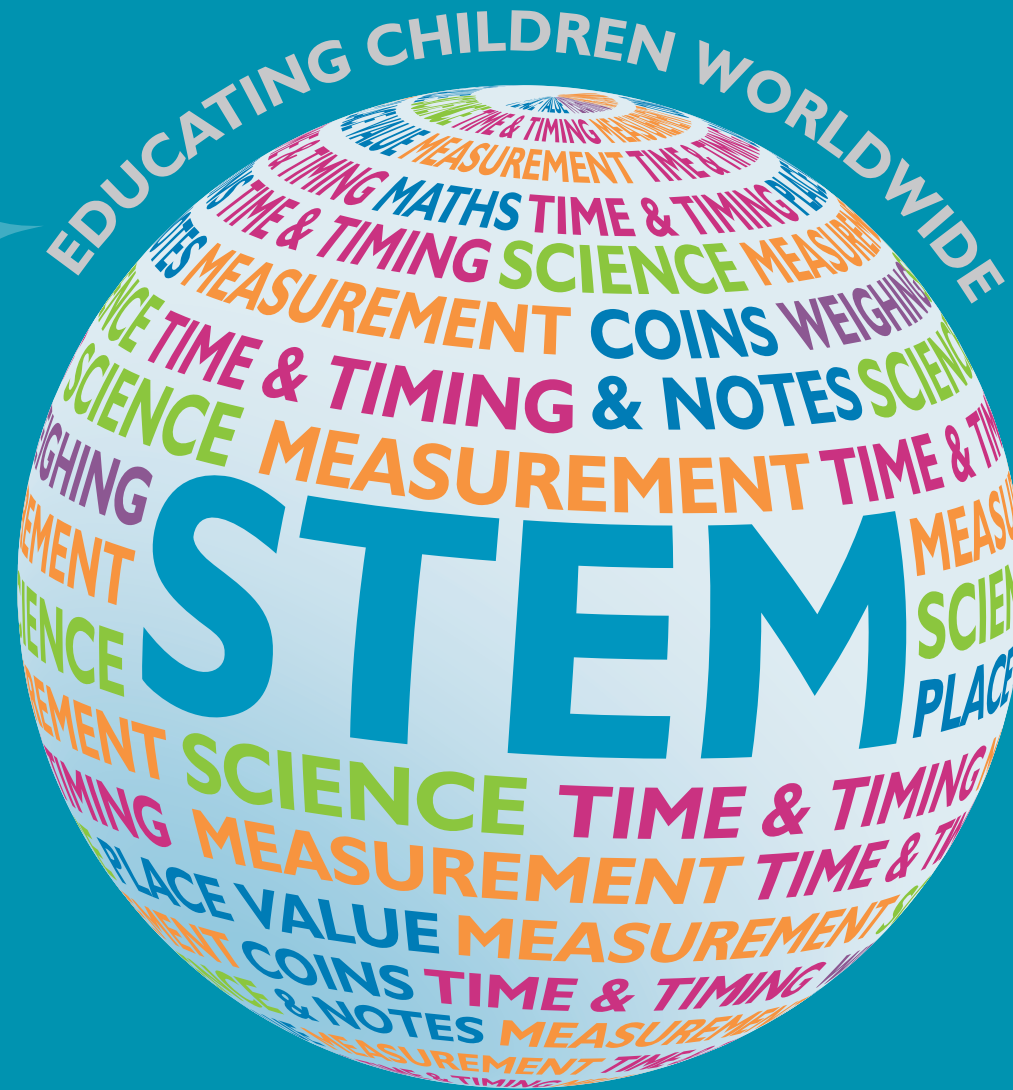




INVICTA  
EDUCATION



CELEBRATING 70 YEARS

Designers & Manufacturers of Innovative Educational Products

# INVICTA

## PRODUCT BENEFITS



### SAFETY STANDARDS

All products conform to the safety standards & requirements of EN71, ASTM, 16CFR and The Canadian Hazardous Products (Toy Regulations), and where appropriate carry the CE mark.



### 3 YEAR GUARANTEE

All Invicta manufactured products are guaranteed against manufacturing defects for a full 3 years. Details available upon request.



### RECYCLABLE

Invicta will accept all products returned at the end of their working life for recycling.



### SEAL OF APPROVAL & ENDORSEMENT

Invicta's seal is displayed on all Education Packaging to confirm that the product has been both approved and endorsed by Invicta's Educational consultants.



### PLEASE NOTE

Most Invicta products are held in stock. Certain products are made to order and are indicated with an **MTO** icon. **MOQ** and extended lead time applies. Details available upon request.

## SHAPING THE FUTURE



Established for over 70 years, The Invicta Education Brand has a history of innovation and cutting edge creative design of educational products.



Invicta is an Original Equipment Manufacturer (OEM) providing bespoke customer 'Own Brand' adaptations. Please contact the education team for further information.



Invicta's product range supports a cross-curricular approach to learning and has been specifically developed to meet the attainment targets of the UK National Curriculum, and equally, international framework requirements in other countries.



Every item in the Invicta range has evolved from a high level of educational research & development combined with the highest standard of design.

Any infringement of our intellectual property rights will be vigorously pursued. We reserve the right to alter designs and specifications (including colours and materials) if and when such changes are unavoidable. Our terms and conditions are available on request.

## The Tree Science Range



Teachers Botanical Press & Botanical Drying Paper

Great products to explore the outdoors full range from Page 2



Insect Observation Net



Tree Science™ Class Quadrat™



Tree Science™ Monitor & Dendrometer Set

# WHAT'S INSIDE..?

Established for 70 years, Invicta has a history of innovation and cutting edge creative design of educational products.

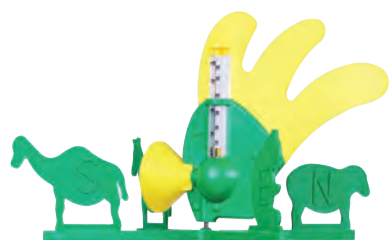
Invicta products support a cross-curricular approach to learning with educational, practical toys and resources and has been specifically developed to meet the attainment targets for both the UK National Curriculum and International markets.



**Renewable Energy Kit**



**Clinometer MK2**



**Upright Weather Station**



**Biodegradability Kit**

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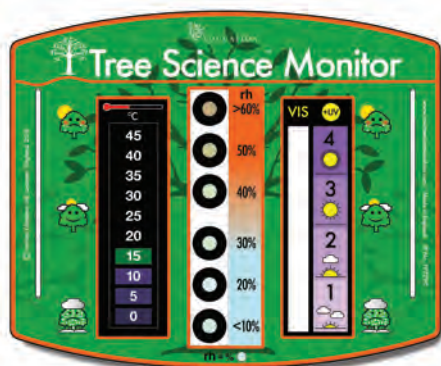
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# Tree Science™

The Tree Science™ range is an innovative range designed by Invicta Education to help children to investigate, explore and understand the fascinating world of Dendrometry. Suitable for ages 5-16 years.

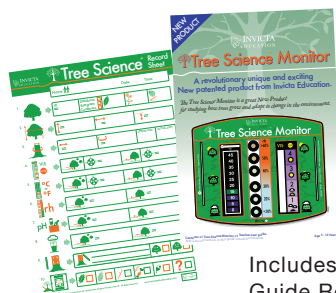


1

## 1 Tree Science™ Monitor

Three of the components that contribute to the healthy growth of trees are temperature, relative humidity and visible light. This monitor does not require batteries, and has a liquid crystal thermometer, a relative humidity (rh%) indicator and a light/UV (VIS) indicator. The Tree Science Monitor has been specifically designed to allow pupils to record accurate findings in a variety of different habitats. Ideal to be used alongside the Tree Science Dendrometer IPI 97300.

IPI 97290



Includes Teacher's Guide Record Sheet

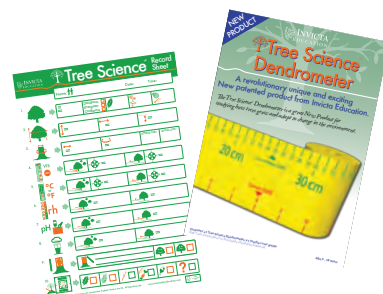


2

## 2 Tree Science™ Dendrometer (6m Metric)

The Tree Science™ Dendrometer is a waterproof device designed to measure the circumference of a tree and it is also calibrated to indicate the diameter. With all the data collected from the tree along with the environmental information, pupils can also work out the tree's age, if the tree is healthy, growing and its maturity. The Dendrometer measures up to 6m in length and can be easily cut to size. Pthalate Free.

IPI 97300



Includes Teacher's Guide Record Sheet



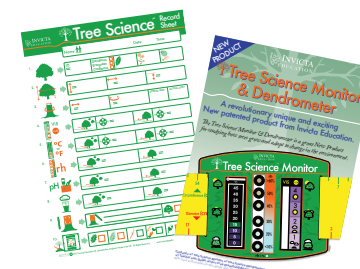
3

## 3 Tree Science™ Monitor & Dendrometer Set (6m Metric)

Complete set comprising :

- ✓ 1 x Tree Science™ Dendrometer
- ✓ 1 x Tree Science™ Monitor

IPI 97250



Includes Teacher's Guide Record Sheet



# TREE SCIENCE™



**Camouflage**



**Leaves**

## Tree Science™ Class Quadrat™

The Class Quadrat™ enables pupils to investigate small areas of habitat & ecosystems closely in the field and record their findings in relative comfort both as individuals and as a class group. The 1m<sup>2</sup> grid in the centre acts as a area within which children may sample the local distribution of plants or small creatures. This Class Quadrat™ is a fully portable 1m<sup>2</sup> Quadrat with a 0.5m wide seating/kneeling area for 9 pupils around the perimeter. The central area is marked out into 9 square areas (1 per pupil) and students may identify, count, collect, record and analyse what they find in 1m<sup>2</sup> so that they can then work out the distribution of species in a much larger surrounding area (e.g. a woodland, park or school grounds). The Class Quadrat™ is Phthalate Free. It measures 2m x 2m & folds up easily. It can easily be carried on field trips. Phthalate Free. Comes complete with a set of ground sheet pegs (adult supervision required).

