## International Baccalaureate

PASCO Next Gen Sensors Support IB Standards with Live, Accurate Data.



PASCO makes reliable equipment for use in IB schools, and we support teachers, lab staff, and students with a wealth of information about experiments, sensors, data collection, and analysis.

- The Extended Essay: When students perform hands-on, self-directed research using PASCO sensors, they have reliable and easy-to-use equipment they need to support their work.
- Group 4 Project: As students participate in this collaborative and interdisciplinary exercise, PASCO technologies give them the opportunity to explore scientific solutions to global questions.



# NEXT GEN SENSORS

# Growing line of award-winning sensors

Compatible: Using the latest Bluetooth® technology, PASCO wireless sensors can connect to any Bluetooth-enabled device. Free data collection and analysis software is available for iOS®, Android™, and Chromebook™.

**Durable:** Built to withstand the rigors of the classroom, PASCO sensors are water-resistant and designed to last. Plus, they are backed by a 5-year warranty.

**Low Cost:** PASCO's wireless technologies offer the best value in the EdTech marketplace.



NEXT GEN science devices with apps for data collection and analysis



PASCO's new dataloggers blend software and hardware for data collection and analysis along with classroom management capabilities, all on one device.







Available but not shown: Wireless O<sub>2</sub> (PS-3217), Wireless Load Cell (PS-3216), Wireless Temperature Link (PS-3222)



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#### Advanced Biology Experiments & Bundles

\*Requires Ethanol Sensor, sold separately.

E	xperiment	PS-7614 Starter Bundle	PS-7615B Extension Bundle	IB <sup>®</sup> Standards
1.	Enzyme Activity			2.5
	Diffusion			1.4, 10.3
	Osmosis	<u> </u>	<u> </u>	1.4
	Plasmolysis		<u> </u>	1.4
-	<u>'</u>		<u> </u>	
	Cell Size	4	<b>Y</b>	1.1
6.	Homeostasis	<b>Y</b>		N/A
7.	Cellular Respiration	<b>✓</b>		2.8
8.	Fermentation		<b>✓</b> *	2.1, 2.8
9.	Photosynthesis	<b>V</b>		2.9
10.	Plant Pigments		<b>~</b>	2.9
11.	Transpiration	<b>V</b>	<b>V</b>	9.1
12.	Energy Dynamics	<b>V</b>		4.2
13.	Artificial Selection	<b>V</b>		N/A
14.	Mitosis	<b>V</b>		1.6
15.	Meiosis	No Sensors Required		3.3,10.1
16.	BLAST Bioinformatics			3.1, B.5
17.	Population Genetics			10.3
18.	Mathematical Modeling of Evolution			10.3
19.	Animal Behavior			A.4
		1		



#### **Advanced Chemistry Experiments & Bundles**

Ex	kperiment	PS-3302 Starter Bundle	PS-3303B Extension Bundle	IB <sup>®</sup> Standards
1.	Modeling Chemistry			11 41 44
		<b>V</b>	<u> </u>	1.1, 4.1, 4.4
2.	Light, Color and Concentration		<b>V</b>	1.3
3.	Gravimetric Analysis of a Precipitate			1.3
4.	Stoichiometry in Solutions	<b>~</b>	✓	1.3
5.	Polar and Non-polar substances	<b>&gt;</b>		4.4
6.	Solubility	<b>&gt;</b>		1.3
7.	Empirical Formula		<b>✓</b>	1.2
8.	Measuring Vitamin C – A Redox Titration		<b>✓</b> *	9.1
9.	Factors That Affect Reaction Rate	<b>~</b>		6.1
10.	Measuring the Speed of a Reaction	<b>~</b>	<b>✓</b>	16.1
11.	Energy in Chemical Reactions	<b>Y</b>		5.1-5.3
12.	Chemical Equilibrium	<b>Y</b>	<b>✓</b>	7.1, 17.1
13.	Shapes of Titrations	<b>Y</b>	<b>✓</b>	1.3, 8.1-8.4, 18.2, 18.3
14.	Weak Acid Titration	<b>~</b>	<b>✓</b>	1.3, 8.1-8.4, 18.2, 18.3
15.	Introduction to Buffers	<b>Y</b>		18.3
16.	Buffer Properties	<b>~</b>		18.3
17.	Moving Electrons	<b>~</b>	<b>✓</b>	9.1, 9.2, 19.1



