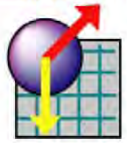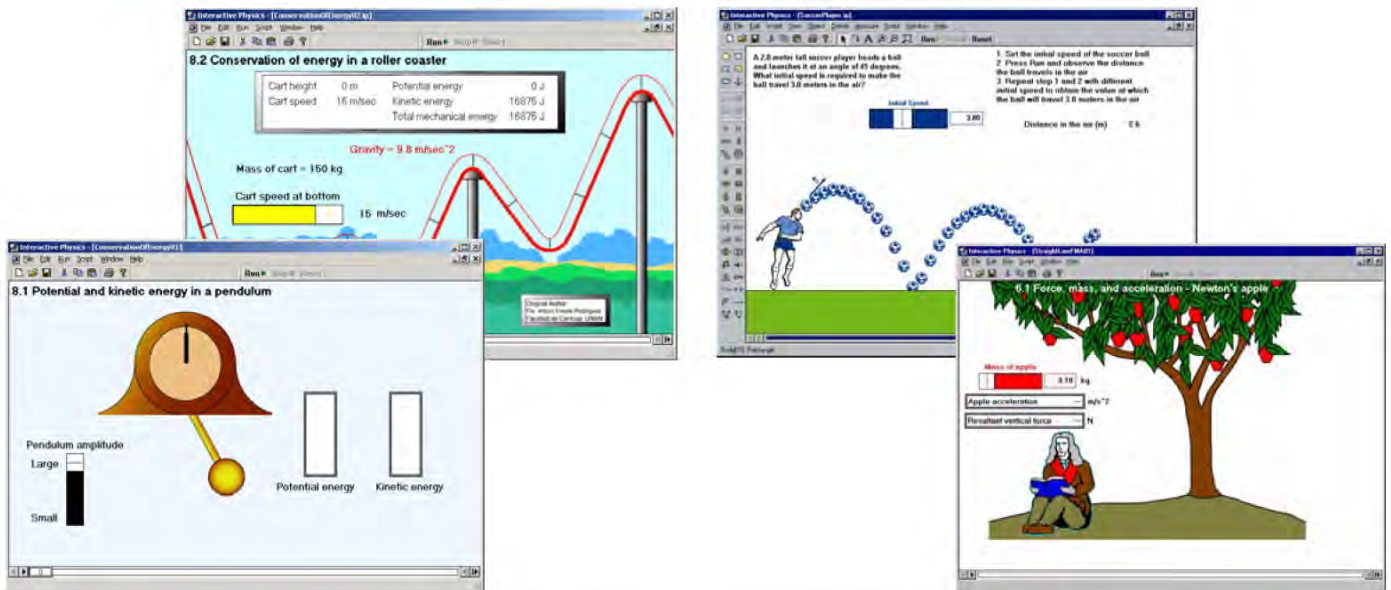# Design Simulation Technologies

Interactive Physics

THE WORLDWIDE STANDARD IN PHYSICS SIMULATION SOFTWARE

BOOST YOUR PHYSICS CURRICULUM WITH POWERFUL MOTION SIMULATION TECHNOLOGY

The foundations of scientific discovery are imagination and inquisitive "what if" curiosity. Interactive Physics makes your students active learners and empowers them to:

- Explore their physical world through fast-paced exciting simulation
- Visualize the abstract scientific concepts taught in the classroom
- Test hypotheses and investigate "what if" scenarios
- Learn school-to-career job skills with real-world motion tools

Adopted by more than 18,000 schools worldwide, try Interactive Physics and see why it has been named the "Best Educational Software Product" several years running.

EASY AND FUN TO USE! WATCH PHYSICS IN ACTION!

Create new experiments or interact with pre-designed Physics exercises to:

- Measure velocity, acceleration, force, momentum, energy, etc., in metric or English units
- Create ropes, springs, dampers, pulleys, slot joints, linear actuators, and rotational motors
- Hear and measure sound volumes, sound frequencies, and Doppler effects
- Vary air resistance, gravity, or material properties
- Create visually appealing presentations by attaching graphics to objects
- View results as numbers, graphs, and animated vectors

Encourage hands-on, minds-on, and can-do attitude in the classroom.

www.interactivephysics.com

mentis

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www.mentis.co.nz

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Fax 09 6244281
Free 0800 mentis
service@mentis.co.nz

EASY CURRICULUM INTEGRATION

Interactive Physics allows students to master concepts in a safe environment, without costly lab supplies and time-consuming lab setup. Your physics lectures and lab activities will immediately benefit from Interactive Physics!