### 1 Camouflage

IP197020

### 2 Leaves

IP197320



Includes Teacher's  
Guide Record Sheet



## Tree Science™ Kit

Contents :

- ✓ 1 x Tree Science™ Class Quadrat™ in a choice of Camouflage or Leaves design
- ✓ 1 x Tree Science™ Monitor
- ✓ 1 x Tree Science™ Dendrometer
- ✓ Teachers Guides and Record Sheets (For Dendrometer, Monitor and Class Quadrat™)
- ✓ 1x Set of ground sheet pegs (adult supervision required)

### 3 Camouflage

IP197270

### 4 Leaves

IP197271



Includes Teacher's Guides  
with Record Sheets



# TREE SCIENCE™



## 1 Class Pack of 30 Large 60ml Flip Top Specimen Vials

These vials come with flip top polythene lid.

**IP197160**



## 2 Class Pack of 30 Small Specimen Vials

These vials come with push-on polythene lids. Supplied as a pack of 30.

**IP197150**

## 3 Pack of 100 25ml Plastic Pots with Lids

These vials come with push-on polythene lids. Supplied as a pack of 30.

**IP197281**



## 4 Teachers Botanical Press

For pressing and preserving leaves and flowers. Metal frames with wadding to stop crushing, held together with heavy duty adjustable straps.

Size 410x310mm

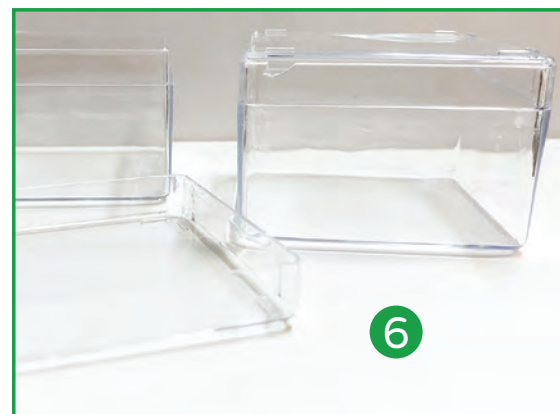
**IP197240**

## 5 Botanical Drying Paper

25 sheets. For use with the Teacher's botanical press.

Size 440 x 280mm

**IP197080**



## 6 Set of 30 Recyclable & Stackable Specimen Boxes

A stackable square clear plastic box with lid. Available in two sizes.

**60 x 60 x 30mm**

**IP197120**

**60 x 60 x 40mm**

**IP197130**





## 1 Insect Observation Net

Netting cylinder with lightweight plastic table. The side zip allows easy access to the butterflies. The hanging strings can be adjusted using the handy toggles.

**Size 300mm diameter x 650mm high with 350mm table.**

**IP197230**

## 2 Sweep Net

Ideal for children, this net comes with a white cloth bag.

**Size 300mm diameter with 300mm wooden handle.**

**IP197200**



## 4 Butterfly/Insect Net

Ideal for children, this net comes with a black and a white netting bag.

**Size 300mm diameter with 300mm wooden handle.**

**IP197190**

## 2 + 4 Net Set

Comprising:

- ✓ 2 x Net frames
- ✓ 1 x white & 1 x black netting bag for aerial work
- ✓ 1 x white cloth bag for sweeping through grasses etc

**IP197280**



## 3 Botanical Lens

Fully adjustable, wide field of view. Approximate magnification X2.5

**IP197090**



## 5 Beating/Sampling Tray

This foldable teachers beating tray comes complete with white fabric giving a tray area of 1100 x 860mm. Suitable for collecting specimens from branches.

**IP197100**



# UNDERSTANDING NATURE



1

## 1 Hand Held Magnifier

A lightweight, 100mm diameter, 2x magnifier with a high quality plastics lens. Inset with 20mm diameter 3x and 4x magnifiers. The large rubber non-slip handle provides a good grip for children and adults.

H195 x W108 x D30mm

IP081059



2

## 2 Bug Pots - 10 Pieces

Bug pots are a great addition to minibeast exploration. Each individual transparent pot has a measurement grid of 5mm squares and 2.5x magnifying lid

Dia.49mm x H44mm

IP040159

These products have been designed to observe and study people, plants and wildlife



3

## 3 Large Magnifying Set

The Large two in one Magnifying Set is ideal for inspecting specimens from nature trips. With 3x magnification and an easy to measure grid in millimetres on the base. Simply remove the base and add the stand to the edge of the magnifier to create a desktop version.

H100 x W110mm

IP081159

Product Guide Available Online



4

## 4 Young Naturalist

Children will find the Young Naturalist a useful addition to their study of nature. The large clear tray and the 6 individual transparent pots with magnifying lids and measurement grids of 5mm squares can be used to observe their findings.

H44 x W120 x D170mm

IP174059

Product Guide Available Online



## 1 Pooter

The Invicta Pooter can be used by children to help them collect insects and small organisms and deposit them safely and without harm into the viewing chamber. The viewing chamber has been specially designed not to be perfectly round. Bugs will keep on walking until they find a corner or crevice to hide in and once they are still children will find it much easier to observe them.

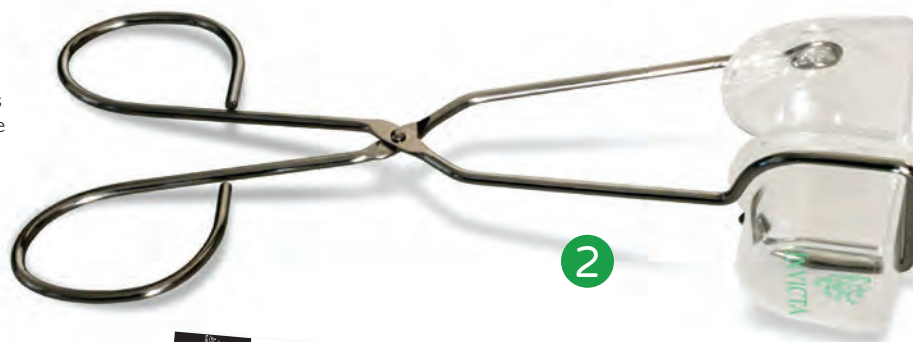
The chamber measures H70 x Dia.54mm

Single

IP040359

Pack of 5

IP037159



## 2 Bug Tongs

Invicta's Bug Tongs are ideal for field trips for pupils to collect specimens. Children can capture insects, bugs and other small organisms from within their natural habitat or environment for examination without touching or hurting the specimen. Once captured the children can transfer the insect into a larger bug pot for further detailed examination prior to release.

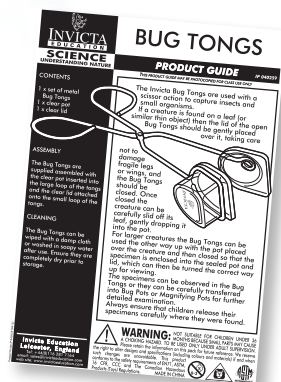
L215mm

Single

IP040259

Pack of 5

IP037059



Downloadable product guide available - see [invictaeducationshop.com](http://invictaeducationshop.com)



Capture insects, bugs and other small organisms without touching them



## 3 Underwater Explorer

Compact cylindrical shape perfect for observing pond life with an adjustable ventilation hole to ensure a good circulation of air.

H230 x W130mm

IP050800



# BIODEGRADABILITY KIT

Used to demonstrate materials bio-degrading in testing media and liquids of pupils choice (not supplied). A teacher guide with detailed instructions, explanations and experiment suggestions is provided. Great for environmental science!

**Containers measure H150mm**

Product Guide  
Available Online



Rapid degrading blue plastics film samples



Clip Frame devices loaded with items for testing (not included)

Biodegradability Kit Contains;

- ✓ 6 x Transparent hexagonal containers with vented lids and base locator stands
- ✓ 6 x Clip Frames. Suitable for holding flat items such as pieces of newspaper, leaves, paper, foil, and plastic bag etc
- ✓ 6 x Open Cage Frames (cage with bars). Suitable for holding solid materials
- ✓ 6 x Closed Cage Frames (cage without bars). Suitable for holding small items that can't be held in either of the other two frame devices
- ✓ 6 x Blue Biodegradable Plastics T Sections. Cold Water Soluble
- ✓ 6 x Brown Biodegradable Plastics T Sections. Hot Tap Water Soluble
- ✓ Samples of Blue Rapid Biodegradable Plastics Film. Cold Water Soluble
- ✓ 6 x Cardboard T Sections (coloured white). A paper-pulp based board composed of two or more plies to provide thickness and strength
- ✓ 6 x Copper T Sections (coloured gold and marked with chemical element symbol Cu)
- ✓ 6 x Tin T Sections (coloured silver and marked with chemical element symbol Sn)
- ✓ 6 x Aluminium T Sections (coloured silver and marked with chemical element symbol Al)
- ✓ Rapid degrading blue plastics film samples and sheets of self adhesive peelable stickers.

IP117359



Clip and Cage Frame devices standing in base locators



Open and Closed Cage Frame devices with apple samples for testing (not included)

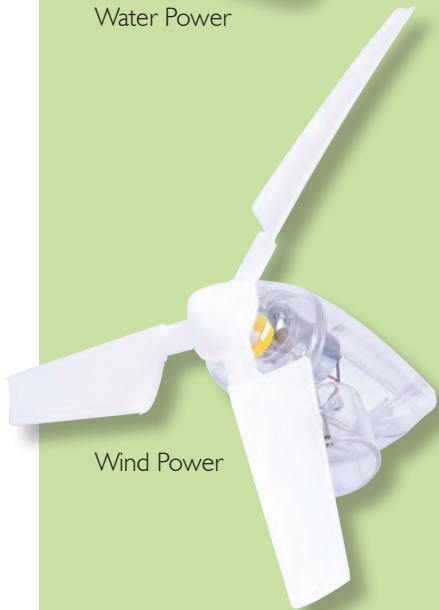




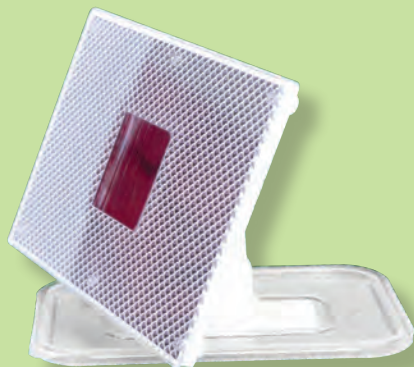
# RENEWABLE ENERGY KIT



Water Power



Wind Power



Solar Power

A resource designed to make the understanding of renewable and sustainable energy generation an exciting and tactile experience, using solar, wind and water power.

## Renewable Energy Kit

Simple and visual ways to demonstrate to children how wind, solar and water powers the Invicta Renewable Energy Kit which allows the children to understand renewable and sustainable energy through an exciting and tactile experience. Designed to be used either indoors or outdoors, the modular format makes it easy to change between the three sources of energy and the four monitors which are activated when enough energy has been produced to power them.

