

1st



Chestnuts Community Centre

# Science Week

Tottenham - Haringey

a selection of pioneering events for your children, parents & teachers

science & maths through the arts

**The Structure of Silicon**  
Who do you need to get the best silicon - ultrapurified, the stuff that's in your cell and that makes you tick?

**Lead Professor Andrew Baskin** (Techniques Intelligence and Chemistry Society for 2016) - [www.chemsoc.org](http://www.chemsoc.org)

Dr Baskin will be presenting on the structure of silicon and how it is used in a range of applications from silicon chips to silicones. He will also be presenting on the structure of silicon and how it is used in a range of applications from silicon chips to silicones.

5

**Sun, Skin and the Immune System**

**Lead Professor Andrew Baskin** (Techniques Intelligence and Chemistry Society for 2016) - [www.chemsoc.org](http://www.chemsoc.org)

Dr Baskin will be presenting on the structure of silicon and how it is used in a range of applications from silicon chips to silicones.

**vitamin D**

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**Human's Daughter - Changing State of the Planet**

**Lead Professor Andrew Baskin** (Techniques Intelligence and Chemistry Society for 2016) - [www.chemsoc.org](http://www.chemsoc.org)

Dr Baskin will be presenting on the structure of silicon and how it is used in a range of applications from silicon chips to silicones.

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**Ally's Secret - How to be a Scientist**

**Lead Professor Andrew Baskin** (Techniques Intelligence and Chemistry Society for 2016) - [www.chemsoc.org](http://www.chemsoc.org)

Dr Baskin will be presenting on the structure of silicon and how it is used in a range of applications from silicon chips to silicones.

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**SKIN DEEP SYCLAM**  
The Science and Politics of the Dark Forest

**Lead Professor Andrew Baskin** (Techniques Intelligence and Chemistry Society for 2016) - [www.chemsoc.org](http://www.chemsoc.org)

Dr Baskin will be presenting on the structure of silicon and how it is used in a range of applications from silicon chips to silicones.

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**INSET & CPD**

**Enhancing Science & Maths Learning Through Creative Cultural Arts**

**Lead Professor Andrew Baskin** (Techniques Intelligence and Chemistry Society for 2016) - [www.chemsoc.org](http://www.chemsoc.org)

Dr Baskin will be presenting on the structure of silicon and how it is used in a range of applications from silicon chips to silicones.

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Presented by Abundance Centres UK

# uLearn Naturally Science Week: 2016

@ your local community centre

St. Ann's Hospital H

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**W:** [www.abundancecentre.org](http://www.abundancecentre.org)  
**Twit:** @uLearnNaturally  
#uLearnScience2016

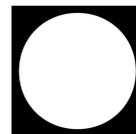
## VENUES:



### Neter Vital Store

25 Brixton Station Road,  
Brixton SW9 8PB

[Google Maps Link](#)



# Brilliance

Abundance Centres (UK)

**uLearn Naturally Science Week 2016**

## SKIN DEEP S.T.E.A.M

**Science** □ **Technology** □ **Engineering** □ **Arts** □ **Maths**

### The Science and Politics of the Dark Tone

*'Skin' & 'Space' - the mysterious beauty explored  
in a week of special science presentations  
and higher learning for the whole family.*



### Chestnuts Community Centre

280 St Ann's Rd,  
Tottenham N15 5BN

[Google Maps Link](#)

# INSET & CPD

## Enhancing Science & Maths Learning Through Creative Cultural Arts - What is the Unifiedknowledge approach to education?:

- educator training and support for local teachers and parents.
- **Tottenham**, Monday 7<sup>th</sup> March, 10am – 4pm, *Book your place in advance.*

## Enhancing Science & Maths Learning Through Creative Cultural Arts - Teaching Maths (& Science) Through the Drum:

- educator training and support for local teachers and parents.
- **Birmingham**, Wednesday 9<sup>th</sup> March, 10am – 4pm, *Book your place in advance.*

## Enhancing Science & Maths Learning Through Creative Cultural Arts - Teaching Maths (& Science) Through Dance:

- educator training and support for local teachers and parents.
- **Manchester**, Thursday 10<sup>th</sup> March, 10am – 4pm, *Book your place in advance.*

- **Teachers**
- **Assistants & Mentors**
- **Home Educators**
- **Parents Passionate about Education**

Click **HERE**  
For more info:  
<http://goo.gl/FDQH57>



**abundance**  
in Schools

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## The Structure of African Hair:

Why do you need to pH test (acid <> alkaline test)  
the stuff you put in your hair and how do you do it?

