



Republic of Philippines  
**DEPARTMENT OF EDUCATION**

DepEd Complex, Meralco Avenue, Pasig City  
Trunk Line (08) 632-13-61, Website <http://www.deped.gov.ph>



*[Signature]*  
NIKKA TRADING's Witness

**PROJECT:** Mass Production and Supply of Science and Mathematics Equipment Packages to Public Elementary for Grades 1 to 3 and Grades 4 to 6, Public Junior High Schools for Grades 7 to 10 and Public Senior High Schools for Grades 11 to 12 (CORE and STEM)

**CONTRACT NO.:** 2022-BLR4(001to006)-BV-CB-001-C001

**CONTRACT**

**THIS CONTRACT** made and entered into this \_\_\_\_ day of \_\_\_\_\_ 2023 by and between **DEPARTMENT OF EDUCATION**, located at DepEd Complex, Meralco Avenue, Pasig City, Philippines, represented herein by its Undersecretary, **DR. GINA O. GONONG**, as per Department Order No. 001, s. 2023 (hereinafter referred to as "**DEPED**"); and **NIKKA TRADING** represented herein by its Authorized Representative, **JONATHAN R. ZULUETA**, with office address at Unit 1014 Cityland, Herrera Tower, V.A. Rufino Street cor. Valero Street, Salcedo Village, Makati City, Philippines (hereinafter referred to as "**NIKKA TRADING**").

**DEPED and NIKKA TRADING** are collectively called "**PARTIES.**"

**WHEREAS, DEPED** invited bids for the mass production and supply of Science and Mathematics Equipment Packages consisting of fourteen (14) Lots and received bids from nine (9) bidders; **DEPED** opened, read, and evaluated the bids of the nine (9) bidders and declared **NIKKA TRADING** as having the lowest calculated bid for Lot No. 1; after evaluation, **DEPED** post-qualified and declared the bid of **NIKKA TRADING** as the lowest calculated responsive bid for Lot No. 1 in the sum of **PHILIPPINE PESOS ONE HUNDRED NINETY-SIX MILLION, SEVEN HUNDRED SEVENTY-FIVE THOUSAND, FIVE HUNDRED FORTY-NINE and 28/100 (PhP 196,775,549.28) ONLY**, (hereinafter called the "Contract Price") detailed as follows:

Lot No.	Description	Amount (PhP)
1 MP-DBS	DEVELOPED BASIC SCIKIT (MP-LOT 1)	196,775,549.28

**NOW THIS CONTRACT WITNESSETH AS FOLLOWS:**

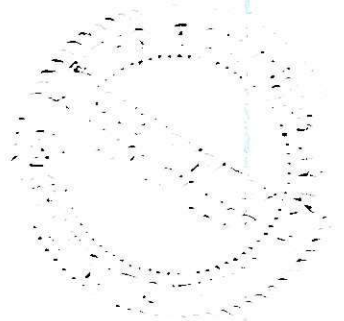
1. In this Contract, words and expressions shall have the same meaning as are respectively assigned to them in the Conditions of Contract referred to.