**H170 x W340 x D350mm.**

**IPI17059**

The 4 interchangeable monitors are activated when enough energy is produced to power them.



Buzzer



Gears



Energy



Lights



Product Guide  
Available Online

# UNDERSTANDING WEATHER

These products have been designed to generate a depth of knowledge in the important scientific area of weather.



## 1 Upright Weather Station

A complete solution with all components attached to one central pole which can be inserted into the ground. Wind speed, wind direction, rainfall and temperature are all featured, as well as the time of day which can be observed on the sun dial.

HI 160mm

IP082659

Downloadable Weather Station chart available - see [www.invictaeducationshop.com](http://www.invictaeducationshop.com)



This advanced Weather Station can be hand-held, wall mounted or free standing...



2



The Weather Station comes with 5 removable weather instruments: barometer, compass, hygrometer, standard thermometer and min/max thermometer.

## 2 Weather Station

All five instruments on the station fit into a specially designed portable resource. The dry-wipe surface allows previous readings to be recorded and displayed. Both the max/min thermometer and the standard thermometer are exceptionally easy to use and completely safe. A weather booklet and a set of instrument name labels in several European languages are included.

H380 x W300 x D70mm.

IP080259

Downloadable Weather Station chart available - see [www.invictaeducationshop.com](http://www.invictaeducationshop.com)





### 1 Anemometer

This unique design gives a direct reading of wind speed, without the need to count revolutions. The low and high calibrations register ms-l and the Beaufort scale. It can be hand-held or fixed permanently outside and comes complete with a product guide.

**H280 x W190mm.**

**IP088059**



### 2 Weather Vane

Simple and robust yet practical for classroom use. Can be used as a hand-held instrument or fixed permanently outside. Comes complete with product guide.

**H320 x W220mm**

**IP087559**



### 3 Rain Gauge

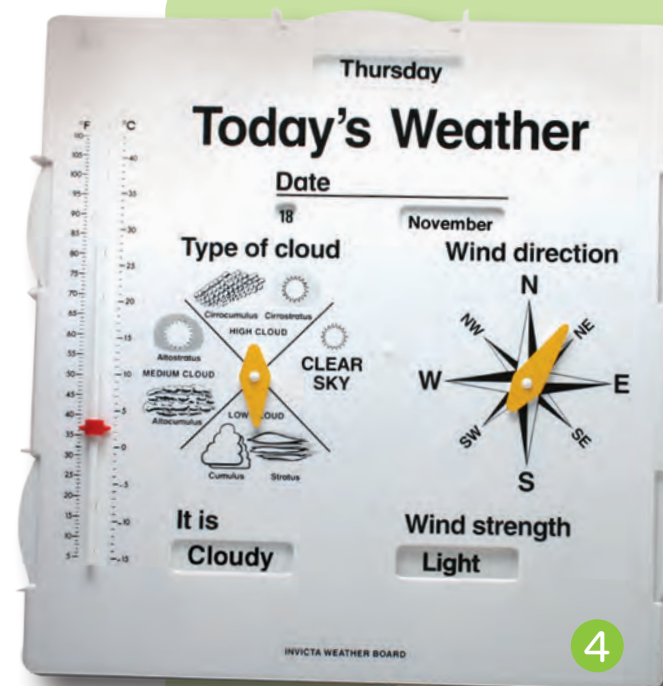
An inexpensive and accurate Rain Gauge which is graduated in millimetres. It can be used freestanding or placed in the ground using the spike provided.

**H160 x W80mm.**

**IP084059**



Detachable Spike



### Weather Board

The seven-day Weather Board has eight aspects to record weather conditions, including cloud formations, wind direction and wind strength. An excellent way to encourage children to learn about the weather and the environment. The Board is made in hardwearing material for indoor and outdoor use. Comes complete with product guide.

**H160 x W80mm.**

#### 4 English

**IP151659**

#### 5 German

**IP151859**

Product Guide  
Available Online

# MICROSCOPES

The Invicta microscope and camera range has excellent optical quality at very affordable prices.



## 1 Digital Camera Microscope Kit

An integrated webcam allows microscopic findings to be shared via the computer to the whole class. Includes 10x, 60x, 120x and 220x magnification, computer software, 6 made-up slides, full operating instructions and storage carrying case.

**H350 x W185 x D245mm**

**IPI I6259**

Product Guide Available Online



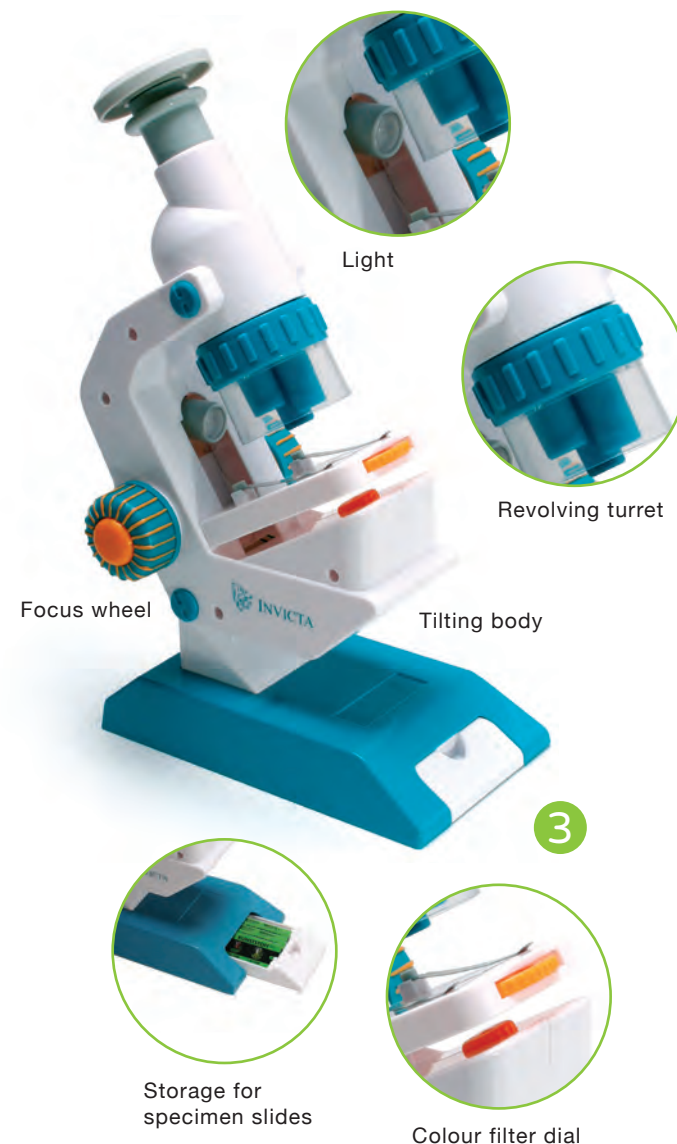
## 2 Junior Microscope Kit

An ideal 'first' microscope with magnification of 15x. Tough yet lightweight for outdoor use with large controls, illumination lamp and a set of 6 made-up viewing slides.

**H268 x W100 x D155mm**

**IPI I6059**

Product Guide Available Online



## 3 Senior Microscope Kit

Comes with 100x, 200x and 300x magnification and 2 illumination options. Also included is a set of 6 made-up viewing slides. The senior microscope has a metal base for added stability.

**IPI I6159**

Product Guide Available Online



# MATHEMATICS

## 1 Polyhedra Dice Set - 162 Pieces

This comprehensive set of 162 plastic dice is supplied in a carry case for easy storage.

It contains the following items;

- ✓ 10 x 10 sided dice, 0-9
- ✓ 10 x 10 sided dice, 1-10
- ✓ 10 x 10 sided tens dice, 10-100
- ✓ 10 x 10 sided hundreds dice, 100-1,000
- ✓ 10 x 10 sided thousands dice, 1,000-10,000
- ✓ 10 x 12 sided dice, 1-12
- ✓ 10 x 6 sided dice, numbered 1-6
- ✓ 30 x 6 sided dice, spotted 1-6
- ✓ 12 x 6 sided dice, blank, white
- ✓ 10 x 6 sided dice, addition and subtraction
- ✓ 10 x 6 sided dice, division and multiplication
- ✓ 10 x 4 sided dice
- ✓ 10 x 8 sided dice
- ✓ 10 x 20 sided dice

**IP053459**



1



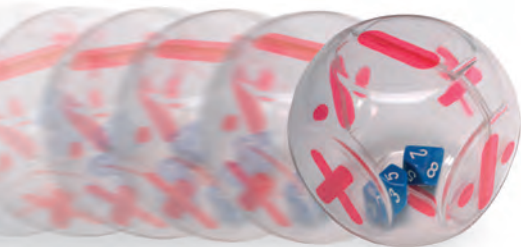
## 2 Sum Setter

A novel, self-contained device which offers virtually unlimited variations of four mathematical operations. A roll of the big clear die makes the two 10-sided dice land in a random sequence; the symbol uppermost on the die acts as the mathematical operation. Removeable symbols (+ - x ÷) allow teachers to match the level of ability of their pupils. Complete with product guide.

70mm x 70mm.

**IP051859**

**MTO**



2



3

## 3 Dice Shakers

These yellow plastic Dice Shakers are made from high quality plastic and supplied as a pack of 10.

Size H45 x W57 x D30mm

**IP053359**

**MTO**

## 4 Traditional Spot Dice

These 15mm plastic dice are supplied in assorted colours.

**Pack of 10** Supplied in a bag  
**IP052359**

**Pack of 100** Supplied in a tub  
**IP052459**

**MTO**



4



## 5 Number Dice

15mm plastic dice are supplied in assorted colours.

**Pack of 10** Supplied in a bag  
**IP052559**

**MTO**



5



**Pack of 100** Supplied in a tub  
**IP052659**

## 6 Ten Sided Number Dice 0-9

These ten sided 20mm plastic dice, numbered 0-9 are supplied in white.

**Pack of 10** Supplied in a bag  
**IP052759**

**Pack of 100** Supplied in a tub  
**IP052859**



6



## 7 Ten Sided Number Dice 1-10

These ten sided 20mm plastic dice, numbered 1-10 are supplied in black.

**Pack of 10** Supplied in a bag  
**IP052959**

**Pack of 100** Supplied in a tub  
**IP053059**



7



## 8 Jumbo Spot Dice

These 25mm plastic jumbo dice are supplied in assorted colours.

