# TASKWORKS INCURSION

## PHYSICAL SCIENCE AND/OR DESIGN AND TECHNOLOGY

Unique to Taskworks/Made in Australia

3 Major ways a Taskworks Incursion fits the curriculum!
Physical Science and Inquiry- Forces, Push/Pull, Movement
Inventions/Design and Technology/Toys/Simple Machines/Materials
Team Building/Communication/You Can Do It/Healthy Mind and Body Themes

Specifically Created, Designed and Built

Our unique incursion has been specifically created, designed and built to fit the Physical Science component of the Australian curriculum with direct links to Design and Technology. All activities are 100% hands-on and require teamwork, effective communication and persistence.

#### Some major links include:

**FOUNDATION:** The way objects move depends on a variety of factors, including their size and shape (ACSSU005)

**YEAR 1 & 2:** A push or a pull affects how an object moves or changes shape (ACSSU033) Explore how <u>technologies</u> use forces to create movement in products (ACTDEK002)

**YEAR 3 & 4:** Forces can be exerted by one object on another through direct contact or from a distance (ACSSU076)

Investigate how forces and the properties of <u>materials</u> affect the behaviour of a product or system (ACTDEK011)





### **INCURSION SPECIFICS**

Where: Students rotate around the activities set up in a school hall or gym.

Group size: Up to 60 students per session. Session time: 90 - 120 mins. Cost: \$10 + GST per student.

MINIMUM CHARGES: \$450 + GST (1 session) \$700 + GST (2 sessions)

PLEASE NOTE: A travel surcharge of \$1 per student may apply depending on travel time from Taskworks.

CONTACT: Rose or Greg on 9561 5561 or info@taskworks.com.au

# THE ACTIVITIES

**HiGH STRIKER:** Use force and a special hammer to strike the plate. Observe the lever action required to drive the puck upwards. Discuss the pushing action of the lever as the hammer strikes the plate. Try to beat gravity and sound the bell at the top. It's harder than it looks!

**KID LIFTER:** Just imagine the see-saw railway wagons on the cartoons. Sit 2 children on opposing seats. Another 2 children push and pull the levers up and down in a see-saw motion and lift the seated children 1 metre off the ground. Observe this simple machine and try to work out how it lifts the children. It's fun on the way down too!

**GO-KART:** Pull the panels, wheels and wing off the Go-Kart. Observe how a steering wheel makes the wheels turn and then rebuild the Kart. Discuss the different materials used to construct the kart and the reasons for their use. Sit inside and pretend to be a Kart driver or push and pull it to make it move.



**MAGNET ART:** Use our specially designed magnetic mosaic pieces to create a piece of art work. We provide heaps of shapes and colours to fuel the children's imagination. Photograph your masterpiece!



FRICTION BOARD: Swivel, twist, turn and balance on our anti-friction board and observe how golf balls reduce friction and allow you to do these movements on the board. It's a good work out too!



ANTi-GRAVITY PLATFORM: Wear our designer shoes and navigate through a path of super magnets hidden in the floor. Feel the force of the magnets pushing against your shoes. The magnets are powerful enough to lift you off the floor. It's not as simple as walking through in a straight line!



**iRON FILINGS TABLE:** Use our powerful magnets underneath the table and observe the interesting formations and magnetic fields created by the iron filings. Observe and discuss magnetic poles and the pushing/pulling forces of magnets.