- Lead presenter **Astehmari Batekun**, Peoplescience Intelligence Unit
- **Tottenham**, Saturday 12<sup>th</sup> March, 4pm – 5.30pm, FREE (£5+ donation is helpful)

It's important that the products or natural substances you use on your hair and skin are pH balanced so your hair can maintain a normal pH level. The goal is to know the substances that balance out to your hair's natural pH level at about 5.

pH (power of hydrogen) is a measure of how acidic or basic/alkaline an aqueous (water based) solution is. The scale goes from 0 (acidic) to 14 (basic or alkaline). 7 is neutral. Hair at a normal, balanced level has a pH of about 5 (give or take 0.5) which is slightly acidic.

You can easily test the pH level of your products (store bought or diy) with a digital pH tester or a litmus test. On this evening we'll introduce this idea further and get into the principles of pH, the power of Hydrogen. Really this comes back to the power of water, the vessel of life. We'll have fun with light yet informative reasoning, watch a selection of videos and do some practical pH testing to get the feel for how it works.

This is a good self knowledge learning path as it connects many subjects (unifiedknowledge style), let's progress on the way with the power of Hydrogen.

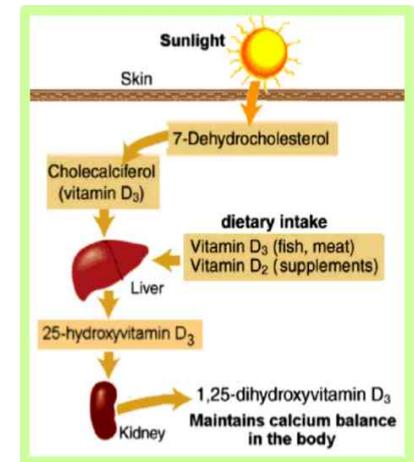
## 5



## Sun, Skin and the Immune System

- Lead presenter **Dr Majeena Lynch** supported by **Professor Donald Palmer**
- [Tottenham](#), Saturday 12<sup>th</sup> March, 8pm – 9:30pm, FREE (£5+ donation is helpful)

Skin acts as a waterproof, insulating shield, guarding the body against extremes of temperature, damaging sunlight, and harmful chemicals. However, the skin functions as more than just a physical barrier: it is an active immune organ, did you know that? With a Sun filled light heart come and share in an interactive evening with our community's leaning immunology specialists to learn more about our frontline of immune protection against environmental toxins and microbes.



## Nyinka's Daughter – Exploring Snake dance movement and the wave form of science through African story, drama and practical experimentation.

- Lead presenter **Olusola Adebisi**, Principal, Narrative Mindfulness
- **Tottenham**, Tuesday 15<sup>th</sup> March, 6pm – 7:30pm, FREE (£3+ donation is helpful)

Come and enjoy a creative short story that will help you explore your own inner fluidity and freedom of expression. We'll be getting hands on with a brief physical science experiment by constructing a special pendulum structure to highlight snake motion and scientific wave form motion, and if that were not enough there will be introductions to snake dance movement in the African martial arts style Ka-Zimba Ngoma. That inner force is spiralling up in you, learn to control it wholistically with science.



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## Abit's Secret – Revealed ! : 1<sup>st</sup> ideas of inner & outer Space explored with fun for children, parents and teachers.