**Pack of 10** Supplied in a bag  
**IP053159**

**Pack of 100** Supplied in a tub  
**IP052659**



8

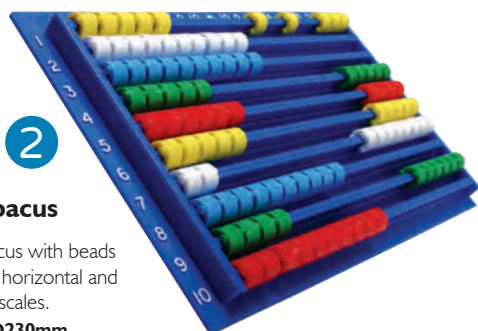




### 1 Number Juggler

This clever balance adds an element of fun to learning equivalence, greater and less than, and simple addition and subtraction. The set includes 20 number weights and 2 bucket weights which enable children to play a game of simple logic and deduction.

**IP178159**



### 2 Slide Abacus

A traditional abacus with beads in 5 colours and horizontal and vertical number scales.

**H20 x W160 x D230mm**

**IP132059**

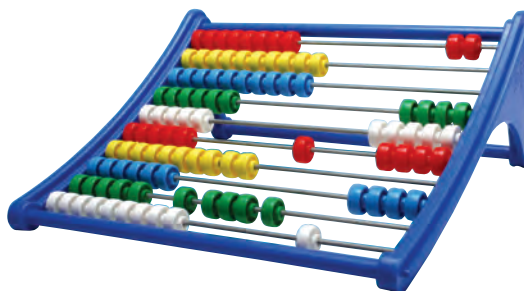
Product Guide Available Online



### 3 Bead Abacus

This cleverly designed Abacus can be used in an upright position or turned over and used on a table top at a 30 degree angle. The Abacus encourages children to explore number concepts such as matching, counting, number patterns and combinations, simple addition and subtraction.

**IP036659**



4



### 4 Rod Abacus

This practical counting-up Abacus helps young children with counting and numeration activities.

Includes 10 stands, 20 rods and 200 cubes.

Suitable for group or individual work.

**IP163459**

**MTO**

5

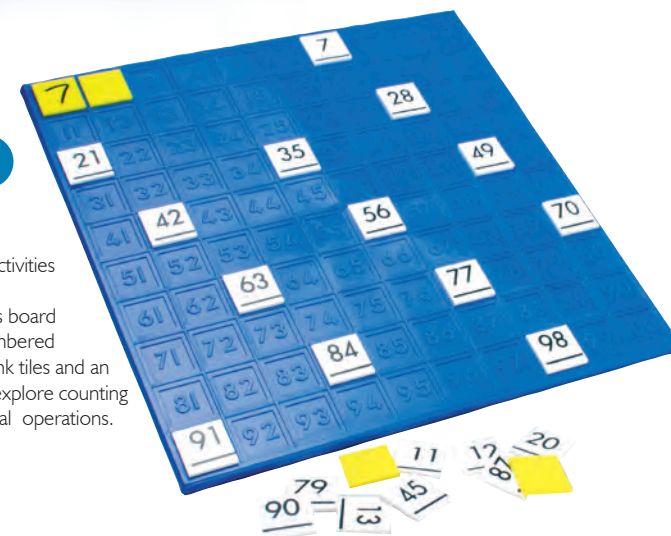
### 5 100 Number Board

A large number of mathematical activities are possible using this large board.

The set includes the sturdy plastics board with 100 recessed and clearly numbered squares, 100 number tiles, 25 blank tiles and an instruction booklet. Children can explore counting and use the board for mathematical operations.

**H290 x W290mm**

**IP013359**

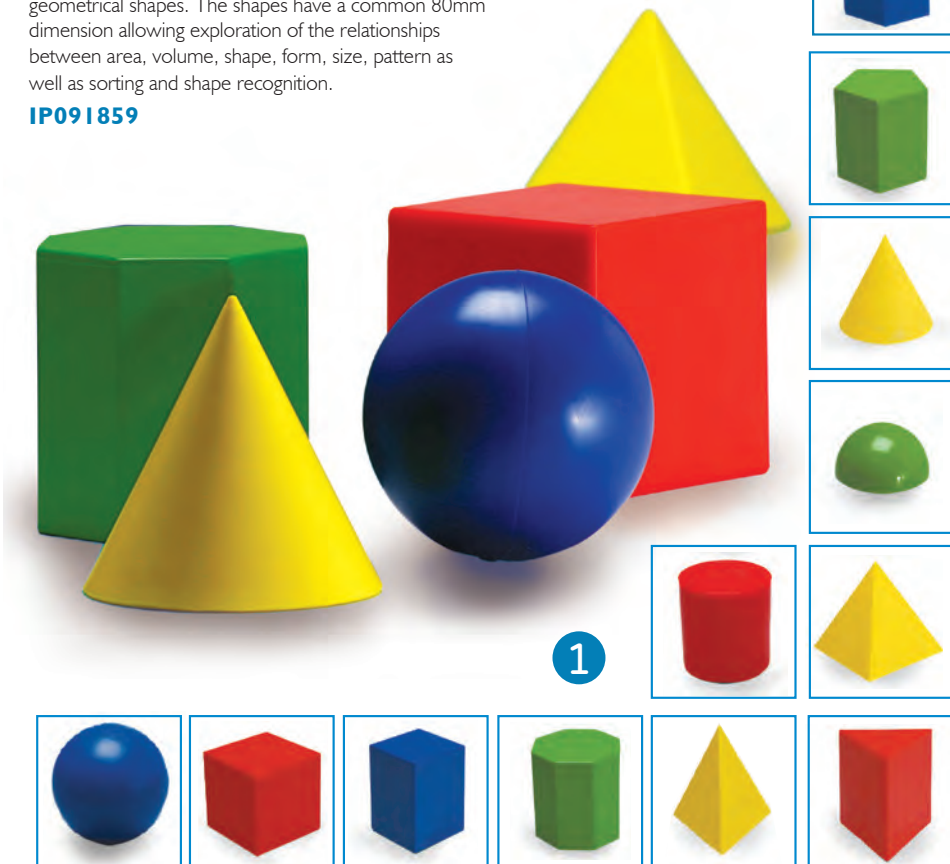




## 1 Large Shapes - 12 Pieces

A collection of 12 large, bright, 3-dimensional plastics geometrical shapes. The shapes have a common 80mm dimension allowing exploration of the relationships between area, volume, shape, form, size, pattern as well as sorting and shape recognition.

IP091859

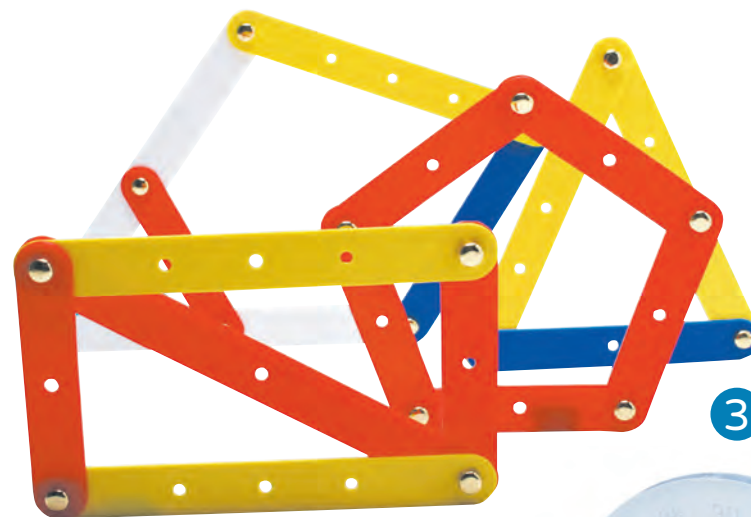


## 2 Mini Maths Shapes - 16 Pieces

A comprehensive collection of 3D geometric shapes. Each cube prism cylinder and cone is supplied in four different sizes. The set comprises of 4 shapes; cube, prism, cylinder and cone which are each supplied in 4 different sizes and colours, making a total of 16 shapes.

H30mm

IP154059



## 3 Geo Strips

What better way for children to learn about shapes than to make them? The set consists of 68 strips of various sizes, a box of connectors, a protractor, and a set of 11 carefully graded work cards.

IP014159

Product Guide Available Online

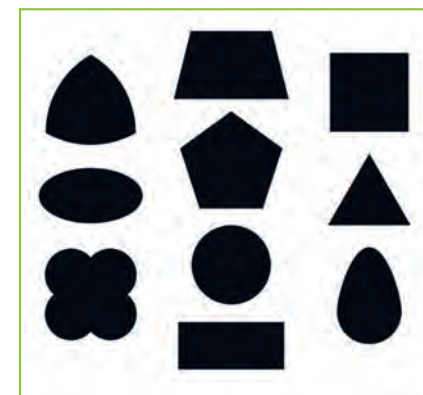


## 4 Montessori Shapes - 20 Pieces

A universally acclaimed product which contains 10 shapes with moulded lifters and 10 matching templates. Children have the option of using the shapes as stencils for tracing or for shape recognition and matching. The shapes are made of tough and washable plastics and are ideal for nursery and infant classes.

IP158659

4



# BASE 10

Base 10 blocks help children to learn basic mathematical concepts including addition, subtraction and place value. Base ten sets consist of cubes (units), rods (tens), flats (hundreds) and blocks (thousands).

## Interlocking Base Ten

The components join together for easy use.  
Number Set includes; 100 yellow cube units, 10 green rods, 10 blue flats and 1 red block.  
Group set includes; 100 yellow cube units, 50 green rods, 30 blue flats and 4 red blocks.

