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• Œuvre Nationale de Secours Grande-Duchesse Charlotte
• Royal Bank of Canada

THANK YOU!
Renewable energies
How much energy do we use and what is the impact of our lifestyle? Discover the potential of renewable energy technologies. (5e to 1e)

Mayonnaise, a liquid or a solid?
Analyse the behaviour of a material in all its forms and establish a relation between its structure and flow behaviour. (3e to 1e)

Modern spectroscopy
Why do we need sunscreen and why does it work? Learn more about light sources, wavelength and properties of light. (3e to 1e)

CO2 - Good, bad, dangerous?
What is the role of CO2 in climate change? Learn more about the greenhouse effect and discover the albedo effect. (4e to 1e)

Mathematics
3 WORKSHOPS ON CAMPUS BELVAL

Dealing with randomness
Get an introduction into the theory of probability and discover how it can help to make decisions in everyday life. (3’ to 1’)*

Finding the shortest path
Explore graph theory and learn how different concepts are used to solve problems in logistics and planning. (4’ to 1’)

Keeping a secret
Discover how number theory is applied to secure communications and find out more about encryption algorithms. (3’ to 1’)

Biology
8 WORKSHOPS ON CAMPUS BELVAL

A taste of research
Discover several aspects of biological research: DNA extraction, cell culture, robotics, model organisms. (5’ and 4’)

A systems biology approach
Analyse the activity of β-galactosidase and build your own computational model of the lactose-pathway. (3’ to 1’)

Cancer research – Part 1
Learn more about the molecular and genetic background of cancer and the research focusing on this group of diseases. (3’ to 3’)

Cancer research – Part 2
Get a better understanding of translational research in cancer treatment and drug resistance. (3’ to 1’)

Dld3 shows its colours
Dive into the world of proteins, in particular enzymes such as Dld3. (3’ to 1’)

DNA on the tanning bed
Explore the effect of UV light on the DNA of the bacterium Escherichia coli. (3’ to 1’)

ELISA’s cutting edge research
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SCIENTEENS LAB

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Hands-on experiments, supervised by experienced scientists and teachers from various disciplines, give the students an insight into scientific research.

The workshops address relevant topics in biology, computer science, mathematics and physics.

Join with your class and become scientists for a day!

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