- Select from a wide range of ready-to run exercises built for your curriculum
- Rapidly customize existing models to meet your specific needs
- Create and share models with teachers and students
- Compare simulation data with theoretical results
- Demonstrate hard-to-explain concepts like Coriolis acceleration
- Show properties of objects that you cannot see in a lab, for example, vectors or the path of a body

COMPLETE CURRICULUM SUPPORT

- Offers both high school and college level ancillary support, with supplementary exercises, and activities for easy lesson planning and grading
- Widely adopted by major textbooks
- Complements textbook problems
- Excellent in-class demonstrations
- The Interactive Physics Homework Edition allows students to work at home and exchange assignments electronically with teachers and other students

REAL LIFE APPLICATION

Design Simulation Technologies also develops Working Model for professional scientists and engineers. Check out www.workingmodel.com and see the same, professional motion simulation technology your students learn with Interactive Physics!

A 2.0-meter tall soccer player heads a ball and launches it at an angle of 45 deg. What initial speed is required to make the ball travel 3.0 meters in the air?

Run   Reset   Initial Speed

3.00

Distance: 5.46 m
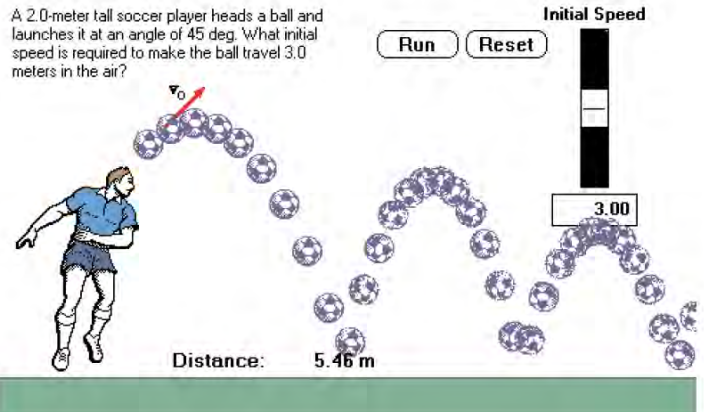
CORRELATED WITH NATIONAL EDUCATION STANDARDS

Your students master science objectives by creating simulations in essential physics topics, including:
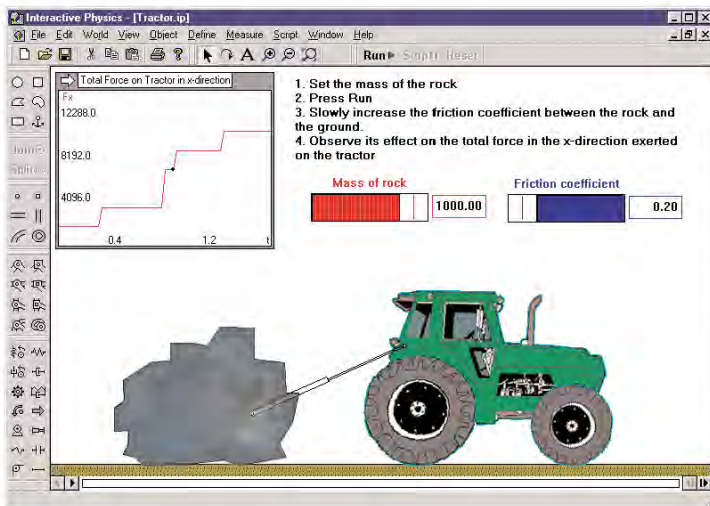
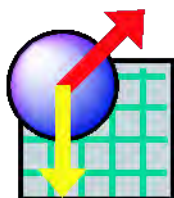|	
1-D motion	Magnetics
2-D motion	Momentum
Collisions	Newton's Law
Conservation Laws	Oscillations
Doppler effects	Particle Dynamics
Electrostatics	Planar Motion
Equilibrium	Projectiles
Evaporation	Pulley Systems
Frequency	Rockets
Friction	Rotational Dynamics
Gears	Sound Intensities
Gravitation	Statics
Kinematics	Waves
Kinetic Theory of Gas	Trig Functions
Machines	Work and Energy