*[Signature]*  
JONATHAN R. ZULUETA  
NIKKA TRADING

*[Signature]*  
ARIZ DELSON ACAY D. CAWILAN  
DEPED's Witness

*[Signature]*  
DR. GINA O. GONONG  
DEPED

ED





  
NIKKA TRADING's Witness

  
JONATHAN R. ZYLUETA  
NIKKA TRADING

  
ARIZ BELSON ACAY D. CAWILAN  
DEPED's Witness

  
DR. GINA O. GONONG  
DEPED's Witness

2. The following documents as required by the 2016 Revised Implementing Rules and Regulations of Republic Act No. 9184 shall be deemed to form and be read and construed as part of this Contract, viz:
  - i. Philippine Bidding Documents (PBD);
    - a. Schedule of Requirements;
    - b. Technical Specifications;
    - c. General and Special Conditions of the Contract; and
    - d. Bid Bulletin No. 1 dated 29 December 2021, Bid Bulletin No. 2 dated 17 January 2022, Bid Bulletin No. 3 dated 21 January 2022, and Bid Bulletin No. 4 dated 27 January 2022.
  - ii. **NIKKA TRADING's** bid, including the Eligibility Requirements, Technical and Financial Proposals, and all other documents or statements submitted;
  - iii. Performance Security;
  - iv. Notice of Award of Contract and **NIKKA TRADING's** conforme thereto; and
  - v. Other contract documents required by existing laws and/or DepEd in the PBD. **NIKKA TRADING** agrees that additional contract documents or information prescribed by the GPPB that are subsequently required for submission after the contract execution, such as the Notice to Proceed, Variation Order, and Warranty Security, shall form part of the Contract.
3. **NIKKA TRADING** shall post a Performance Security within ten (10) calendar days from receipt of the Notice of Award in the form and amount prescribed therein. The performance security shall be posted in favor of **DEPED**, and shall be forfeited in the event it is established that **NIKKA TRADING** is in default of any of its obligations under this contract. **NIKKA TRADING** shall be responsible for the extension of its performance security and/or undertake to renew its performance security whenever necessary, and without need of prior notice or instruction from the **DEPED**, to ensure that it is in force and effect for the whole duration of the contract and until a Certificate of Final Acceptance is duly issued.
4. The goods must be ready for pick-up and hauling by the designated hauling service provider within **210 CALENDAR DAYS** from the receipt of the Notice to Proceed or as may be indicated in the NTP.
5. **DEPED** shall have the right to visit and inspect **NIKKA TRADING's** premises covered by the Contract, at any time or stage of contract implementation, to monitor and assess **NIKKA TRADING's** capacity to discharge its contractual obligations.
6. Pre-delivery and Pre-Implementation Conference shall be conducted prior to the conduct of inspection of goods by the designated DepEd Inspectorate Team.



  
JONATHAN R. ZULUETA  
NIKKA TRADING's Witness

  
JONATHAN R. ZULUETA  
NIKKA TRADING

  
ARIZ DEKSON ACAY D. CAWILAN  
DEPED's Witness

  
DR. GINA O. GOMING  
DEPED's Witness

7. Prior to and for purposes of inspection, **NIKKA TRADING** shall ensure convenient access to the goods for inspection. **NIKKA TRADING** shall assign personnel to undertake the handling, unpacking, assembly, commissioning, disassembly, sorting, repacking, and resealing of the goods prior to, during and after the inspection.
8. The goods shall be inspected by the DepEd Inspectorate Team prior to pick-up or hauling from **NIKKA TRADING'S** warehouse in accordance with the provisions of the Special Conditions of the Contract, the Schedule of Requirements, or otherwise indicated in other parts of the bidding documents. A turnaround period of not more than **THIRTY (30) WORKING DAYS** from the time of the receipt of the request for Pre-Delivery Inspection shall be given to **DEPED** to schedule the inspection.
9. The goods must conform to and comply with the standards mentioned in Section VI. Schedule of Requirements of the bidding documents, and must be in accordance with the final technical specifications as approved by the Bids and Awards Committee based on the samples submitted by **NIKKA TRADING**, and reflected in the post-qualification report, which is hereto attached as Annex "A" and made an integral part hereof.

Any proposal by **NIKKA TRADING** to deliver goods of different technical specifications, in lieu of those of the approved bids or samples, shall not be allowed. However, under justifiable circumstances, delivery of goods of equivalent, higher or superior technical specifications may be permitted, subject to the evaluation and favorable recommendation of the **DEPED's** end-user or implementing unit, and the approval of the herein authorized signatory. In any such case, the proposal by **NIKKA TRADING** for substitution shall be in writing and shall not result in any additional cost or undue burden to **DEPED**.

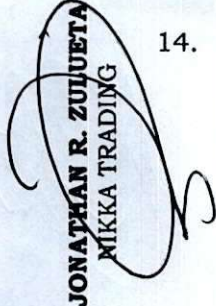
10. Goods with defects or are non-compliant with the required technical specifications during Pre-Delivery Inspection shall be rejected, orally or in writing, by **DEPED**, and replaced by **NIKKA TRADING** in accordance with the warranty provisions in the bidding documents. The replacement goods for this reason shall be subject to re-inspection.
11. The goods shall be picked-up or hauled by the designated hauling service provider within **90 WORKING DAYS** from the date of inspection and acceptance as reflected in the Inspection and Acceptance Report (IAR). Title to the goods shall pass from **NIKKA TRADING** to **DEPED** upon inspection and acceptance by the latter.
12. During the said **90-day period**, **NIKKA TRADING** shall retain the risks over the goods and shall have the residual obligation to ensure the safekeeping of the goods while the same are in its custody. **NIKKA TRADING** shall assume accountability over the goods until the pick-up or hauling of the same and the issuance of the Transfer Manifest by the designated hauling service provider. However, assembly, installation, start-



  
NIKKA TRADING's Witness

up and/or commissioning of goods, in cases where they are necessary, shall remain to be the responsibility and for the account of **NIKKA TRADING** notwithstanding inspection and acceptance at its warehouse or premises.

