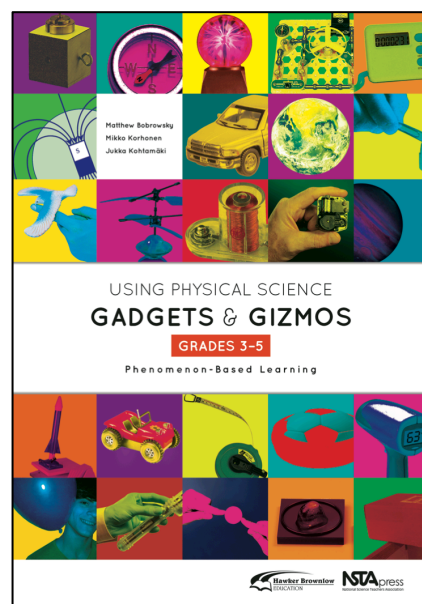


Using Physical Science Gadgets & Gizmos, Grades 3–5: Phenomenon-Based Learning

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Date Available: 6 April 2016
ISBN: 978 1 76001 912 9
Code/SKU: NST9129
RRP: \$45.95
Format/Page No.: A4, 120 pages
Year Level: 3–5, Teachers and Administrators
Focus Area: Activities and Exercises, Classroom Practice and Direct Instruction
Key Learning Area: Science



Summary

What student – or teacher – can resist the chance to experiment with Velocity Radar Guns, Running Parachutes, Super Solar Racer Cars and more? The 30 experiments in *Using Physical Science Gadgets and Gizmos, Grades 3–5*, let your primary school students explore a variety of phenomena involved with speed, friction and air resistance, gravity, air pressure, electricity, electric circuits, magnetism and energy.

The phenomenon-based learning (PBL) approach used by the authors – two Finnish teachers and a US professor – is as educational as the experiments are attention-grabbing. Instead of putting the theory before the application, PBL encourages students to first experience how the gadgets work and then grow curious enough to find out why. Working in groups, students engage in the activities now as a task to be completed but as exploration and discovery using curiosity-piquing devices and doohickeys.

The idea is to motivate young scientists to go beyond simply memorising science facts. *Using Physical Science Gadgets and Gizmos* can help them learn broader concepts, useful thinking skills, and science and engineering practices (as defined by the Next Generation Science Standards). And – thanks to those radar guns and racing cars – both your students and you will have some serious fun.

Other Resources

- *Using Physical Science Gadgets and Gizmos, Grades 6–8* (NST9235)
- *Using Physics Gadgets and Gizmos, Grades 9–12* (NST9242)
- *Uncovering Student Ideas in Physical Science, Volume 1: 45 New Force and Motion Assessment Probes* (NST1130)
- *Uncovering Student Ideas in Physical Science, Volume 2: 39 New Electricity and Magnetism Formative Assessment Probes* (NST9259)
- *Vocabulary for the Australian Curriculum: Science* (MRL6005)