### ① Number Set - 121 Pieces

IP163959

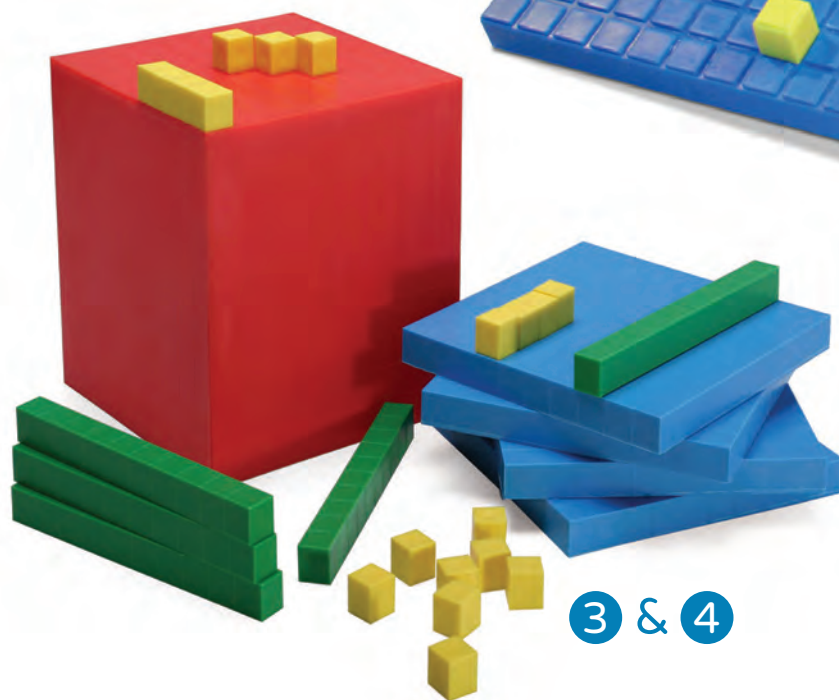
### ② Group Set - 184 Pieces

IP163859

① & ②

## INTERLOCKING BASE 10

This Interlocking range allows pupils to join the components together for easy use. Each piece is clearly marked in centimetre squares to highlight how each unit relates to the whole.



③ & ④

## Base Ten

Number Set includes; 100 yellow cube units, 10 green rods, 10 blue flats and 1 red block.  
Group set includes; 100 yellow cube units, 50 green rods, 30 blue flats and 4 red blocks.

### ③ Number Set - 121 Pieces

IP163659

### ④ Group Set - 184 Pieces

IP163559

## STANDARD BASE 10

The Invicta standard range of Base Ten components are colour coded with each piece marked in centimetre squares to highlight how each unit relates to the whole.





1

# PLACE VALUE

Class, Teacher & Pupil Versions

## 1 Place Value Magic Ruler - Class Pack

Class pack contains one large teacher place value magic ruler and ten small dry wipe pupil versions. These magic rulers have removable place value tabs for units, tens, hundreds, thousands, hundred thousands, millions, tenths, hundredths, thousandths and hundred thousandths. Also supplied is one removable decimal point, two comma's and seven of each number tab 0-9. For easy storage the tabs are provided in a plastic container. Teacher's ruler is able to be displayed on a wall or to stand up freely.

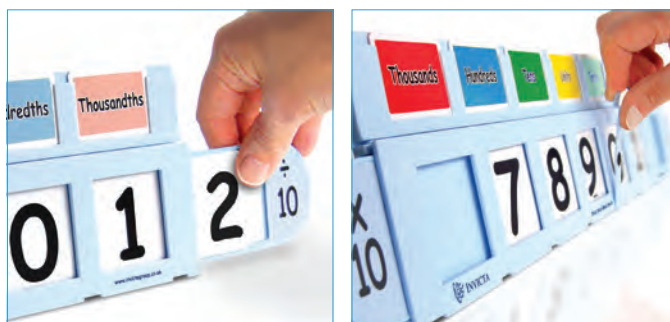
**IP124359**

Product Guide Available Online

## 2 Place Value Magic Ruler - Teacher Pack

Contains one large Place Value Magic Ruler, removable place value tabs: units, tens, hundreds, thousands, ten thousands, hundred thousands, millions, tenths, hundredths, thousandths, ten thousandths and hundred thousandths to enable the subject to be taught step by step. Also supplied are one removable decimal point, two comma's and seven of each number tab 0-9. For easy storage the tabs are supplied in a plastic container. There are optional legs (to stand on a desk), a magnetic strip on the reverse for attaching to a magnetic board and holes to enable the product to be screwed to a wall.

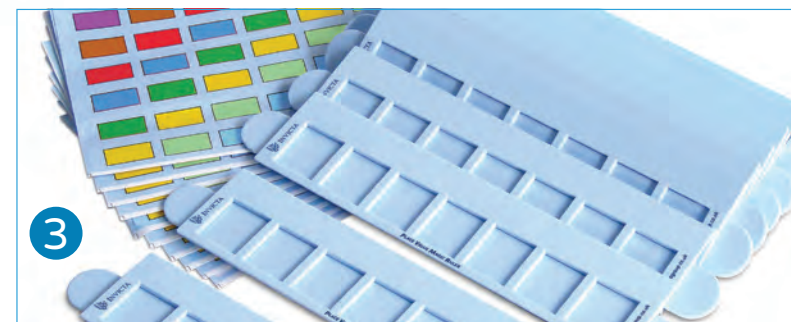
**IP124559**



2



3



## 3 Place Value Magic Ruler - Pupil Pack

Set of 10 dry wipe Place Value Magic Rulers. Complete with ten sheets of removable stickers showing place headings, these can be applied if required for pupils ability and speed of learning.

**IP124459**

MTO



# PINBOARDS & PEGBOARDS



## Pegboards

Square pegboards each with 100 holes, ideal for pattern, symmetry, sorting and sequencing work. Boards measure H160 x W160mm

### 1 5 Pegboards (excluding pegs)

IP011459

### 2 5 Pegboards Including 1000 Multi-coloured Pegs

IP147759

Product Guide Available Online



### 3 Storage Tubs - Set of 10

A pack of inexpensive tubs with lids for storing and sorting counters, pegs or beads. Contents not included. 70mm cube.

IP098159

MTO



### 4 Big Peg Board

The large board and 25 coloured pegs help to create designs and patterns. Small children and those with motor difficulties will find that the size and shape of the pegs makes them easy to manipulate. Each peg has a hole for threading activities and they can be stacked for block graph, sequencing and 1 to 5 abacus work.

H50 x W280 x D280mm

IP157159



### 5 Storage Box

#### 5 Storage Box

Clear plastic container, ideal for storing pegs, counters, beads etc. (Contents not included).

IP014059



### 1000 Assorted Pegs

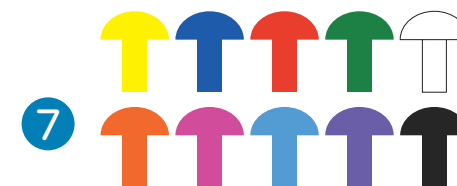
#### 6 200 X 5 COLOURS

IP072659

#### 7 100 X 10 COLOURS

IP072159

Supplied in a bag (not shown)







1

### 1 6 x 6 Pinboard

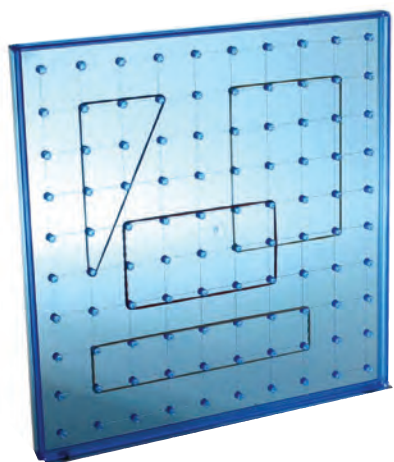
Features a 30mm grid on one side and a circle board on the reverse. Supplied with elastic bands.

H180 x W180mm

IP151159



Reverse



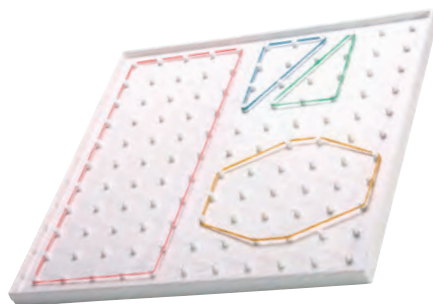
2

### 2 Translucent 10 x 10 Pinboard

Translucent pinboard ideal for work on an overhead projector or light box, supplied with elastic bands.

H200 x W200mm

IP091559



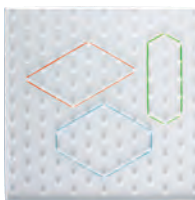
3

### 3 11 x 11 Pinboard

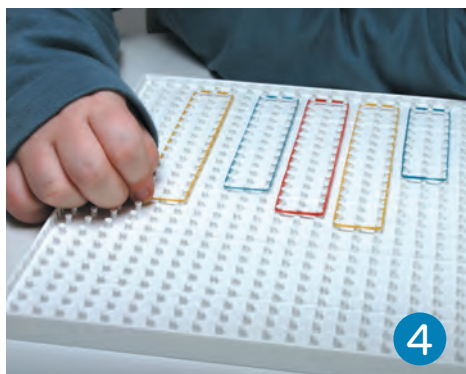
20mm squares on one side and isometric on the reverse, supplied with elastic bands.

H230 x W230mm

IP151259



Reverse



4

### 4 Centimetre Pinboard

Large pinboard with 700 pins - ideal for block graphs supplied with elastic bands.

H280 x W280mm

IP140659



5

# COUNTING

Counters can be used in numerous ways including patterns, sorting, symmetry, tessellation and numeracy.

## Counters

Counters can be used in numerous ways including patterns, sorting, symmetry, tessellation and numeracy. All supplied in bags. Five colours.



6

### 5 16mm Counters

Pack of 250

IP075459

### 5 16mm Counters

Pack of 1000

IP075059

### 6 22mm Counters

Pack of 250

IP011259

### 6 22mm Counters

Pack of 500

IP011059



7

### 7 Grouping Circles

These flexible folding plastic circles can be used in a wide range of grouping and set activities. The set consists of 6 circles, 2 each of red, yellow and blue.

Diameter: 50cm.

IP128659

# Geometric Tracer Set

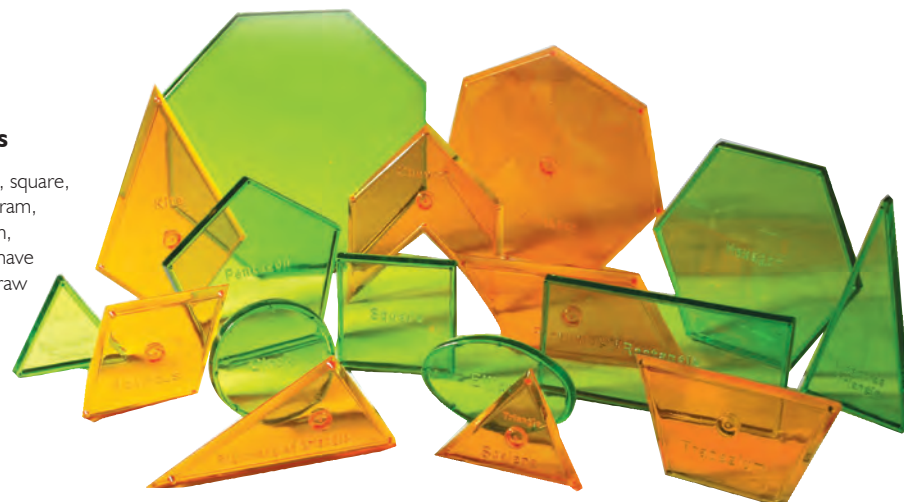


## 1 Geometric Tracer Set - 17 Pieces

The transparent shapes: octagon, hexagon, pentagon, square, equilateral triangle, rectangle, circle, ellipse, parallelogram, heptagon, chevron, kite, rhombus, scalene, trapezium, right hand triangle and isosceles triangle. The shapes have angled edges for 2D tracing or making networks to draw 3D models and each shape is named.

