RC electronics vendor: Highly recommended you add Getfpv.com and RacedayQuads.com

These provide a much wider selection of electronics and usually for 20-30% less than the price on Amazon

Video for Safety procedure for batteries

3d print instructions: It is recommended that you use PETG at 25% infill for all components, if using PLA then 50% infill is recommended. Be careful of motors getting hot (This often results from incorrect tuning) hot motors will cause nuts and bolts to become loose

These are generic components you only need to purchase one set of:

1) M2 screw kit 9.99
2) M3 screw kit 9.99
3) Battery straps small for drone 9.99
4) Battery straps large for VTOL 9.99

5) It's recommended you purchase a couple extra hex screwdrivers, makes life alot easier, purchase M2, M3 and M4 screwdriver heads 7.99
6) A battery charger:
   Here's the Preferred battery charger that will work out of the box:
   ~ $64.99
   And here's a
   El-Cheapo Battery charger (This one requires that you already have a USB-C DC power supply, preferably a mac book charger or something like that)
   ~$15.99

Total price ~$107

More generic components, you should purchase one set per flying drone system:

1) Radio: elrs Amazon 69.99:

2) One receiver: (You can either use this out of the box as a PWM receiver or use it as an sbus receiver, allowing you to get access to a full 16 channels!)
   ~ $26.99
1) Two batteries recommended: ~ $39.98 total

1) Some cables to connect the PWM receiver to the Longfly dRehm

~ 4.99

2) Recommended for PID tuning: 2-4ft xt-60 extension cable
~$14.99

3) Necessary for PID stand: Buy a 0.5in diameter wooden dowel from your local hardware store, you want at least one piece to be 1m in length and the other pieces to be about 0.4-0.5 m in length
~$5.98
4) Smaller 1404 motors (4 needed per drone 2 per demo uni, choose the 3800kv option) ~ $61.96 totall
5) 4in propellers for a drone or 2in propellers needed for a demo unit ~$8
6) A 4 in one ESC (preferred because can also be used for a VTOL airplane) or individual ESC's (only usable for demo unit)~$40

Total Price needed Generic Components: **~$200**

3d printed drone & PID_demo specific parts list (parts are interchangeable):

1) Longfly dRehm
~$55.00
2) Teensy4.0
~$24.00
3) Longfly 3d printed drone ~$10.00
4) Smaller battery connector for drone ~9.99
5) Two 650 mah batteries for the drone ~$32
6) Longfly 3d printed demo files ~$0.00
7) Smaller 1404 motors (4 needed per drone 2 per demo uni, choose the 3800kv option)
~ $61.96 total
8) 4in propellers for a drone or 2in propellers needed for a demo unit
~$8

9) A 4 in one ESC (preferred because can also be used for a VTOL airplane) or individual ESC's (only usable for demo unit)

~$40

Total cost of Just 3d printed Drone/ PID demo without generic components:
$240.96

Here's the parts list for how to make a Vertical Takeoff Airplane:

1) two escs (these are to power the motors):
~$40

2) Longfly dRehm
~$55.00

3) Teensy4.0
~$24.00

3) Longfly VTOL 3d print files ~$25.00

5) Two Motors (These ones are built to be strong enough to spin 7in propellers
~30.50

6) 7in propellers (recommended to purchase two packs)
~3.69

7) Two servos: ~3.79

Total cost of a Vertical Takeoff Tailsitter Airplane without generic components:
$180

Total price per person ~ $340-380, around $300 of those parts are reusable