13. In case **NIKKA TRADING** encounters condition(s) impeding timely delivery of the goods, **NIKKA TRADING** shall promptly notify **DEPED** and **Bureau of Learning Resources – Cebu (BLR-Cebu)** in writing of such condition(s). Any request for work suspension and/or contract period extension shall be promptly done in writing as soon as circumstances for such requests have become apparent. **NIKKA TRADING** must provide sufficient proof to support any request for work suspension and/or contract period extension.

  
JONATHAN R. ZUIQUETA  
NIKKA TRADING

14. The Contract Price shall be paid to **NIKKA TRADING** in accordance with the following disbursement procedures:

14.1. **NIKKA TRADING** may submit a request for payment based on Progress Reports which shall be attached to the progress billing and include the following:

- i. **NIKKA TRADING's** signed summary of duly signed Delivery Receipts (DRs) in sequential order of DR numbers (cumulative quantities of goods delivered based on the schedule of deliveries and other relevant terms and conditions of the Contract);
- ii. Inspection and Acceptance Reports (IARs), including certification by **NIKKA TRADING**, duly signed and dated by the authorized representative of the **DEPED** indicating that the goods have been delivered in accordance with the Contract.

  
ARIZ NELSON ACAY D. CAWILAN  
DEPED's Witness

Other documents in support of a request for payment may be required by **DEPED** pursuant to existing disbursement, accounting and auditing rules and procedures.

14.2. Payment shall be made to **NIKKA TRADING** within sixty (60) days from submission of the documents specified in SCC Clause 2.2 and other documents as may be prescribed by **DEPED**, in the following manner:

14.2.1. For the initial progress payment, a minimum of twenty-five percent (25%) of the Contract Price shall be paid to **NIKKA TRADING** upon delivery of at least twenty-five percent (25%) of the goods and acceptance of the same by **DEPED's** authorized representative;

14.2.2. Final payment shall consist of the full and final payment of the unpaid inspected and accepted goods;

  
DR. GINA O. GONONG  
DEPED



14.2.3. Refund/release of retention money shall be at the expiration of the warranty period, or the remaining amount in case it has been utilized pursuant to the warranty provision.

15. Payments shall be subject to the "Warranty" provision in the form of either retention money in an amount equivalent to three percent (3%) of every progress payment or a Special Bank Guarantee in the amount equal to three percent (3%) of the Contract Price required under Section 62 of R.A. 9184 and its revised IRR.

15.1. The warranty period of **one (1) year** for the delivered and accepted goods in compliance with the bidding documents shall reckon from the date of issuance of Certificate of Final Acceptance by **DEPED**.

16. **NIKKA TRADING** shall be liable for liquidated damages for the delay in its delivery in an amount equal to one-tenth (1/10) of one percent (1%) of the cost of the delayed goods scheduled for delivery, for every day of delay until such goods are finally delivered and accepted by **DEPED**. **DEPED** shall deduct the liquidated damages from any money due or which may become due to **NIKKA TRADING**, or collect from any of the securities or guarantees posted by **NIKKA TRADING**, whichever is convenient to **DEPED**. Once the accumulated amount of liquidated damages reaches ten percent (10%) of the Contract Price, **DEPED** may rescind or terminate the Contract, without prejudice to other courses of action and remedies available under the circumstances.

17. The **PARTIES** shall make every effort to resolve amicably and by mutual consultation any and all disputes or differences arising between the **PARTIES** in connection with the implementation of the Contract. Should such dispute not be resolved amicably, it shall be submitted to Early Neutral Evaluation pursuant to R.A. No. 9285, or the "Alternative Dispute Resolution Act of 2004," and its Implementing Rules and Regulations.

**IN WITNESS WHEREOF**, the **PARTIES** hereto have caused this Contract to be executed in accordance with governing laws on the day and year first above written.