H240 x W170 x D130mm

IP027859



## FRACTIONS

These sets help children to visualise and understand the concept of fractions, by demonstrating that fractions are parts that make up a whole.

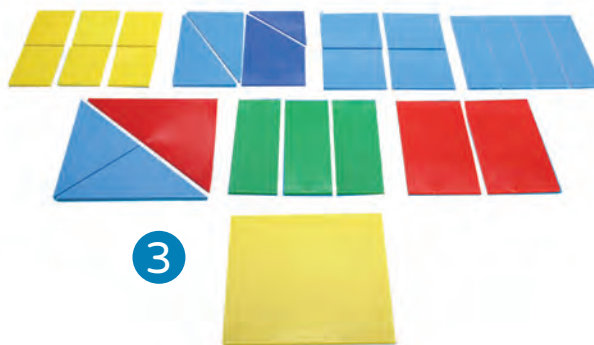


## 2 Fraction Cubes & Spheres

Fraction Cubes and Spheres allow children to explore the relationship between different fractions of solid shapes. The set comprises three cubes and three spheres, each divided differently to show halves, quarters and eighths. To ensure that the fractions of the sphere can be held together to show different ways of making a 'whole' sphere, two transparent sphere holders are included. For extended work each fraction of each shape is marked with decimal and percentage value.

To aid recognition of specific fraction values, each fraction piece of the same value is manufactured in the same colour plastic e.g. all halves are red.

IP051759



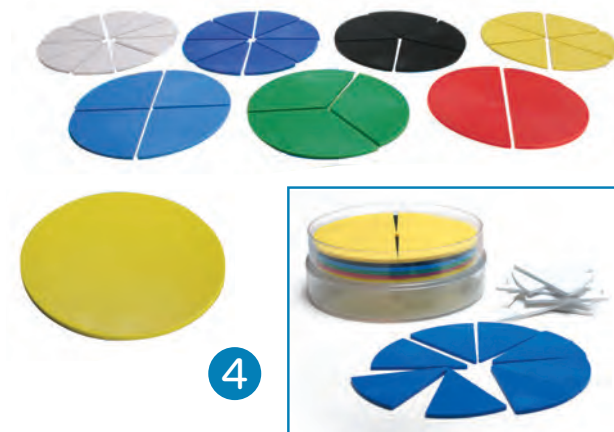
## 3 Fraction Squares - 27 Pieces

Children often have difficulty visualising fraction concepts. However, this set helps to show that fractions are pieces that make up a whole.

Set includes the equivalent of eight complete squares in fractions of  $\frac{1}{2}$ ,  $\frac{1}{3}$ ,  $\frac{1}{6}$ ,  $\frac{1}{4}$ ,  $\frac{1}{8}$ ,  $\frac{3}{8}$  plus one whole.

Supplied in a storage tub.

IP175059



## 4 Fraction Circles - 39 Pieces

Seeing fractions as segments of a whole circle helps children to understand this important concept. Set includes the equivalent of 8 circles.

$\frac{1}{2}$ ,  $\frac{1}{3}$ ,  $\frac{1}{4}$ ,  $\frac{1}{5}$ ,  $\frac{1}{6}$ ,  $\frac{1}{8}$ ,  $\frac{1}{10}$  and a whole circle.

Supplied in a storage tub.

IP176059



# Attribute Sets

Each set contains 5 shapes (square, circle, hexagon, rectangle and triangle), in 3 colours, 2 sizes and 2 thicknesses. All pieces are made of heavy duty plastic and are packaged in a storage box. The box lid can be used both as a shapes stencil and shapes sorter. The 'Learning with Logic' booklet is included with all sets.



## 1 Attribute Set – Group Pack of 60

Large square size 75cm<sup>2</sup>: 25cm<sup>2</sup>  
ratio 3:1.

Pack Size: 310mm x 235mm x 50mm.

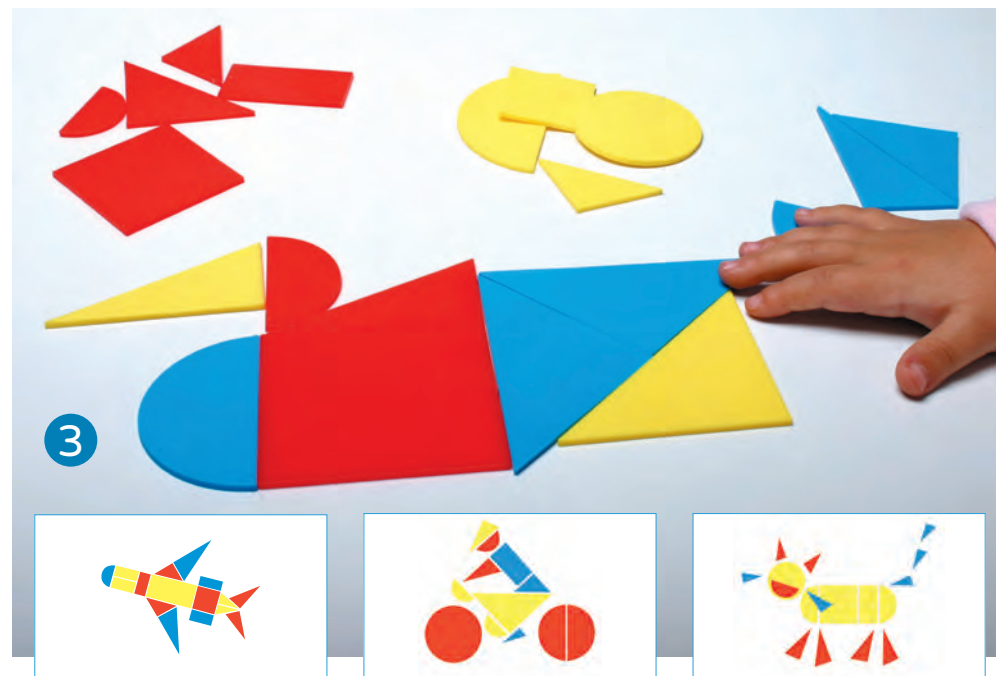
IP138159

## 2 Attribute Set – Class Pack of 60

Large square size: 100cm<sup>2</sup>: 25cm<sup>2</sup>  
ratio 4:1.

Pack Size: 350mm x 235mm x 50mm.

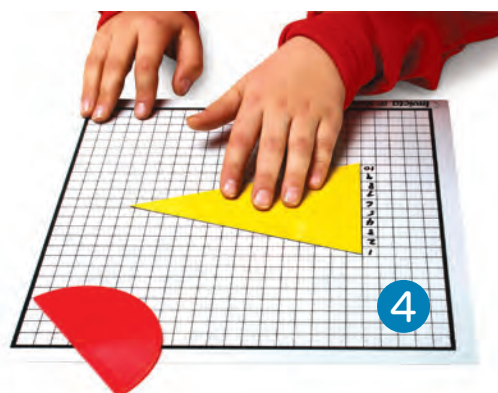
IP110759



## 3 Playshapes

Brightly coloured plastic shapes to encourage the creation of designs and pictures while learning basic maths concepts. 6 shapes in 3 bright colours, a total of 186 pieces. Large wall chart included.

IP167359

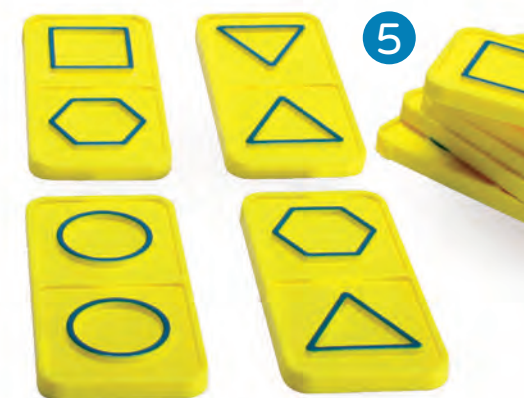


## 4 Area Measuring Grid

Marked in cm squares, flexible washable grids ideal for calculating areas, quadrant and nature study work. Can be used with overhead projector.

IP108659

MTO



## 5 Highlighted Texture & Shape Dominoes

The raised textures, highlighted in blue, enable people with visual impairment to play on equal terms against fully-sighted opponents. The other sides of the pieces encourage matching and recognition of familiar geometric shapes. Packed in a transparent storage box.

IP052059

MTO

# COINS & NOTES

Make learning fun with Invicta's safe and durable sets of coins and notes, all approved by The Bank of England.



## 1 Coins & Notes

**1p Coins - 100 Pieces**

**IP060259**

**2p Coins - 100 Pieces**

**IP060359**

**5p Coins - 100 Pieces**

**IP060459**

**10p Coins - 100 Pieces**

**IP060959**

**20p Coins - 100 Pieces**

**IP165359**

**50p Coins - 100 Pieces**

**IP063659**

**\*Old design £1 Coins - 100 Pieces**

**IP165459**

**New design £1 Coins - 100 Pieces**

**IP165410**

**£2 Coins - 50 Pieces**

**IP063759**

**Coins Assorted - 700 Pieces**

**IP061359**

*\*Only available whilst stocks last*

## 2 700 Assorted Coins and 25 Notes Set

**IP060159**

Set includes: fifty each of all eight coin denominations plus 10 x £5, 10 x £10 and 5 x £20.



## 3 Play Notes (25 Assorted)

**IP063200**

Set includes 10 x £5, 10 x £10 and 5 x £20.



# PROBABILITY

## 2 Probability Kit Including Binostat

Practical demonstrations to prove the Theory of Probability and investigate random and selective sampling, binomial expansion and distribution.

- ✓ Binostat
- ✓ Pack of cards
- ✓ Dice, red and blue ball and shakers
- ✓ Pots with white and black balls

**IPI13159**

1



### 1 Binostat Only

A device for physical demonstration of binomial distribution and Pascal's Triangle. 300mm square.