SYSTEM REQUIREMENTS

Windows Systems
- Microsoft Windows 95/98/ME/2000/XP/Vista/Windows 7
- 1 GB RAM minimum
- 60 MB disk space
- CD-ROM drive
- Sounds card for sound experiments

Interactive Physics - [Tractor.ip]

File Edit World View Object Define Measure Script Window Help

Run   Stop   Reset

Total Force on Tractor in x-direction
Fx
12288.0
8192.0
4096.0
0.4   1.2

1. Set the mass of the rock
2. Press Run
3. Slowly increase the friction coefficient between the rock and the ground.
4. Observe its effect on the total force in the x-direction exerted on the tractor

Mass of rock   1000.00   Friction coefficient   0.20

Help your students make the right moves toward their FUTURE!

Interactive Physics

Interactive Physics™	http://www.interactivephysics.com			NZ$ ex gst - July 2012	
Description	**Item No.**	**Annual Licence**	**Perpetual Licence**	**Item No.**	**Perpetual Licence**
Single User (node-locked)*	IP01NL	**150**	**374**	IP01NLUp	**180**
Additional Single User **	IP01	**N/A**	**150**	IP01Up	**75**
Single User (dongle-locked)***	IP01DG	**N/A**	**744**	IP01DGUp	**306**
10 User ****	IP10	**480**	**1,494**	IP10UP	**625**
20 User ****	IP20	**720**	**2,244**	IP20Up	**938**
30 User ****	IP30	**960**	**2,994**	IP30UP	**1250**
50 User ****	IP50	**1,435**	**4,494**	IP50Up	**1881**
100 User ****	IP100	**2,640**	**8,244**	IP100Up	**3475**
Custom Site License	IPCustom	**N/A**	**Call**	IPCustomUp	**Call**
Homework9*	IPHW	**N/A**	**750**	Requires Multi-User Installation of IP	
Single User CD & Manual	IP01DOC	**N/A**	**75**	Requires Single User Node Lock or Dongle Lock Purchase	
English Manual	IPUSR	**N/A**	**75**	Requires current Interactive Physics licence	

+Upgrades require valid version 2000 or higher serial number (no upgrades from version 5.x or earlier)

* Single User node-locked and homework versions can only be used on a single, identified computer

** Additional Single user copies can only be added to Single User node-locked versions. A purchase of at least one single user node-locked is a pre-requesite.

*** Single user dongle locked use a hardware locking device. The software can run on any computer in which the locking deviced is attached.

**** Multi-user seats can be configured as a floating (network) license or as node locked seats. See notes 9-12 below

1 A copy of the school's purchase order and/or purchasing information must accompany all orders .

2 All software and documentation is delivered electronically, by email containing download instructions and a serial number.

3 CDs and documentation may be requested at no charge for multi-user seats. One copy of the manual and one CD will be provided.

4 CDs and documentation for single user seats must be ordered separately. Order the extra manual and request a CD.

5 For any CD and Manual requested, shipping charges will be added to the invoice.

6 To trade up from x users to y users (with or without an upgrade), use the following price calculation formula:
 Trade-up price = (new y user price – new x user price) + x upgrade price (if applicable)
Example: 10 user upgrade trade-up to a new 30 user: ($2994 - $1435) + $625 = $2186

7 Homework/Student Editions have no technical support. Only for student use on student-owned computers (not for school computers).

8 Homework licenses are valid for one year and are limited to 50 bodies, 15 constraints, and 15 output meters.

9 Multi-user licenses configured as floating licenses allow simultaneous use up to the number of licenses purchased and require the installation of our network license server.

10 Multi-User licenses configured as node-locked can be installed on N machines, where N is the number of licenses purchased. No license server is required.

11 Multi-user licenses can only be installed at a single geographic location or campus.

12 Multi-user license quantities differing from the listed packages can be purchased. The price is calculated by using the per-user price from the next lower package and multiplying by the number of users. For example, to price a multi-user configuration for 34 users: 30 user per user price = 2994 / 30 = $99.80 which means the 34 user price = $99.80 X 34 = $3393.20 The same methodology applies to the Annual License price.

13 All sales are final. Free Evaluation versions are available and provide the means for you to determine if the product meets requirements.

14 Prices and terms are subject to change without notice. Prices on this sheet are NZ$ ex gst