SIGNED, SEALED AND DELIVERED BY:

  
**DR. GINA O. GONONG**  
Undersecretary  
DEPED

  
**JONATHAN R. ZULUETA**  
Authorized Representative  
NIKKA TRADING

SIGNED IN THE PRESENCE OF:

  
ARIZ DELSON ACAY D. CAWILAN  
DEPED's Witness

  
NIKKA TRADING'S Witness

CERTIFIED FUNDS AVAILABLE: ₱196,715,549.28

  
MA. RHUNNA L. CATALAN  
Chief Accountant

  
JONATHAN R. ZULUETA  
NIKKA TRADING

  
ARIZ DELSON ACAY D. CAWILAN  
DEPED's Witness

  
DR. GINA O. GONONG  
DEPED



*[Signature]*  
NIKKA TRADING's Witness

REPUBLIC OF THE PHILIPPINES)  
— CITY OF MAKATI —, METRO MANILA) S.S

**ACKNOWLEDGMENT**

**BEFORE ME**, a Notary Public in and for CITY OF MAKATI,  
Philippines, this \_\_\_\_ day of JAN 24 2023 2023 personally appeared:

**NAME**

**GOVERNMENT ISSUED ID**

*(Number, Issued On, Issued By)*

**DR. GINA O. GONONG**  
Undersecretary  
Department of Education

*GSIS Ecard 006-0072-8151-2*

**JONATHAN R. ZULUETA**  
Authorized Representative  
NIKKA TRADING

PASSPORT NO. P6219471A  
ISSUED OF FEBRUARY 28, 2018  
ISSUED BY DFA NCR WEST

Known to me and to me known to be the same persons who executed the foregoing instrument and acknowledge to me that the same is the free and voluntary act and deed of the entities which they respectively represent.

The foregoing instrument is a CONTRACT consisting of seven (7) pages (exclusive of attachments), including this page on which this acknowledgment is written and signed by the parties hereto and their instrument witness on the left-hand margin of each and every page hereof.

WITNESS MY HAND AND SEAL on the date and place first above written.

*[Signature]*  
JONATHAN R. ZULUETA  
NIKKA TRADING

*[Signature]*  
ARIZ DELSON ACAY D. CAWLAN  
DEPED's Witness

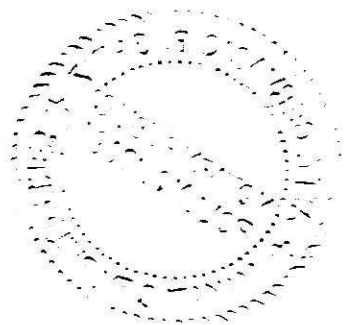
**ATTY. GERVACIO B. ORTIZ JR.**  
Notary Public City of Makati  
Until December 31, 2024  
IBP No. 05729-Lifetime Member  
MCLE Compliance No. VII-0022734  
valid until April 14, 2025  
Appointment No. M-39 (2023-2024)  
PTR No. 9563522 Jan. 3, 2023/ Makati  
Makati City Roll No. 40091  
101 Urban Ave. Campos Rueda Bldg.  
Brgy. Pio Del Pilar, Makati City

*[Signature]*  
DR. GINA O. GONONG  
DEPED - 2023

Doc. No. 401;  
Page No. 98;  
Book No. VI;  
Series of 2023.