**IPI19959**

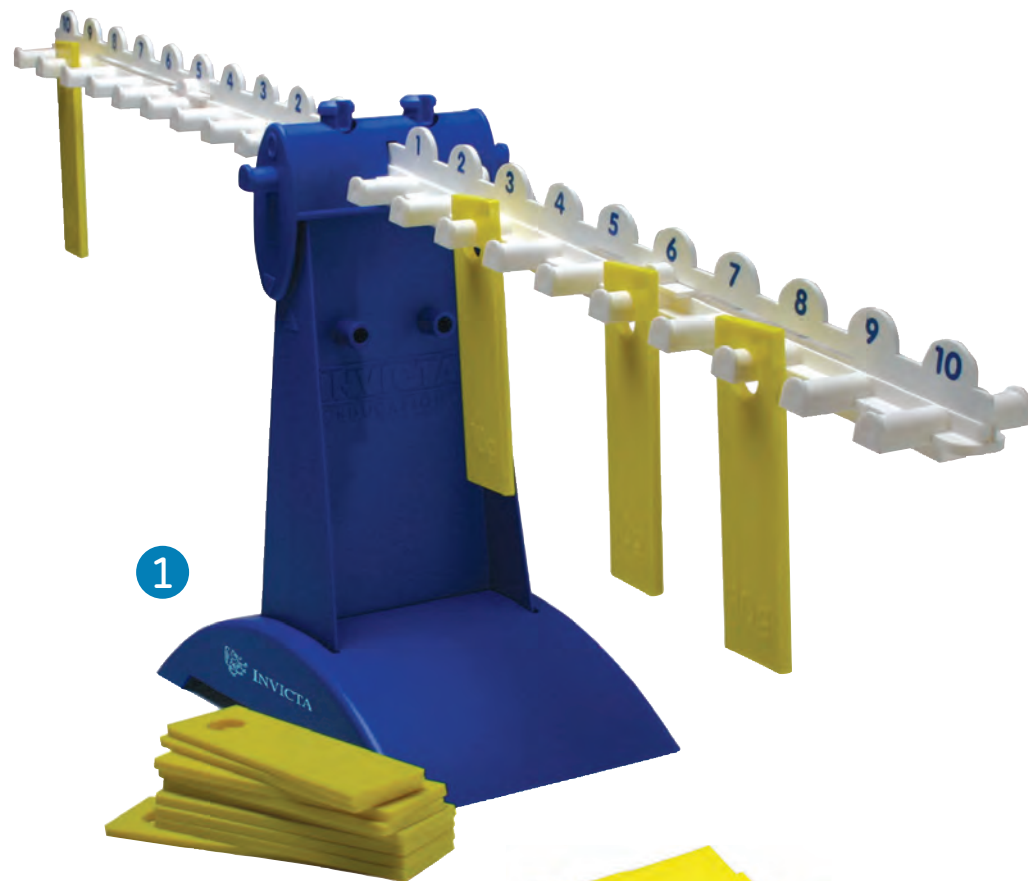
**MTO**



2



# BALANCE



1

## 1 Maths Balance

Perform all four mathematical functions (+ - x ÷) with immediate visual and physical verification of their results. Maths balance is supplied with a set of 20 x 10g weights. The reverse of the number strip may be printed/written on if required. Can be completely dismantled for storage.

**H340 x W650mm**

**IP050359**

Product Guide Available Online



Weights  
included

## 3 Operations in 1

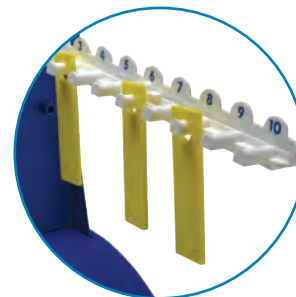


Weighing bucket set

2



Weighing pan set



Weights  
included



## 2 Balance Kit

Balance kit contains a 3 in 1 base which is then used to build the Bucket Balance, Simple Scales and Maths Balance. This can be assembled quickly and saves on space. (Contents of buckets not included).

**IP050559**



# WEIGHING

## An introduction to understanding volume and weight relationships.

These simple and sturdy products help to develop a multitude of skills including an understanding of the concept of volume and its relationship to weight. A wide variety of objects can be weighed as well as liquids.

### 1 Combined Pan & Bucket Balance Kit

Combined pan and balance kit includes 2 sets of measuring containers each marked with 100ml graduated scale. Lids are provided for both sets meaning another surface to use when weighing. Set also contains 60 clearly marked stackable weights 1g x 20, 5g x 20 and 10g x 20. (Other weights shown are not included).

**IP15245**



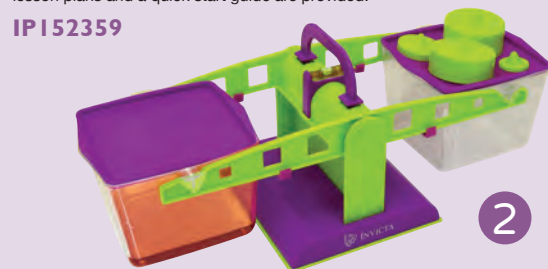
1

### 2 Combined Rocker Scale

This Combined Rocker Scale has been designed to enable the teacher and/or pupil to use either 1/2 litre or 1 litre clear containers, all of which have 100ml graduated scales for liquid measurement and bevelled lids for platform weighing. The scales are fitted with a spirit level for total accuracy.

The scales are supplied with 60 clearly marked stackable weights (1g x 20, 5g x 20 & 10g x 20). A detailed teacher guide with suggested lesson plans and a quick start guide are provided.

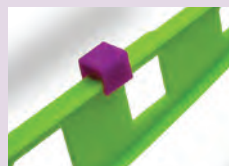
**IP152359**



2



Spirit Level



Balance adjustment device



Weights

### Rocker Scales

Rocker scale with 1/2 and 1 litre tubs which are easily lifted out of the arms of the rocker scales. Each tub is marked with 100ml graduations for liquids. The scale is sensitive enough for 1g to register a positive movement and the tubs are designed to give accurate readings even when objects are placed off centre. Easy to store as all elements come apart for storage. (Contents of the tubs are not included).

#### 3 1 Litre

170mm x 420mm.

**IP090559**

#### 4 1/2 Litre

170mm x 420mm.

**IP152259**



3

4

Product Guide  
Available Online

### 5 Simple Scales

These Simple Scales are sturdy and easy to use. The large pans hold 1 litre of fluid. Indicators show when the balance is level/not level. The balance can be completely dismantled for storage. Includes 5 x 5g weights and 5 x 10g weights. Complete with product guide. Coloured counters not included.

**IP050259**



5

Product Guide  
Available Online

6

### 6 Bucket Balance

A variety of relatively heavy items can be weighed in the 2.5 litre capacity buckets. The robust balance can be completely dismantled for storage. Contents of buckets not included.

**IP050459**

Product Guide  
Available Online



# TIME & TIMING

## Seconds, minutes, hours, days...

This hands-on range of products is designed to promote the understanding of the passage of time, through the use of conventional clocks, sand and water timers.

### Teaching Clock

Turn the dial and 6 alternative faces appear: 24 hour, Roman Numerals, minutes, words, fractions and a blank space to write on. The internally-sprung hands move independently so that time before and after the hour can be shown without the hour hand moving. Able to be wall mounted or place in the stand provided to create a desk-top version.

H400 x W400mm

#### 1 English

IP091759

#### Dutch

IP091762

#### Spanish

IP091729

#### German

IP091760

#### French

IP091761



### 6 Faces:

24

24 hour clock

XII

Roman numerals

twelve

Written representation of hours

00

Numeric representation of minutes

0'clock

Verbal representation of minutes

Plus blank set to write on (use water based dry-wipe pens)



### 2 Manual Big Clock

This large clearly-defined clock is perfect for classroom demonstrations. The 2 hands move independently so that the time before and after the hour can be shown without the hour hand moving. The clock is lightweight yet made of strong, durable plastic with raised numbers and markings.

H400 x W400mm

IP164859



### 3 Geared Big Clock

This geared clock demonstrates the relationship of movement between the hour and the minute hand. The hands cannot be moved independently of each other. The clock is large, yet lightweight and the clearly defined markings make it perfect for classroom demonstrations.

H400 x W400mm

IP164959





1

Timers offer children an excellent opportunity to observe and compare the passage of time...



30 Seconds 1 Minute 2 Minutes 3 Minute 5 Minutes 10 Minutes 15 Minutes

### 1 Giant Sand Timers - 7 available

Designed with an 80mm square base and top to prevent rolling, each sand timer has the time embossed on the top and colour-coded grains.

Size (each): H145mm x W80 x D80mm



- 30 Seconds IP090259
- 1 Minute IP090459
- 2 Minutes IP089759
- 3 Minutes IP089859
- 5 Minutes IP090359
- 10 Minutes IP089959
- 15 Minutes IP090159
- Set of 3 IP081559  
(30 secs, 1 min, 5mins)
- Set of 3 IP081659  
(1 min, 3 mins, 5mins)
- Set of 6 IP081759  
(30 secs, 1, 3, 5, 10 & 15 mins)
- Set of 7 IP081959  
(Set of 7 – 30 secs, 1, 2, 3, 5, 10 & 15 mins)

### 2 Adjustable Sand Timer

Easily adjust this timer between 5 seconds and 3 minutes. Designed for the many activities that require general or comparative timings to be taken. The Sand Timer is made from tough and durable plastics and is supplied with a bag of silver sand.

Complete with product guide.

H140 x Dia.80mm.

IP094059



2

### 3 Water Timers - Pack of 3

One of the oldest known methods of measuring time is illustrated with these brightly coloured Water Timers. Each lid is embossed with the approximate time that the pot takes to empty (30 sec, 1 min, 2 mins). Excellent for reinforcing the concept of time and demonstrating that time can be measured by many means. Complete with product guide.

75mm x 90mm.

IP081459

MTO



### 4 Mini Sand Timers

These Mini Sand Timers stand 9cm high and are perfect for classroom use. Colour coded with 3 different time options and supplied in packs of 10.

75mm x 90mm.

- 1 Minute IP089459
- 3 Minutes IP089559
- 5 Minutes IP089659

MTO

4



# MEASURING

Invicta's range of measuring and estimating products are designed to withstand the everyday knocks and constant use of a typical school day. Suitable for both indoor and outdoor use.

All of these products help to expand children's measuring and estimating experiences.



1

## 1 Height Measure

Developed with a leading UK paediatrician and approved and endorsed by The Child Growth Foundation. Children can monitor and record their own heights and then have fun drawing graphs and calculating Body Mass Index. Measures to 2 metres when fully assembled. Great for classrooms which have minimum space as the whole height measure can be separated and stored into the base. Designed to give accurate measurements on uneven or non-flat surfaces.

