANT: Follow the instructions on page 2 for every lab.

Using your own lab supplies? Even if you are not using the DIVE Lab Kit, follow these instructions on which labs to attempt hands-on, supplies needed, etc.

The **DIVE Biology Lab Kit** can be purchased at [Nature's Workshop Plus](#). Except for the items on page 2, the lab kit contains all the equipment to do 21 of the 28 labs. These are the best college preparatory labs, NOT the safest labs. Please take the necessary **safety precautions** when completing all lab activities. [FAQs: Lab Supplies & Kits](#)

Instructions for Labs Not Completed Hands-On

Labs 4, 6, 9, 12, 23, and 28

These labs require very expensive equipment or chemicals that are restricted by Federal Law. To complete these labs:

1. Watch the video lab and fill in the corresponding Lab Activity pages in the Lab Workbook..
2. Grade and correct the lab activity sheets using the video solutions at the end of the video lab.
3. A completion grade is recommended. If the lab is completed and corrected, a grade of 100 is awarded. [Learn More](#)

Instructions for Hands-On Labs

Labs: 1, 2, 3, 5, 7, 8, 10, 11, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 24, 25, 26, and 27

1. **Important:** Do not use the supply list in the lab workbook. Find the lab in the Chart on page 3.
2. Read the special instructions and gather the supplies listed there.
3. Watch the video lab. Do not complete the lab activity page or use the supplies, yet.
4. Do the lab hands-on while filling out the lab activity pages in the DIVE Lab Workbook.
5. Grade and correct the lab pages by watching the video solutions at the end of the video lab.
6. A completion grade is recommended for labs. This means if all of the work is completed, graded, and corrected, a 100 is awarded. [Learn More](#)

Supplies You Provide

- Anacharis - a live aquatic plant that cannot be included in the kit. However, it is available at most pet stores that sell fish.
- Banana
- Calculator (Graphing or Scientific)
- Duct Tape
- Distilled Water
- Ice
- Onion
- Paper Towels
- Permanent Marker
- Pond Water
- Spinach Leaf
- **Sow or Pill Bugs (Live)**
- Print out of of sponges and cnidarians
- Print out of [Color Vision Test](#)
- Print out of [Respiratory and Digestive System Reference Chart](#)

Questions? [FAQs: Lab Supplies & Kits](#)

Important: Instructions & Lab Supplies by Lab

| Lab # | Supplies In Kit | Supplies You Provide & Important Instructions |
|-------------|--|---|
| 1 | Preserved Slide Desmids Preserved Slide Crossed Threads Economy Magnifiers (Hand Magnifying Lens) | Microscope |
| 2 | None | Computer with Spreadsheet Application (see Important Notes above) |
| 3 | Dialysis Tubing Iodine Solution (Iodine Tincture)* *Save for Lab 5 100 ml Starch Solution, 1%* 100 ml Glucose Solution, 15%* Beakers, glass, 150ml Ruler Stir Rod Glucose Test Strip Eyedropper (In Dissecting Kit) Graduated Cylinder, 10ml Digital Scale (Balance) | Distilled Water Spreadsheet Application (see notes above) *Special Instructions: The video lab instructs you to create a starch solution and a glucose solution. However, the lab kit provides these as pre-mixed solutions . Simply follow the instructions in the video as if you had made the solutions as instructed. The video will tell you how much of each solution to use and how to use it. |
| 5 | Slides and Coverslips Set* Concave Slide Set* Eyedropper (In Dissecting Kit) Methylene Blue Iodine Solution (From Lab 3) Cotton Swabs Scalpel (In Dissecting Kit) Forceps (Tweezers -In Dissecting Kit) Pointed Probe | Microscope Onion Banana Anacharis (<i>Available at local pet store with aquarium supplies</i>) Water *Wash and save for future labs |
| 7 Part 1 | Preserved Slide Allium (Onion) Root Tip Slides and Coverslips Scalpel (In Dissecting Kit) Pointed Probe Eyedropper (In Dissecting Kit) | Complete Part 1 with included lab supplies. Complete remaining part(s) by watching the video lab. Whitefish Blastula Slide * *This slide is not in the kit. Use the slide images in the video lab. |
| 8 | None | Calculator |
| 10 | PTC Paper Index Cards (To make your own Allele Cards) | Calculator |
| 11 | Choice Chamber Filter Paper | Water Live Sow or Pill Bugs* *If you don't have live Pill or Sow bugs, watch the video lab instead. See "ILive" on page 2. |