**ANNEX A**

**MASS PRODUCTION**

**Lot No. 1: BLR-DEVELOPED BASIC SCIKIT: Nikka Trading**

<b>Item No.</b>	<b>Description</b>	<b>Specifications</b>
<b>LOT 1: BLR-DEVELOPED BASIC SCIKIT</b>		
1	BLR-developed Basic Scikit: Ø 9.5mm x 250mm long Stand Rod	<p><b>Functional Specifications:</b> used to interconnect stand base to stand supports; used for suspending pulleys, meter tapes</p> <p><b>Performance Specifications:</b> should effectively interconnect stand base-stand support systems; suspend single pulleys, meter tapes</p> <p><b>Design Specifications:</b> please see technical drawing</p>
2	BLR-developed Basic Scikit: Ø 9.5mm x 500mm long Stand Rod	<p><b>Functional Specifications:</b> used to interconnect stand base to stand supports in heavier setups</p> <p><b>Performance Specifications:</b> should effectively interconnect stand base-stand support systems in heavier setups</p> <p><b>Design Specifications:</b> please see technical drawing</p>
3	BLR-developed Basic Scikit: Ø 12.7mm x 1000mm long Stand Rod	<p><b>Functional Specifications:</b> used as vertical support for free fall setup; horizontal support for suspending multiple pulley systems</p> <p><b>Performance Specifications:</b> should be able to support vertically free fall setup; horizontal support for suspending multiple pulley systems</p> <p><b>Design Specifications:</b> please see technical drawing</p>
4	BLR-developed Basic Scikit: Rail	<p><b>Functional Specifications:</b> used as path rail for motorized and dynamics carts</p> <p><b>Performance Specifications:</b> should be able to serve as path rail for motorized and dynamics carts</p> <p><b>Design Specifications:</b> please see technical drawing</p>
5	BLR-developed Basic Scikit: Ring with stem	<p><b>Functional Specifications:</b> used to support glasswares in heating activities</p> <p><b>Performance Specifications:</b> should be stable in supporting glasswares</p> <p><b>Design Specifications:</b> please see technical drawing</p>
6	BLR-developed Basic Scikit: Test Tube Rack	<p><b>Functional Specifications:</b> used for resting racks for test tubes both for specimen viewing and storage</p> <p><b>Performance Specifications:</b> should be able to keep test tubes in place used for resting racks for test tubes both for specimen viewing and storage</p> <p><b>Design Specifications:</b> please see technical drawing</p>
7	BLR-developed Basic Scikit: Wire Gauze BLR-developed Basic Scikit: Wire Gauze-cont.	<p><b>Functional Specifications:</b> used to diffuse open flame in activities that involve heating</p> <p><b>Performance Specifications:</b> should be able to diffuse open flame in activities that involve heating</p> <p><b>Design Specifications:</b> please see technical drawing</p>

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8	BLR-developed SCIKIT BASIC 001: Stand Base	<b>Functional Specifications:</b> used as base support of activity equipment setups <b>Performance Specifications:</b> should be stable in supporting equipment setups <b>Design Specifications:</b> please see technical drawing
9	BLR-developed SCIKIT BASIC 001: Stand Support	<b>Functional Specifications:</b> used to support stand base assembly <b>Performance Specifications:</b> should provide sturdy support for stand base assembly <b>Design Specifications:</b> please see technical drawing
10	BLR-developed SCIKIT BASIC 001: SCIKIT BASIC Storage Case 001 (With Cover and Base Sheathing)	<b>Functional Specifications:</b> used as storage for stand bases <b>Performance Specifications:</b> should be able to store free fall apparatus set components <b>Design Specifications:</b> please see technical drawing
11	BLR-developed SCIKIT BASIC 002: Multi-clamp	<b>Functional Specifications:</b> used as for interconnecting rods perpendicularly <b>Performance Specifications:</b> should be sturdy in interconnecting rods <b>Design Specifications:</b> please see technical drawing
12	BLR-developed SCIKIT BASIC 002: Test Tube Holder	<b>Functional Specifications:</b> is used for holding heated test tubes <b>Performance Specifications:</b> should be stable in holding heated test tubes <b>Design Specifications:</b> please see technical drawing
13	BLR-developed SCIKIT BASIC 002: SCIKIT BASIC Storage Case 002 (With Cover and Base Sheathing)	<b>Functional Specifications:</b> Used as storage of multi-clamps and test tube holders <b>Performance Specifications:</b> should be able to store 25 pieces multi-clamp and 5 pieces test tube holders <b>Design Specifications:</b> please see technical drawing
14	BLR-developed SCIKIT BASIC 003: Universal Clamp	<b>Functional Specifications:</b> is used for securing heated beakers and flasks in place <b>Performance Specifications:</b> should be stable in holding heated glasswares <b>Design Specifications:</b> please see technical drawing
15	BLR-developed SCIKIT BASIC 003: Universal Bosshead	<b>Functional Specifications:</b> for interconnecting rods to increase overall length as activity requirement; can also be used to perpendicularly interconnect rods for lighter loads <b>Performance Specifications:</b> should be sturdy in interconnecting rods <b>Design Specifications:</b> please see technical drawing
16	BLR-developed SCIKIT BASIC 003: SCIKIT BASIC Storage Case 003 (With Cover and Base Sheathing)	<b>Functional Specifications:</b> used as storage for clamps and bossheads <b>Performance Specifications:</b> should be able to store 12 pieces universal clamp and 10 universal bosshead <b>Design Specifications:</b> please see technical drawing
17	BLR-developed Free Fall Apparatus (Mechanics	<b>Functional Specifications:</b> used storage case for the metal balls and metal embedded plastic ball





