Salvaging your electronic device from battery leakage

You must know that feeling, the dread that fills you when you find that batteries have leaked in one of your expensive pieces of technology. You'd think that would've been solved by now in 2015, but you're wrong!

Step 1: Gather materials!

First, know what kind of battery leaked into your electronics. Disposable batteries are either acid or alkaline, usually alkaline. Check what it says on the batteries. From chemistry, you should know that you can cancel out an acid with a base, and vice versa.

The batteries that leaked into my device were alkaline, and as the name implies, were made with basic chemicals. You will need:
- Vinegar (an acid) or baking soda (a base) (which you use depends on the type of battery that leaked)
- Paper towels
- Toothpicks (optional)
- Plenty of Q-tips (cotton swabs or an old toothbrush would work just as well)
- Shot glass or other small container (for the solution you will clean with)
- Electrical tape (optional, but good to keep liquids and dust particles out of the circuits)
- A pencil eraser
- Steel wool (optional, but useful as a last resort)

Pour the vinegar or water into the shot glass; add the baking soda to the water if

making a base solution. Go to a cleared and cleaned area, preferably well ventilated too, with your electronics and sit down.

Step 2: Get cleaning

If you have toothpicks, you can use these to pick off larger pieces of corrosion from the springs.

If you have electrical tape, cut it into small squares and cover openings to the circuits inside to prevent water from getting inside. Dip the Q-tips into the solution and start scrubbing. They are not sturdy when wet so you will need a lot of them. I find it useful to clean with one end of the Q-tip and dry with the other; after all, you don't want to get the electronics wet inside. That is why Q-tips are good since they can't hold enough water to really drench things. In between scrubs, you can use a toothpick to get off more loosened gunk.

If you have the leeway, use the paper towels. They are larger and slightly more abrasive than the Q-tips. Be ABSOLUTELY sure that they are not soaking wet, as you do not want to get the delicate circuits inside wet (yet another reason to use electrical tape). Repeating what you did before, scrub off the corrosive chemicals and dry. You may hear fizzing as your solution reacts with the leaked chemicals.

You need not be perfect with your cleaning. You only need the parts of the metal that touch the nodes of the battery to be clear enough to conduct electricity. The metal underneath the corroded area will still conduct just fine.

**Be careful not to touch your face, eyes, mouth, nose, etc... as some of these chemicals are very caustic! Plastic gloves, or even goggles, would be great for safety here.

If you are not having any luck, see the next step.

Step 3: Additional cleaning

Once you've sufficiently dried off the nodes, use a pencil eraser to get more of the corroded material off of the metal. This is especially good for the though spots that did not lift with your solution.

If necessary, use the small piece of steel wool. I wouldn't recommend using it initially, since it is very abrasive and can leave particulate steel dust

inside your device, potentially creating shorts.

Cover openings with electrical tape to mitigate this issue. I think my cleaning did a good enough job clearing the connectors, but I resorted to it briefly as my device had been sitting in this state for quite a while. It really took care of one spot that just wouldn't clear with the vinegar.

Step 4: Enjoy your electronics once more!
Voila! Your electronics are once more functional and ready to fulfill their purpose! I learned my lesson; never keep batteries inside something too long. Be sure to wash your hands once finished!