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| 13 | Concave Slides* Coverslips* Eyedropper (In Dissecting Kit) Methyl Cellulose Preserved Slide Mixed Protozoans Preserved Slide Marine Diatoms | Distilled Water Pond Water Microscope *Wash and save for future labs |
| 14 | Preserved Slide Rhizopus Preserved Slide Penicillium Preserved Slide Coprinus, cross-section Preserved Slide Lichen, cross section | Microscope |
| 15 | Glass Vials Rubber Stoppers Graduated Glass Pipettes, 2ml 100ml Graduated Cylinder Dry Pea Seeds Plastic Beads Cotton Balls Rayon Balls Potassium Hydroxide Solution(KOH) Silicone Sealant Stir Rod Thermometer Safety Goggles | Duct Tape Ice Water Paper Towels Permanent Marker |
| 16 | Watch the video lab for the science experiment in the first part titled "Of the following variables, heat/light, wind," Use the following lab supplies to complete the 2nd part titled "Observing cells involved in transpiration." Ranunculus slide (root and stem) Slides and cover slips** Tweezers (In Dissecting Kit)* Eye Dropper (In Dissecting Kit)* Dissecting Scissors (In Dissecting Kit)* | Spinach leaf Water *Wash and save for future labs **Use to make spinach slide |
| 17 | Preserved Slide Grantia (c.s. and l.s.) Preserved Slide Spicules Preserved Slide Hydra Concave Slides* Cover Slips* Eyedropper (In Dissecting Kit) | Microscope Water Print out of Photographs sponges and cnidarians **Wash and save for future lab |
| 18 | Preserved Earthworm Dissection Tool Kit Dissection Pan and Flex Pad* Gloves Economy Magnifier (Magnifying Lens) | Microscope *Wash and save for future lab |
| 19 | Preserved Crayfish Dissection Tool Kit Dissection Pan and Flex Pad* Gloves Economy Magnifier (Magnifying Lens) | Microscope *Wash and save for future lab |

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| 20 | Preserved Grass Frog Dissection Tool Kit Dissection Pan and Flex Pad* Gloves Economy Magnifier (Magnifying Lens) | Microscope *Wash and save for future lab |
| 21 | Preserved Fish (Perch) Dissection Tool Kit Dissection Pan and Flex Pad* Gloves Economy Magnifier (Magnifying Lens) | Microscope *Wash and save for future lab |
| 22 | Preserved Fetal Pig Dissection Tool Kit Dissection Pan and Flex Pad* Gloves Economy Magnifier (Magnifying Lens) | Microscope *Wash and save for future lab. |
| 24 | Slide Human Skin c.s. Slide Human Stomach c.s. (involuntary) Slide Heart Muscle (cardiac) Slide Striated Muscle (voluntary) | |
| 25 | Lung Volume Bag Human Anatomy Torso | Respiratory and Digestive system reference chart http://creationwiki.org/Respiratory_system |
| 26 | Part 1 Human Blood and Blood Typing* Human blood slide Human ABO Blood Typing Kit | Microscope Spreadsheet Application (see notes above) *Complete Part 1 with included lab supplies. Complete remaining part(s) by watching the video lab. |
| 27 | Reflex Hammer (Rubber Mallet) Penlight (Flashlight) | Banana Color Vision Test |

Please check your order for any shortages and/or damaged items upon receipt.

Please contact *Nature's Workshop Plus! Inc.* for any needed replacement, and/or additional items.

Please observe all safety precautions when doing experiments.

Please note that exact quantities may vary slightly, and some items may not be included due to limited availability or seasonal shortages.