	001): Ball Case (with Cover and foam)	<b>Performance Specifications:</b> <b>Design Specifications:</b> please see technical drawing
18	BLR-developed Free Fall Apparatus (Mechanics 001): Digital Timer Assembly (Digital Stopwatch)	<b>Functional Specifications:</b> used to determine time of fall of metal balls or metal embedded plastic ball in free fall activity <b>Performance Specifications:</b> should be able to determine time of fall of metal balls or metal embedded plastic ball in free fall activity <b>Design Specifications:</b> please see technical drawing
19	BLR-developed Free Fall Apparatus (Mechanics 001): Meter tape with hooks and plastic pointer	<b>Functional Specifications:</b> used to measure the height of fall of falling objects in free fall activity <b>Performance Specifications:</b> should be able to measure the height of fall of falling objects in free fall activity <b>Design Specifications:</b> please see technical drawing
20	BLR-developed Free Fall Apparatus (Mechanics 001): Ø 12.7mm Steel Spherical Ball	<b>Functional Specifications:</b> used as free fall object in free fall activity <b>Performance Specifications:</b> <b>Design Specifications:</b> please see technical drawing
21	BLR-developed Free Fall Apparatus (Mechanics 001): Ø 25mm Plastic Spherical Ball with metal screw	<b>Functional Specifications:</b> used as free fall object in free fall activity <b>Performance Specifications:</b> <b>Design Specifications:</b> please see technical drawing
22	BLR-developed Free Fall Apparatus (Mechanics 001): Ø 25mm Steel Spherical Ball	<b>Functional Specifications:</b> used as free fall object in free fall activity <b>Performance Specifications:</b> <b>Design Specifications:</b> please see technical drawing
23	BLR-developed Free Fall Apparatus (Mechanics 001): Pad Switch Assembly	<b>Functional Specifications:</b> used as second switch to stop the stopwatch in free fall activity <b>Performance Specifications:</b> should be able to stop the stopwatch in free fall activity <b>Design Specifications:</b> please see technical drawing
24	BLR-developed Free Fall Apparatus (Mechanics 001): Solenoid Assembly	<b>Functional Specifications:</b> used as electromagnet to temporarily suspend the metal balls or the metal imbedded plastic ball in free fall activity <b>Performance Specifications:</b> should be able to provide electromagnetism to temporarily suspend the metal balls or the metal imbedded plastic ball in free fall activity <b>Design Specifications:</b> please see technical drawing
25	BLR-developed Free Fall Apparatus (Mechanics 001): Synchro Box Assembly	<b>Functional Specifications:</b> used to simultaneously start the stopwatch and cut-off current to the solenoid <b>Performance Specifications:</b> should be able to simultaneously start the stopwatch and cut-off current to the solenoid <b>Design Specifications:</b> please see technical drawing
26	BLR-developed Free Fall Apparatus (Mechanics	<b>Functional Specifications:</b> used as storage case for free fall apparatus set