#### **Advanced Physics 1 Experiments & Equipment**

Experiment	PS-3813 Equipment Kit	PS-3814 Expansion Kit	IB® Standards
1. Graphical Analysis: Motion	<b>Y</b>	<b>Y</b>	2.1
2. Newton's Second Law	<b>✓</b>	✓	2.2
3. Atwood's Machine	<b>✓</b>	<b>~</b>	2.2
4. Coefficients of Friction	<b>✓</b>	<b>✓</b>	2.2
5. Two Dimensional Motion: Projectiles		<b>V</b>	1.3, 2.1
6. Conservation of Mechanical Energy	<b>✓</b>	<b>✓</b>	2.3
7. Work and Kinetic Energy	<b>✓</b>	<b>✓</b>	2.3
8. Conservation of Momentum		<b>V</b>	2.4
9. Momentum and Impulse	<b>✓</b>	<b>✓</b>	2.4
10. Rotational Dynamics		<b>✓</b>	B.1
11. Rotational Statics		<b>✓</b>	B.1
12. Periodic Motion: Mass and Spring	<b>✓</b>	<b>✓</b>	4.1, 9.1
13. Simple Pendulum	<b>✓</b>	<b>✓</b>	4.1, 9.1
14. Resonance and Standing Waves		<b>✓</b>	4.5, B.4
15. DC Circuits		<b>V</b>	5.1, 5.2



### **Advanced Physics 2 Experiments & Equipment**

Experiment		PS-3816 Equipment Kit	PS-3817 Expansion Kit	IB® Standards
1.	Hydrostatic Pressure	<b>Y</b>	<b>Y</b>	B.3
2.	Buoyant Force		✓	B.3
3.	Fluid Dynamics	<b>✓</b>	<b>~</b>	B.3
4.	Boyle's Law	<b>✓</b>	<b>V</b>	3.2
5.	Spherical Mirror Reflection	<b>✓</b>	<b>V</b>	C.1
6.	Snell's Law	<b>✓</b>	<b>V</b>	4.4
7.	Focal Length of a Converging Lens	<b>✓</b>	<b>~</b>	C.1
8.	Interference and Diffraction	<b>✓</b>	<b>V</b>	4.4, 9.2, 9.3
9.	Electric Field Mapping		<b>~</b>	5.1, 10.1
10.	Magnetic Fields		<b>~</b>	5.4
11.	Magnetic Field Strength		<b>~</b>	5.4
12.	Electromagnetic Induction	<b>✓</b>	<b>~</b>	11.1
13.	Capacitor Fundamentals		<b>~</b>	11.3
14.	Series and Parallel Capacitors		<b>V</b>	11.3
15.	RC Circuits		<b>~</b>	11.3
16.	Planck's Constant		✓	12.1



#### **Dystrybutor PASCO w Polsce:**



IMAGE RECORDING SOLUTIONS Sp. z o.o. ul. Arkuszowa 190, 01-934 Warszawa tel. +48 22 752 27 88 – 96, fax. +48 22 752-27-97 NIP:526-10-25-668, REGON:010994837

**PASCO** 

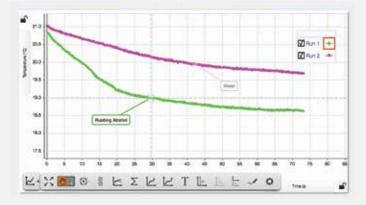
Zapraszamy na strony: www.pasco.com.pl, www.pasco.com

Prosimy o kontakt: E pasco@irs.com.pl, M +48 606 850 155, T +48 22 752 27 88 - 96 wew. 109

Profesjonalną i odpowiedzialną współpracą z nauczycielami wspieramy rozwój uczniów i studentów w współczesnym świecie.

#### PASCO has software for all your data collection and analysis needs.

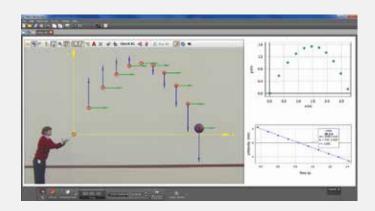
## SPARKvue<sup>®</sup>



**SPARKvue** software is a data collection and analysis software that was designed to be intuitive enough to use with young learners, yet powerful enough for AP® and university applications.

- Start a new activity or open an experiment, with one click.
- Monitor sensor data without recording using the Live Data Bar.
- Easily configure, calibrate, and edit sensor properties.
- Share experiment files directly to popular Cloud services.





**PASCO Capstone** was designed from the ground up to be the most powerful software available for high level physics and engineering applications or for anyone who wants the advanced capabilities it offers.

#### Features include:

- Multi-coordinate tool
- Versatile tables
- · Error bars and weighted linear fits
- Video analysis

#### To learn more pasco.com/software

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