

EXPERIENCE WORKSHOP



THE EXPERIENCE-CENTERED MATH/ART MOVEMENT

www.experienceworkshop.org

University of Jyväskylä has developed Kids Inspiring Kids in STEAM Hothousing Activities in collaboration with Experience Workshop Math-Art Movement (www.experienceworkshop.org) and its international partners. All activities are based on the 4Dframe modelling kit, but can be done with other modelling equipment too.



Interested in STEAM (Science, Technology, Engineering, Arts and Mathematics) learning? Looking for support in connecting mathematics & art in education? Do you have a good idea?

More information about Experience Workshop: www.experienceworkshop.org

Contact: info@experienceworkshop.org

Facebook: www.facebook.com/experienceworkshop.math.art

“KIDS INSPIRING KIDS IN STEAM” MATERIALS FOR DOWNLOAD

01- Bridge Building Challenge

Who makes the strongest, the most efficient, or the most beautifully designed bridge?

02- Snowflake Science

The beautiful symmetries of snowflakes, not only for the wintertime...

03- Football and Basketball with Giant Molecules

Did you know that the old-school black and white ‘classic’ soccer ball and a fullerene molecule has the same structure? Let’s try it and let’s play the game!

04- Let’s Build a Small Geodesic Dome!

Geodesic domes have a simple, but fascinating structure. Explore the hidden symmetries and let’s try to put together some!

05- Let’s Build a GIGANTIC Geodesic Dome!

Think big and build a 5 meters wide and 3 meters high geodesic dome!

06- 4Dframe Warka Water

How to harvest water from the thin air? Geometry and art might can help to find the solution. Warka Water is the creation of the Italian architect, Arturo Vittori and to learn about it, is perfect to raise water & environmental awareness.

07- 4Dframe Wind & Water Power

How to transform wind and water power into dynamic energy?

08- 4Dframe Mechanical Instruments

Would you like to make a drum or a mechanical xylophone?

09- 4Dframe Sierpinski Tetrahedron

Let’s make a huge fractal together!

10- 4Dframe “Bubbleology”

Blow some scientific bubbles and enjoy their beauty (while you are learning about the Fermat point and optimal surfaces ☺).