



build a suspension bridge

This fascinating model of a suspension bridge will introduce you to a special type of bridges: the cable bridges! Learn through experimentation how the tension of the cables supports the deck of the bridge.

- Which are the different types of cable bridges.
- What are their advantages.



build a cable-stayed bridge

This exciting model of a cable-stayed bridge is another type of a cable bridge. One famous example of this bridge is the Rio-Antirion bridge in Greece, the world's second longest multi-span cable-stayed bridge.

- How long spans can be supported effectively.
- How tension gives stability to the bridge.



build an arch bridge

Build a realistic model of an arch bridge and learn the properties of the arch! See how this bridge can become stable and support a lot of weight by transferring it to the abutments.

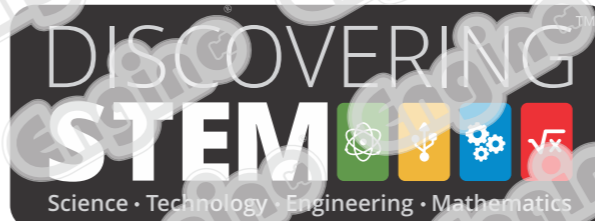
- How weight is redistributed.
- Which are the elements of an arch bridge.



build a truss bridge

Build two models of a truss bridge, one with the trusses over the deck and one with the trusses under the deck! Learn how triangulation offers great stability and rigidity to a structure. Discover the different types of simple bridges.

- Which are the different types of truss bridges.
- How triangulation strengthens a structure.



STRUCTURES

buildings & bridges

Learn all about buildings and how they literally support our lives! Experiment with different types of bridges and find out how their architecture design provides massive weight support. Discover all the types of forces applied and how engineers manage to reduce their effects. Build 9 working models such as a house, a pyramid and various types of bridges: beam, arch, truss, cable-stayed and suspension bridge. You can find easy-to-follow building instructions for all models either online or in the booklet included. The booklet provides detailed explanations of the different scientific principles applied and incorporates innovative experimental activities for hands-on learning. A Quiz section is also available to challenge your newly acquired knowledge!

10 pages of theory and amazing facts!

4 pages of experimental activities!

2 pages of revision quiz!

2 pages of step by step instructions!



EU OFFICE & FACTORY:
ENGINO-NET LIMITED
P.O. BOX 72100, 4200
LIMASSOL, CYPRUS
Tel.: +357 25821960
Fax: +357 25821961
E-mail: info@engino.com
Web: www.engino.com



3D interactive instructions to download on your smart device

Engino kidCAD (3D Viewer) app

Available on the App Store

GET IT ON Google Play



Product Code: **STEM06**
Edition 3.0



9 models to build

9+ years old



online instructions

1 printed instructions



**Thank you for accessing our free
version of this resource.**

To continue reading and gain access to the full version,
please login and register your product.

We appreciate your interest and hope
you find our resources valuable.

Login or Register