	001): SCIKIT MECHANICS Storage Case 001 (With Cover and Base Sheathing)	<b>Performance Specifications:</b>  <b>Design Specifications:</b> please see technical drawing
27	BLR-developed Dynamics Carts-Rail System (Mechanics 002): Cart-spring loaded	<b>Functional Specifications:</b> used as source of action force in Newton's 3rd law of Motion Experiment <b>Performance Specifications:</b> should be able to provide action force in Newton's 3rd law of Motion Experiment <b>Design Specifications:</b> please see technical drawing
28	BLR-developed Dynamics Carts-Rail System (Mechanics 002): Cart-with counterweight	<b>Functional Specifications:</b> used as source of reaction force in Newton's 3rd law of Motion Experiment <b>Performance Specifications:</b> should be able to provide reaction force in Newton's 3rd law of Motion Experiment <b>Design Specifications:</b> please see technical drawing
29	BLR-developed Dynamics Carts-Rail System (Mechanics 002): Cylindrical Mass, 50- gram	<b>Functional Specifications:</b> used for loading into each dynamics cart for newton's 2nd Law of Motion experiment <b>Performance Specifications:</b> should be able to load into each dynamics cart for newton's 2nd Law of Motion experiment <b>Design Specifications:</b> please see technical drawing
30	BLR-developed Dynamics Carts-Rail System (Mechanics 002): Driving Mass, 3-gram	<b>Functional Specifications:</b> use to provide the 'net' force in newton's 2nd Law of Motion experiment <b>Performance Specifications:</b> should be able to provide the 'net' force in newton's 2nd Law of Motion experiment <b>Design Specifications:</b> please see technical drawing
31	BLR-developed Dynamics Carts-Rail System (Mechanics 002): Leveling Pad Assembly	<b>Functional Specifications:</b> used as bottom support of rails <b>Performance Specifications:</b> should be able to support rails <b>Design Specifications:</b> please see technical drawing
32	BLR-developed Dynamics Carts-Rail System (Mechanics 002): Plastic Hammer	<b>Functional Specifications:</b> used to strike the push rod to release spring in spring-loaded dynamics cart <b>Performance Specifications:</b> should be able to make push rod release spring in spring-loaded dynamics cart <b>Design Specifications:</b> please see technical drawing
33	BLR-developed Dynamics Carts-Rail System (Mechanics 002): Modelling Clay, 1 bar/set	<b>Functional Specifications:</b> used as storage case for dynamics carts and accessories set <b>Performance Specifications:</b>  <b>Design Specifications:</b> please see technical drawing
34	BLR-developed Dynamics Carts-Rail System (Mechanics 002): Stopper-Fork Assembly	<b>Functional Specifications:</b> used as low inertia string guide in Newton's 2nd Law of Motion Experiment <b>Performance Specifications:</b> should be able to provide low inertia string guide in Newton's 2nd Law of Motion Experiment <b>Design Specifications:</b> please see technical drawing

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35	BLR-developed Dynamics Carts-Rail System (Mechanics 002): String (thin), 1 ball/set	<p><b>Functional Specifications:</b> used to transmit net force from weight of 3-gram driving masses to pull dynamics carts along rail</p> <p><b>Performance Specifications:</b> should be able to transmit net force from weight of 3-gram driving masses to pull dynamics carts along rail</p> <p><b>Design Specifications:</b> please see technical drawing</p>
36	BLR-developed Dynamics Carts-Rail System (Mechanics 002): SCIKIT MECHANICS Storage Case 002 (With Cover and Base Sheathing)	<p><b>Functional Specifications:</b> used as storage case for Dynamics Carts-Rail System (Mechanics 002) and accessories</p> <p><b>Performance Specifications:</b> must store the items for Dynamics Carts-Rail System Set</p> <p><b>Design Specifications:</b> please see technical drawing</p>
37	BLR-developed SCIKIT MECHANICS 003: 10-Newton Spring Balance	<p><b>Functional Specifications:</b> used to measure forces with magnitudes equivalent up to the weight of 1 kilogram mass</p> <p><b>Performance Specifications:</b> should be able to measure forces with magnitudes equivalent up to the weight of 1 kilogram mass</p> <p><b>Design Specifications:</b> please see technical drawing</p>
38	BLR-developed SCIKIT MECHANICS 003: 250-gram Hooked Mass	<p><b>Functional Specifications:</b> used to provide 5 newton load in simple machines activity</p> <p><b>Performance Specifications:</b> should be able to provide 5 newton load in simple machines activity</p> <p><b>Design Specifications:</b> please see technical drawing</p>
39	BLR-developed SCIKIT MECHANICS 003: 500-gram Hooked Mass	<p><b>Functional Specifications:</b> used to provide 2.5 newton load in simple machines activity</p> <p><b>Performance Specifications:</b> should be to provide 2.5 newton load in simple machines activity</p> <p><b>Design Specifications:</b> please see technical drawing</p>
40	BLR-developed SCIKIT MECHANICS 003: Axle and Lever Beam	<p><b>Functional Specifications:</b> used to demonstrate the lever principle</p> <p><b>Performance Specifications:</b> should be to demonstrate the lever principle</p> <p><b>Design Specifications:</b> please see technical drawing</p>
41	BLR-developed SCIKIT MECHANICS 003: Double Pulley	<p><b>Functional Specifications:</b> used to demonstrate efficiency of pulley combinations</p> <p><b>Performance Specifications:</b> should be able to demonstrate efficiency of pulley combinations</p> <p><b>Design Specifications:</b> please see technical drawing</p>
42	BLR-developed SCIKIT MECHANICS 003: Dry Cell, AA 1.5V	<p><b>Functional Specifications:</b> used to provide DC power to motorized cart</p> <p><b>Performance Specifications:</b> should be able to provide DC power to motorized cart</p> <p><b>Design Specifications:</b> please see technical drawing</p>
43	BLR-developed SCIKIT MECHANICS 003:	<p><b>Functional Specifications:</b> Used to validate factors affecting friction force</p>