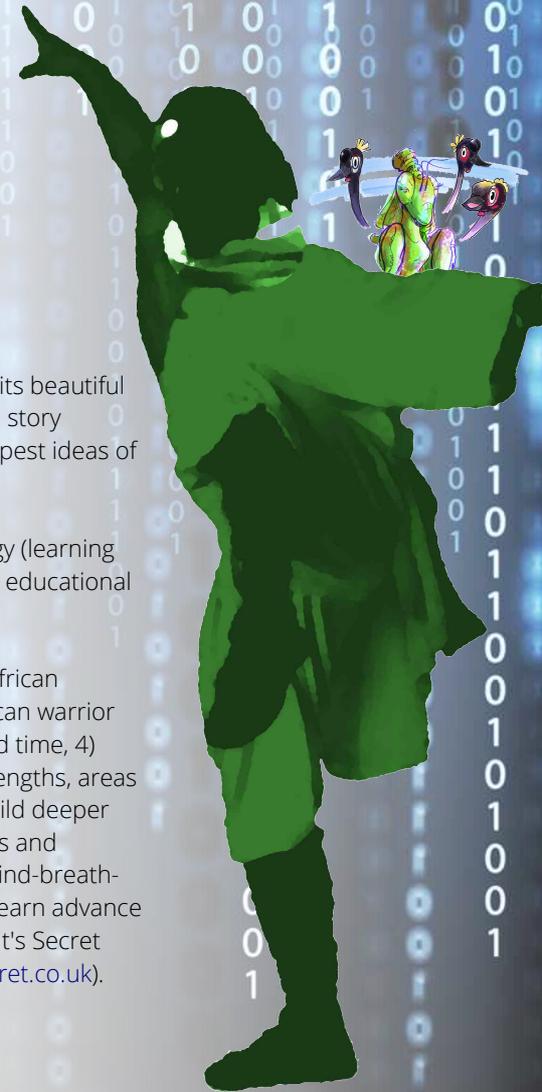
- Lead presenter **Astehmari Batekun**, Schools Of Unified Learning (SOUL).
- **Tottenham**, Tuesday 15<sup>th</sup> March, 7:30pm – 9pm, FREE (£3+ donation is helpful)
- **Revolutionary NEW BOOK !!** Find out more at [AbitsSecret.co.uk](http://AbitsSecret.co.uk)

Abit's Secret is a short, yet profound story book that journeys deeply into space to reveal its beautiful creative patterns (as found when studying life with maths and science). As an 'edutaining' story expressed in the classic የጥምር፡ዕውቀት፡ “unifiedknowledge” way, it connects us to the deepest ideas of energy, matter and mind as children, families and the young at heart globally.

Come and join the author, parents and teachers as we review the self-advancing pedagogy (learning science) behind this story to help fans and new readers of the book best explore its great educational scope with the young Ones in their care.

Learn how to teach maths and science through dance, drum and many other modes of African culture. On this evening we will define many things: 1) principles of Dankira Tehwagi (African warrior dance), 2) the five important shapes and forms, 3) basic ideas of energy-matter, space and time, 4) personal space (“i-Province”) relating to the whole, 5) dimensions, centres, weight, mass, lengths, areas and volumes relating to One's personal province, 6) ways to enhance visualisation and build deeper perception, 7) binary, the pulse and power of the Drum, 8) the true nature of mathematics and science, 9) the importance of Breath Command (ትንፋሽ፡ክዘዘ፡፡ t.n.fa.sh:ah.zeh.zeh::) and mind-breath-body harmonisation and 10) ideas of infinite capacity. Bring pen and paper, be ready to learn advance techniques in creative play, all within the fun context of the wonderful allegorical story Abit's Secret ([www.AbitsSecret.co.uk](http://www.AbitsSecret.co.uk)).