**IP095659**

**IP095600 (Boxed Version)**



The Height Measure packs neatly away and can be carried by adults or children. Measure is supplied in a box for storing when not in use.



2

Teachers and children can use this product to measure, record and calculate areas and volumes on a whole range of objects.



2



## 2 Foot, Hand and Object Measure

This measure includes metric and imperial values and international sizes. Approved and endorsed by The Child Growth Foundation. Teachers and children can use this product to measure, record and then calculate areas and volumes on a whole range of objects.

**IP052259**

Product Guide Available Online



The Metric Caliper can be used to measure the depth, width

and thickness of most shapes.

## 3 Metric Calliper

Measures most shapes from 1 mm to 30cm by simply reading measurements through a single viewing window. Designed for calculating areas and volumes, measuring depth, width and diameter.

**L430mm**

**IP139759**



3





# TRUNDLE WHEEL



## 1 Trundle Wheel

Designed for durability, with a rubber tyre to maintain accuracy. The pointer on the wheel helps children to measure intermediate distances. An adjustable clicker can be set from off to every 100mm and to every metre. Overall assembled length: 830mm.

**IP050059**

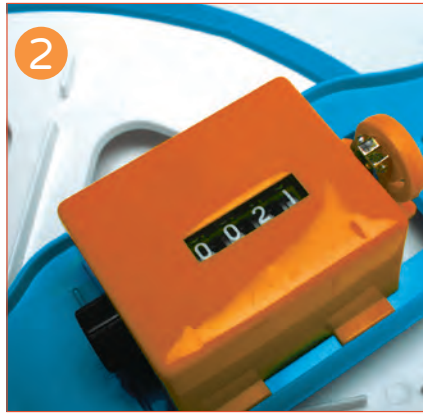
Product Guide  
Available Online



## 2 Trundle Wheel Counter

The counter fits onto the trundle wheel clicker and accurately counts to 999 metres. It can be set to register every 100 mm to 999.9 metres.

**IP050159**



Invicta's  
Metrilog  
can measure  
any regular  
or irregular  
object.

## 3 Metrilog

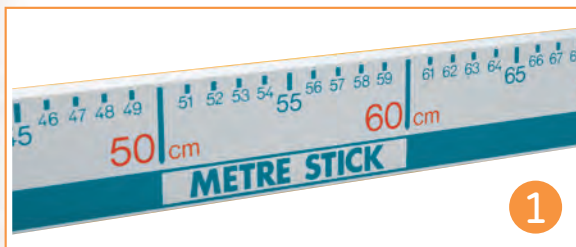
A mini trundle wheel which has a variety of uses in measuring the circumference, perimeter or dimensions of virtually any regular or irregular object. It will measure up to 99cm within a 5% tolerance, with a ridged wheel, easy-to-grip handle and a clear viewing window.

**IP146459**

Product Guide  
Available Online







### 1 Metre Stick

This measuring stick is clearly marked with 1, 5 and 10cm graduations and is made with rounded edges for safety. The metre stick is presented with turquoise and orange numbers on a white background.

IP124259



### Tape Measures - 10 Pieces

Invicta tape measures are made from nylon-reinforced plastic which is non-stretch and washable. 1m long x 30mm wide with bold markings.

#### 2 Centimetre

IP094559

#### 3 Millimetre

IP094659

Product Guide  
Available Online

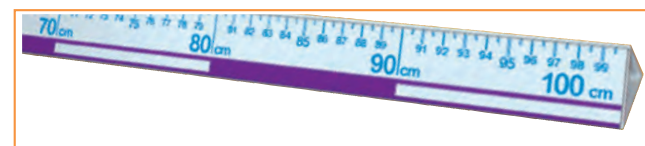


### 4 Number Rule

A 1m triangular ruler, with a 100cm scale on each side. Blocks of colour on each side indicate 10cm, 20cm and 25cm, reinforcing the concept of fractions, decimals and percentages. The ruler, which can be used outdoors, is also an excellent line drawing product for the teacher.

Cubes not included.

IP080559



### 5 Comparison Rule

A 1m triangular ruler, with an inches scale on one side, centimetres on another and millimetres on the third. Blocks of colour on each side indicate feet, 10cm and 100mm, reinforcing the concept of fractions, decimals, percentages and the comparison between metric and imperial measurements. The ruler, which can be used outdoors, is also an excellent line drawing product for the teacher.

IP080459



Invicta's Theodolite is manufactured in robust materials to withstand outdoor use.



1

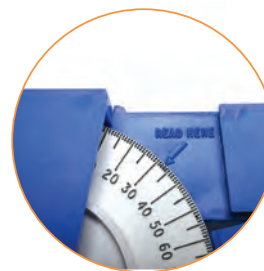
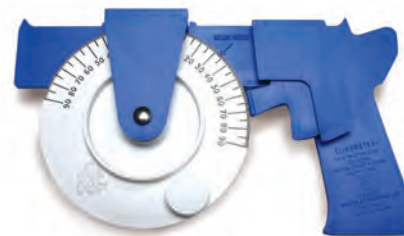
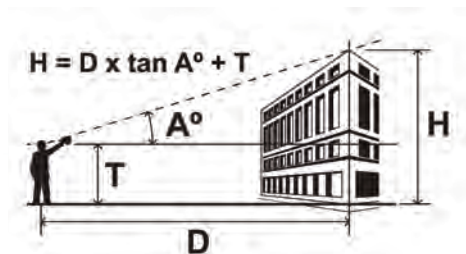


### 1 Theodolite

Manufactured with robust materials to withstand outdoor use, with strong adjustable telescopic legs for easy storage. The level indicator ensures accurate set-up, both the horizontal and vertical scales move and measure to an accuracy of 0.5 degrees.

**Maximum assembled height is 830mm.**

**IP129259**



### 2 Clinometer MK1

Traditional lightweight angle-measuring instrument to calculate heights. Simply let go of the trigger on the handle and it will stop on the measurement. Complete with European product guide.

**IP025059**

Product Guide Available Online



2



### 3 Clinometer MK2

A compact Clinometer with no external moving parts and a combined 'sighting' angle-reading eyepiece. A viewing window on the side of the Clinometer allows a second person to check a reading. All angles in degrees followed by a plus or minus to indicate an upward or downward slope. Complete with product guide.

**IP050659**

3



# LIQUID MEASURING

These sets of measuring containers of differing shapes help children to understand the concept and relationship of volume.



1

## 1 Capacity Measures - 4 Containers

Holds 125cm<sup>3</sup>, 250cm<sup>3</sup>, 500cm<sup>3</sup> and 1 litre of fluid respectively. Fill containers to the specially designed cut-out fill line and excess liquid will spill out ensuring the correct capacity is measured.

IP034359



Half Litre

2

Cube

1 Litre

Flat

Rectangle

## 5 regular shaped containers

### 2 Litre Set - 5 containers

Contains; flat cylinder, half litre cylinder, 1 litre cylinder, cube and flat rectangle. Each is clearly marked so that smaller amounts can be measured.

IP120559

### 3 Litre Extension Set - 3 containers - irregular shapes

3 unusual shaped containers; funnel, triangle and elliptical, each 1 litre. Containers are clearly marked so that smaller amounts can be measured.

IP051959

## 3 irregular shaped containers



Funnel

3

Elliptical

Rectangle



# PAINTING & COLOUR

Let children's imagination run wild with these painting essentials.

All the magic of colour and shape come together in the most traditional of products.

Designed and manufactured to take the spills that come with small hands.

## 1 Giant Paint Scrapers - Set of 4

Set of 4 different paint scrapers, ideal to use with paint and sand to create interesting patterns and effects.

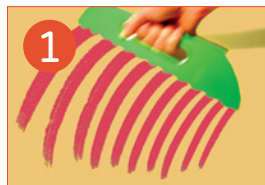
L300 x W70mm

IP I 86059

1



Each Paint Scraper has a different edge, enabling alternative patterns.



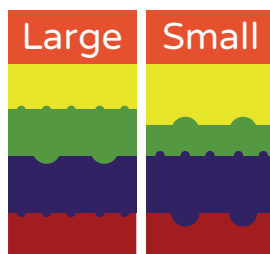
## 2 Paint Scrapers - Set of 4

Set of 4 easy-to-hold, durable Paint Scrapers each having a different patterned edge. Excellent for creating patterns using ready-mixed paint.

Size: 15cm x 7cm.

IP I 85059

2



SCRAPERS CAN ALSO BE USED WITH SAND



3

## 3 Colour Paddles - 15 Pieces

The set comprises 15 paddles in the 3 primary colours, red, blue and yellow. Overlapping the transparent paddles will produce the 3 secondary colours: violet, green and orange. They can also be used with sand and modelling materials.

H20 x W140 x D170mm

IP035359



4

## 4 Six Well Paint Palette - 10 Pieces

Durable with convenient finger holes and a raised rib to ensure that even the messiest artists can carry the palettes without getting paint on their hands.

W230 x D155mm

IP081259



5

## 5 Paint Stampers - 10 Pieces

Hard-wearing, washable, plastic stampers with a sponge base and large handles providing an easy grip for small hands.

Shape 100mm.

IP I 90059



## 6 Non Spill Pots - (Without Stoppers) - Set of 10

Eliminate spillage problems. Rounded corners for easy cleaning, a larger capacity than conventional pots and a square design for greater stability. Ideal for paint or water use. Complete with coloured lids.

80mm cube.

IP080659



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## 7 Paint Tray and White Pots

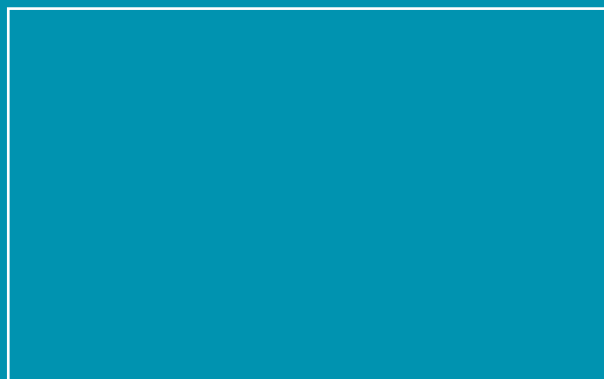
Tough, washable tray with 6 removable pots. Spills are minimal as the specially designed tray reduces the danger of knocking over the pots. Each pot hold standard size 1 (44mm x 16mm) paint blocks. Paint and brush not included.

Size: 170mm x 120mm x 40mm

IP040059



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