Forensic Science Kits

NOTE: Prices are estimates only.

Item Description + Item #	Company	Unit Cost	Quantity
Ward's Forensic Detective Lab (TS CSI-900)	https://www.teachersource.com/category/forensic	\$399.00	1
CRASH Curriculum	https://www.legalsciences.com/crash/l	\$400.00	1

NOTES:

- 1 The Wards Forensic Detective Lab contains supplies for blood typing, luminol detection, blood spatter, DNA analysis, glass lab, FACES software, and much more
- 2 If you cannot purchase the entire Wards kit, at least purchase the FACES software through the Teacher Source website for \$99.00. It is well worth the cost and your students will love making facial composites of their classmates.
- 3 You may be able to get funding for the CRASH curriculum unit through state police or local community organizations. You might also want to split the cost with your high school physics teachers as they will be able to use the kit as well for more involved investigations. The Legal Sciences website offers a "Physics of Automobile Crashes" book for \$39 that will provide enough information to get you started with your lessons.

Fingerprinting Supplies

Fingerprint Ink Pads (TS CSI-300)	https://www.teachersource.com/category/forensic	\$9.95	3
Magnetic Powder (Black) (1-0160)	http://www.crimescene.com/	\$6.00	6
TEX Disposable Magnetic Applicators	http://www.dojes.com/	\$6.95	12

NOTES:

- 1 You will also need rolls of clear plastic tape and index cards for each set of materials. I created 12 sets (6 with regular powder and 6 with magnetic powder). Each set has one container of powder, 2 brushes, a roll of tape, and several index cards.
- 2 If you have the funds available, purchase several containers of fluorescent magnetic powder and a UV light.

Hairs & Fibers

Glass Microscope Slides (14 V 3500) - Pack of 72 slides	http://wardsci.com/	\$8.95	2
Fiber Sample Set (36 V 0135)	http://wardsci.com/	\$4.95	2
Human Hair Sample Set (36 V 0136)	http://wardsci.com/	\$4.95	2
Microscope Slide Boxes (CA-97-0025)	http://www.zefon.com/	\$2.49	12

NOTES:

- 1 I asked students for donations of animal hairs from their pets and/or livestock. You'll want samples of cat, dog, rabbit, rat, and horse hair. Other interesting samples may come from deer, cows, pigs, and exotic pets.
- 2 I received donations of human hairs from my fellow teachers. You will want samples for dark hair, light hair, red hair, colored hair. You might also use samples of naturally curly or permed hair.

3 - Create your own slide sets using clear tape or clear nail polish to hold the sample on the slide. Label the slides with a permanent marker and store them in plastic slide boxes. I created 6 sets - one set for every two microscopes I have in my room.

Chromatography Supplies

Chromatography Paper Strips	http://www.dsoi.com/	\$2.05	10
(15 V 3708)	http://wardsci.com/	\$3.95	10

NOTES:

- 1 You will also need a set of 20 or more black markers in a variety of brands and styles for this activity along with beakers or plastic cups and masking tape.
- 2 If you prefer to do chromatography with solvents other than water, you'll need additional paper strips and samples of permanent markers in addition to the solvents.

Blood Unit Supplies

Refill Kit for Simulated ABO + Rh Blood Typing (36 V 0034)	http://wardsci.com/	\$19.95	6
Blood Spatter Blood (Fake Blood)	Check dollar stores near Halloween	\$1.00	2
24" White Butcher Paper (8WW4024)	http://www.discountschoolsupply.com/	\$33.99	1

NOTES:

- 1 I saved money on blood typing kits by setting up 6 kits one for each group of students. Each group tested one blood sample instead of all 4 samples provided in the kit. More details about this lesson are on the forensic science page at http://sciencespot.net/Media/FrnsScience/bloodtypinglab1wkst.pdf for more info.
- 2 I use fake blood I found at a dollar store after Halloween. I did need to water it down a bit to get it to spatter the right way you need it to show spines and not just a glob of red. The brand I had didn't show any spines at first, but by adding a bit of water it worked great.

Impression Evidence

Micropore Ink Pads (# 901-21281)	http://www.quill.com/	\$3.09	10
Plaster of Paris (Shoeprints Lab)	Various Stores	\$4.00	2
Play Sand (Shoeprints Lab)	Various Stores	\$10.00	1

NOTES:

- 1 Ask your students for donations of used Hot Wheels (or other toy cars) to use for the tire tracks lab. You'll probably need to add some wear patterns to the tires if the cars have not been used a lot. I used screwdrivers, sandpaper, and nails to add some interesting characteristics to mine.
- 2 If you plan to use other ink pads than the "micropore" type, be sure to avoid the sponge pads as it tends to be harder to get a good amount of detail with them.
- 3 If you know any mechanics or junk yard dealers, see if they will donate samples from real tires. I was able to get 10 samples from my mechanic last year. He was nice enough to cut them into sections (about 2 feet long) and labeled the back of each one with the tire brand. You can use black paint and a sponge brush to coat the tire tread and then press a piece of paper over the tire to create a print.

Other Materials:

Forensic Science Resource CD (SW WL5269-FRC) Includes worksheets, templates for lab samples, microscope images, etc.	http://www.sargentwelch.com/	\$30.49	1
Forensic Knowledge Cards (CARD-490)	https://www.teachersource.com/category/forensic	\$9.95	1
Life Picture Puzzle Books	Amazon.com	\$9.00	4
Famous Court Cases Cards (CARD-510)	https://www.teachersource.com/category/forensic	\$9.95	1
Forensic Files DVDs	Amazon.com	\$29.95	1

Frequently Asked Questions

How many students do you have each year? I use the supplies with approximately 100 students each school year. In the past our students rotated through 4 activity classes, so I had approximately 25 students per quarter. I now do the Forensics units throughout the year with all 7th & 8th graders (approximately 130 students) along with sharing some units with our 6th grade teacher to implement in units they investigate that relate to CSI topics.

What supplies do you need to purchase each year? I purchase the refill kits for the blood typing lab, paper strips for chromatography, sand/plaster for the shoeprints lab, and restock my supply of clear tape every year. I plan to purchase additional materials (power and a few new brushes) for the fingerprinting kits every three years.

What other supplies do you use that are not listed? I am able to get large sheets of white construction paper (tire tracks lab), index cards (fingerprinting), and card stock (reference cards) from our school supply.

Note: I purchased a SircleLam HQ-330 13" Pouch Laminator and letter-sized pouches this past summer from Laminator.com to create the reference cards for each unit. I also purchased business card-sized laminating pouches and used those to create new hair/fiber "slide" sets for this year. I created slides of each type of hair and fiber I had available by laminating a few specimens along with a label inside each pouch. I punched holes in each of the "slides" and keep them bound together using o-rings. I also plan to use the smaller pouches during class to have the kids make slides using their own hair.

How do you store all the supplies? I purchased small plastic containers (food storage size) or ziploc bags to use for the various sets of materials. I invested in a dozen larger plastic tubs (various sizes) in order to set up kits for each of the units I teach in this class. I can store these tubs in a cabinet in my room. When it's time for that unit, I pull out the tub and have everything ready to go!

What resources have you used to develop the units? Most of my units were developed using online resources and input from police officers I know. Go to http://sciencespot.net/Pages/classforscilsn.html to find

links to websites with lesson ideas. A list of sites with background information on a wide variety of forensic science topics is available at https://sciencespot.net/Pages/rdss_forsci.html .

T. Tomm https://sciencespot.net/ Last Updated: 1/16/2024