# 12





## Transformations of Winchi

- Guidance for Learners -

unifiedknowledge @ your learning centre

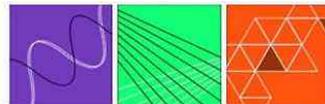
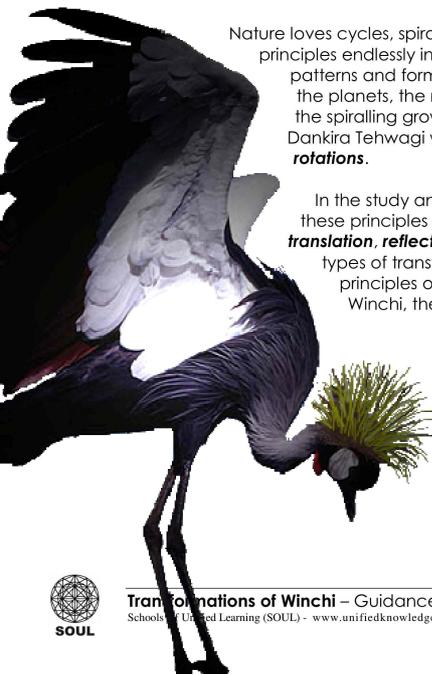
Today we are going to experience an introduction to the cultural arts of **dankira tehwagi** (warrior dance) using the **unifiedknowledge** (yeht'mr urwak'ehi) approach to learning where art and the core idea of math are learnt in one form. Our arts draw on African heritage.

Nature loves cycles, spirals and rotations. It uses these principles endlessly in the creation of various living patterns and forms. For example in the movements of the planets, the movement of electrons in an atom or the spiralling growth patterns of many plants. In Dankira Tehwagi we also use circles, cycles, spirals and **rotations**.

In the study and practice of mathematics One finds these principles grouped with the principles of **translation, reflection and enlargement**, these are all types of transformation. Let's explore all the principles of transformation with the help of Winchi, the graceful Crane.

### Our Objectives Today:

1. To learn and correctly use the language associated with various types of transformation (rotation, enlargement reflection and translation).
2. To understand the principles of transformation and other principles associated to it.
3. To be introduced to expressive gestures and movements of Winchi (the crane), using these to help us recognise and visualise the transformation of points and patterns.
4. To begin learning how to apply Winchi's gestures and movements within One's Dankira Tehwagi (warrior dance).



THE STEM DIRECTORIES



- **Making Patterns - Fun-da-Mental Points** (lines, and angles too)

Relating dance movements to fundamental maths ideas gives a stronger internal foundation for young people to build mathematical insight, creativity and enjoyment.

- **Introducing the Art of Mathematics - Part 1**

Mathematics viewed from cultures panAfrica - its simple and omnipresent. Learning the Mathematician's Charter - Keywords explored; observe, record, enjoy, estimate, calculate, forecast, visualise.

- **Reasoning and the Art of Mathematics - Part 2**

Principled visualisation, the greatest purpose of maths. Helping young people value mathematical reasoning, language and empowerment.

- **Number, Measure and Ratio - the old school classics**

These three mathematical ideas have a special depth that when explored can be found to bind many other aspects of maths, the sciences, the arts, nature and general life skills studies. There is a great and liberating value when gaining consciousness and competence in them. We explore these old school classics from refreshingly diverse cultural view points.

- **I Count Too - Binary Drumming**

Counting with one hand, counting with two things. Looking at music and number in a deeper way we explore an ancient basis of drum language. Alternate ways of counting combined with rhythmic harmony development make a great way to enhance the value and utility of number.

- **Special Powers in the Hands of Children**

5 important reasonings on power that every child should know, supported by interactive explorations into the meaning of peace development and the realisation of wisdom. Core mathematical ideas as they relate to harmony, energy, work, power and wisdom. Becoming an advance learner.

- **Transformations of Winchi**

Maths taught through dance - the African Crowned Crane bird in rotation, reflection, enlargement and translation. Transformational studies.

*In this our most popular abunDANCE in Schools workshop we dance like birds (Winchi, the African Crowned Crane), exploring closely how our dance movements and gestures express the mathematical ideas of transformations and other interrelated principles/themes. We work through and practice physical and mental exercises that build determination and mind-breath-body harmonisation. Then, as a grand finale, we bring it all together for the great show, the part of our dance programme we call The Ngoma; bringing principles and free creative expression together naturally in abunDANCE.*

- **ግዛት፣ Gzatz: The Province of One**

introducing foundational math principles of space through cultural metaphor. Drawing (visual art) and warrior dance movements combined enhances this multi-sensory learning.

- **Valuing the Quest for Truth**

Ancient views of maths saw a unity of mathematical "truths" with personal and social character development, ethics and justice. Exploring the educative culture of the world's oldest recorded mathematical geniuses and natural philosophers.