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	Friction Block and Friction Board	<p><b>Performance Specifications:</b> Must be able to validate factors affecting friction force</p> <p><b>Design Specifications:</b> please see technical drawing</p>
44	BLR-developed SCIKIT MECHANICS 003: Leveling Hose	<p><b>Functional Specifications:</b> used to check horizontal levelness of surfaces where the rail will be placed</p> <p><b>Performance Specifications:</b> should be able to check horizontal levelness of surfaces where the rail will be placed</p> <p><b>Design Specifications:</b> please see technical drawing</p>
45	BLR-developed SCIKIT MECHANICS 003: Motorized Cart	<p><b>Functional Specifications:</b> used as constant speed object in uniform speed activity</p> <p><b>Performance Specifications:</b> should be able to move with constant speed object in uniform speed activity</p> <p><b>Design Specifications:</b> please see technical drawing</p>
46	BLR-developed SCIKIT MECHANICS 003: Single Pulley	<p><b>Functional Specifications:</b> used to demonstrate that a pulley can function to change direction of force</p> <p><b>Performance Specifications:</b> should be able to demonstrate that a pulley can function to change direction of force</p> <p><b>Design Specifications:</b> please see technical drawing</p>
47	BLR-developed SCIKIT MECHANICS 003: Spare part for Motorized Cart: Spur Gear B	<p><b>Functional Specifications:</b> used to transmit torque to worm gear A</p> <p><b>Performance Specifications:</b> should be able to walk downstairs at least 2 levels</p> <p><b>Design Specifications:</b> please see technical drawing</p>
48	BLR-developed SCIKIT MECHANICS 003: Spare part for Motorized Cart: Spur Gear C	<p><b>Functional Specifications:</b> used to change torque direction of motor torque</p> <p><b>Performance Specifications:</b> should be able to change torque direction of motor torque</p> <p><b>Design Specifications:</b> please see technical drawing</p>
49	BLR-developed SCIKIT MECHANICS 003: Spare part for Motorized Cart: Worm Gear A	<p><b>Functional Specifications:</b> used to transmit torque to worm with axle</p> <p><b>Performance Specifications:</b> should be able to transmit torque to worm with axle</p> <p><b>Design Specifications:</b> please see technical drawing</p>
50	BLR-developed SCIKIT MECHANICS 003: Spare part for Motorized Cart: Worm with Axle	<p><b>Functional Specifications:</b> used to transmit power to motorized cart wheels</p> <p><b>Performance Specifications:</b> should be able to transmit torque to motorized cart wheels</p> <p><b>Design Specifications:</b> please see technical drawing</p>
51	BLR-developed SCIKIT MECHANICS 003: String (thick), 1 ball/set	<p><b>Functional Specifications:</b> used to interconnect pulley combinations</p> <p><b>Performance Specifications:</b> should be able to interconnect pulley combinations</p> <p><b>Design Specifications:</b> please see technical drawing</p>
52	BLR-developed SCIKIT MECHANICS 003: SCIKIT MECHANICS Storage Case 003 (With	<p><b>Functional Specifications:</b> used as storage case for motorized cart, pulley sets, lever assembly, leveling hoses, and spare parts</p> <p><b>Performance Specifications:</b></p>



	Cover and Base Sheathing)	<b>Design Specifications:</b> please see technical drawing
53	BLR-developed: User's Manual (SCIKIT BASIC)	<b>Functional Specifications:</b> used as reference guide on assembly of Scikit Basic items <b>Performance Specifications:</b> <b>Design Specifications:</b> please see attached specifications
54	BLR-developed: User's Manual (SCIKIT MECHANICS)	<b>Functional Specifications:</b> used as reference guide on assembly of mechanics items <b>Performance Specifications:</b> <b>Design Specifications:</b> please see attached specifications
55	BLR-developed: Experiment Module (SCIKIT MECHANICS)	<b>Functional Specifications:</b> used as guides to perform mechanics activities <b>Performance Specifications:</b> <b>Design Specifications:</b> please see attached specifications

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