

 **ULTIMATE ATL / STEM INVENTORY (30 STUDENTS)** **Electronics Core Kit**

Component	Quantity
Arduino Uno	15
Arduino Nano	5
Breadboard	20
Jumper wires (set)	25 sets
LEDs (assorted colors)	300
Resistors (assorted kits)	15 kits
Capacitors kit	5 kits
Transistors	40
Diodes	30
Push Buttons	40
Buzzer	15
Potentiometer	15
LCD Display (16x2)	3

 **Sensors & Advanced Modules**

Component	Quantity
Sound Sensor	5
IR Sensor Modules	12
Ultrasonic Sensor (HC-SR04)	5
MQ-135 Gas Sensor	3
Temperature & Humidity Sensor (DHT11/DHT22)	5
HX711 Amplifier	2
Load Cell (5–10kg)	2
Relay Module	5

Motors & Motion

Component	Quantity
DC Motors	15
Servo Motors	5
Motor Driver (L298N)	5
Wheels	50
Chassis (robot/car base)	10
Axles (rods/skewers)	25

Power System

Component	Quantity
9V Batteries	15
AA Batteries	40
Coin Cell (3V)	50
Battery Holders	20
USB Cables	15
Switches	25

Electrical & Conductivity Materials

Component	Quantity
Copper Tape	6 rolls
Copper Plates	10
Zinc Plates / Iron Nails	25
Conductive Dough	3 kg
Insulating Dough	2 kg
Connecting wires (extra)	30

Mechanical & DIY Materials

Component	Quantity
Balloons	20

Straws	30
Plastic Bottles	15
Wooden sticks / strips	60
Rubber Bands	30
Thread/String	30

Science Lab Materials

Component	Quantity
Beakers / Containers	15
Plastic tubes / pipes	15
Water pump (mini)	5
Thermometer	5
pH Paper Strips	3 packs
Vinegar (acid)	2 L
Baking Soda (base)	1.5 kg
Salt	1 kg
Food Color	5 bottles
Pencil leads (electrodes)	30

Craft & Model Making

Component	Quantity
Cardboard Sheets	50
Chart Paper	40
Colored Paper	60
Graph Paper	40
Nuts & Bolts	60 sets
Paper Fasteners	60
Glue Sticks	15
Glue Gun	2
Tape Rolls	6

 **Tools & Stationery**

Component	Quantity
Scissors	12
Cutter	6
Scale (Ruler)	12
Protractor	12
Compass	12
Pencil	40
Marker	15

 **Software & Platforms**

Tool
Scratch
PictoBlox
Tinkercad
Dabble
Microsoft Excel
Teachable Machine

 **Devices**

Device	Quantity
Laptops/Computers	8-10
Smartphones	8-10