



K'NEXT Generation

Workshop Guide

MegaBuild™

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Workshop Information (for more information about the content of the workshops please visit <https://www.knextgeneration.co.uk>)

Workshop	Age	Maximum number pupils	Responsible persons ¹	Duration (mins)	Room size	Furniture	Power supply	Set-up (mins)	Turn-around (mins)	Clear-up (mins)	Other
MegaMaths	P4-7	P4:33 P5:33 P6:33 P7:33 Comp:25	1	75	Hall/Gym ²	3 chairs	Not required	45	10	20	None

1. Refers to minimum number of persons provided by the school, who MUST remain in the workshop at all times to comply with Disclosure requirements and K'NEXT Generation Health & Safety policies and Insurance. More helpers are always welcome. Extra support for ASN pupils provided by the school at school's discretion.
2. Space needs to be clear of all furniture and at least the size of a badminton court.

Curriculum for Excellence 1

All K'NEXT Generation workshops are designed to support, complement and enhance the Curriculum for Excellence (CfE).

The scope and ethos of the workshops use the Principles, Values, Purposes and Cross-cutting themes of CfE as their foundation:

- Principles – Challenge & enjoyment, Breadth, Depth, Progression, Personalisation & choice, Coherence and Relevance
- Values – Wisdom, Justice, Compassion and Integrity
- Purposes – Successful learners, Confident individuals, Responsible citizens and Effective contributors
- Cross-cutting themes – Sustainability, Enterprise, Creativity and Citizenship,

K'NEXT Generation workshops are cross-curricular and provide opportunities to explore principles and concepts in the following curriculum areas:

- Health & wellbeing, Languages, Mathematics, Sciences, Social Studies, Expressive Arts and Technologies.

The workshops focus particularly on “STEAM” subjects:

- Science, Technology, Engineering (and Enterprise), Art and Mathematics (and Numeracy).

Workshop content is designed and built around the Experiences & Outcomes (E&Os) and the Benchmarks of CfE at Early, First, Second and Third levels (see following page for details).

The workshops employ hands-on, challenge-based, active learning which provides opportunities for pupils to develop their teamwork skills, resilience and creativity.

K'NEXT Generation aims to provide workshops that are fun and challenging and that help to develop skills for life.

Curriculum for Excellence 2: Experiences & Outcomes (E&Os) and Benchmarks

Workshop	Health & Wellbeing (HWB)	Modern Languages (MLAN)	Literacy & English (LIT)	Mathematics (MTH)	Numeracy (MNU)	Sciences (SCN)	Social Studies (SOC)	Expressive Arts (EXA)	Technologies (TCH)
MegaMaths	2-11a 2-14a 2-20a 2-23a	2-01b 2-02a 2-03a 2-04a	2-02a 2-06a 2-10a	2-16a 2-16b	2-16c				2-09a 2-12a

The workshops support the E&Os by providing a relevant practical activity, however, the workshops may not provide the complete experience as detailed in the Benchmarks.

Follow-on Activities 1: Pupil review template for Second & Third Level pupils.

My name _____

Workshop name _____

Date _____

My team mates

I learned

Problems we had

How we solved them

We made

Skills I used

Next steps...

Comments/ideas/thoughts

Success criteria

Follow-on Activities 2:

1. Use K'NEX, if available, in school to explore 2- and 3-D shapes.
2. Use photographs/videos taken during workshop to:
 - a. review what was built and discuss improvements
 - b. produce a class poster/display or presentation for parents/other classes/school assembly showing what the class achieved and what they learned during the challenge.
3. Explore ways of building 3-D shapes using household materials, e.g. newspaper and tape or spaghetti and marshmallows and discuss the suitability of these and other materials for this purpose.
4. Explore other 3D shapes and make their nets using cardboard and scissors.
5. Produce a wall display showing 3D shapes and their nets.
6. See "[Useful Links](#)" section for activities and online games.

Risk Assessment

K'NEXT Generation Risk Assessment - MegaBuild workshops

(not all items/actions apply to all workshops)

Hazard			Initial Assessment			Control	Residual Risk		
Action/Item	Hazard Effect	Population at Risk	Hazard Severity	Likelihood of Occurrence	Risk Rating	Controls required	Hazard Severity	Likelihood of Occurrence	Risk Rating
Carrying boxes, during set-up & clear-up	Muscle injury/strain	1 6 (lifting helper)	4	2	8	<ol style="list-style-type: none"> 1. Correct lifting procedures employed. 2. Two people to carry heavy equipment when required. 3. Lifting/moving aids used when appropriate/available. 	4	1	4
Moving furniture during set-up & clear-up	Muscle injury/strain	1 6 (lifting helper)	4	2	8	<ol style="list-style-type: none"> 1. Correct lifting procedures employed. 2. Two people to move heavy equipment when required. 3. Lifting/moving aids used when appropriate/available. 	4	1	4
Obstacles in aisles, work area and on floor	Trips and falls	1 2 3 4	3	2	6	<ol style="list-style-type: none"> 1. All personal belongings to be cleared from work area. 2. No running allowed. 3. Equipment overspill on floor to be minimised. 4. Adult supervision. 	3	1	3
Wooden Rods	Penetration/stabbing wounds	2 3 4	4	2	8	<ol style="list-style-type: none"> 1. Safety glasses provided. 2. Gloves available if required. 3. Verbal warning given as necessary. 4. Adult supervision. 	4	1	4

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CONT									
Dismantling models	Penetration/stabbing wounds	1 2 3 4	4	2	8	1. Safety glasses provided. 2. Verbal warning given as necessary. 3. Adult supervision. 4. Appropriate time allocated for task completion.	4	1	4
Clip boards	Finger pinching	2 3 4	1	3	3	1. Clip boards provided with paper in place and collected in same way. 2. Adult supervision.	1	1	1
Pencils	Stabbing injury	2 3 4	2	3	6	1. Pupils familiarity with equipment. 2. Adult supervision.	2	2	4
Signed <i>Ann Larkham</i>								Date 01/08/2019	

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Population Codes: 1. Employees. 2. Paying public. 3. School/General groups. 4. Visitors (non-paying). 5. Contractors. 6. Others (specify).

Contact for additional help or support: info@knextgeneration.co.uk

Useful links:

K'NEXT Generation: <https://www.knextgeneration.co.uk/>

BBC Bitesize – nets: <https://www.bbc.co.uk/bitesize/articles/z247tv4>
<https://www.bbc.co.uk/bitesize/guides/zj76fg8/revision/4>
<https://www.bbc.co.uk/bitesize/articles/zgqpk2p>

Enrich Cut Nets: <https://nrich.maths.org/2315>

Net or Not Game: https://www.transum.org/Maths/Activity/Net_or_Not/Default.asp?Level=0

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