

Main Criteria: Forward Education**Secondary Criteria:** Scotland Mathematics Curriculum for Excellence - Experiences & Outcomes, Scotland Sciences Curriculum for Excellence - Experiences & Outcomes, Scotland Technologies Curriculum for Excellence - Experiences & Outcomes**Subjects:** Mathematics, Science, Technology Education**Grades:** 7, 8, Key Stage 3**Forward Education****Harnessing the Sun's Energy with Solar Panels****Scotland Mathematics Curriculum for Excellence - Experiences & Outcomes****Mathematics**

Grade 7 - Adopted: 2017

LEVEL / STRAND	SCT.NM.M.	Third Level - Number, money and measure
EXPERIENCES	NMM.11.	Expressions and equations

OUTCOMES NMM.11. I can collect like algebraic terms, simplify expressions and evaluate using substitution. MTH 3-14a
1

Scotland Mathematics Curriculum for Excellence - Experiences & Outcomes**Mathematics**

Grade 8 - Adopted: 2017

LEVEL / STRAND	SCT.NM.M.	Third Level - Number, money and measure
EXPERIENCES	NMM.11.	Expressions and equations

OUTCOMES NMM.11. I can collect like algebraic terms, simplify expressions and evaluate using substitution. MTH 3-14a
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Scotland Sciences Curriculum for Excellence - Experiences & Outcomes**Science**

Grade 7 - Adopted: 2017

LEVEL / STRAND	SCT.PE.	Third Level – Planet Earth
EXPERIENCES	PE.2.	Energy sources and sustainability

OUTCOMES PE.2.2. By investigating renewable energy sources and taking part in practical activities to harness them, I can discuss their benefits and potential problems. SCN 3-04b

LEVEL / STRAND	SCT.PE.	Third Level – Planet Earth
EXPERIENCES	PE.3.	Processes of the planet

OUTCOMES PE.3.2. I can explain some of the processes which contribute to climate change and discuss the possible impact of atmospheric change on the survival of living things. SCN 3-05b

LEVEL / STRAND	SCT.FEW.	Third Level - Forces, electricity and waves
EXPERIENCES	FEW.2.	Electricity

OUTCOMES FEW.2.2. I can help to design simple chemical cells and use them to investigate the factors which affect the voltage produced. SCN 3-10a

LEVEL / STRAND	SCT .PE.	Fourth Level – Planet Earth
EXPERIENCES	PE.2.	Energy sources and sustainability

OUTCOMES PE.2.1. By contributing to an investigation on different ways of meeting society's energy needs, I can express an informed view on the risks and benefits of different energy sources, including those produced from plants. SCN 4-04a

OUTCOMES PE.2.2. Through investigation, I can explain the formation and use of fossil fuels and contribute to discussions on the responsible use and conservation of finite resources. SCN 4-04b

LEVEL / STRAND	SCT .PE.	Fourth Level – Planet Earth
EXPERIENCES	PE.3.	Processes of the planet

OUTCOMES PE.3.2. Through exploring the carbon cycle, I can describe the processes involved in maintaining the balance of gases in the air, considering causes and implications of changes in the balance. SCN 4-05b

LEVEL / STRAND	SCT .FEW	Fourth Level – Forces, electricity and waves
EXPERIENCES	FEW.2.	Electricity

OUTCOMES FEW.2.4. Using experimental evidence, I can place metals in an electrochemical series and can use this information to make predictions about their use in chemical cells. SCN 4-10a

LEVEL / STRAND	SCT .FEW	Fourth Level – Forces, electricity and waves
EXPERIENCES		Electricity

OUTCOMES FEW.2.5. Using a variety of sources, I have explored the latest developments in chemical cells technology and can evaluate their impact on society. SCN 4-10b

Scotland Sciences Curriculum for Excellence - Experiences & Outcomes
Science

Grade 8 - Adopted: 2017

LEVEL / STRAND	SCT .PE.	Third Level – Planet Earth
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LEVEL / STRAND	SCT .PE.	Third Level – Planet Earth
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LEVEL / STRAND	SCT .FEW	Third Level - Forces, electricity and waves
EXPERIENCES	FEW.2.	Electricity

OUTCOMES	FEW.2.2.	I can help to design simple chemical cells and use them to investigate the factors which affect the voltage produced. SCN 3-10a
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LEVEL / STRAND	SCT.PE.	Fourth Level – Planet Earth
EXPERIENCES	PE.2.	Energy sources and sustainability

OUTCOMES	PE.2.1.	By contributing to an investigation on different ways of meeting society's energy needs, I can express an informed view on the risks and benefits of different energy sources, including those produced from plants. SCN 4-04a
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OUTCOMES	PE.2.2.	Through investigation, I can explain the formation and use of fossil fuels and contribute to discussions on the responsible use and conservation of finite resources. SCN 4-04b
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Scotland Technologies Curriculum for Excellence - Experiences & Outcomes
Technology Education
Grade 7 - Adopted: 2009

LEVEL / STRAND	SCT.TDS	Fourth Level - Technological developments in society
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EXPERIENCES AND OUTCOMES	TDS.2.	Having investigated a current trend of technological advance in Scotland or beyond, I can debate the short- and long-term possibilities of the technological development becoming a reality. TCH 4-01b
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EXPERIENCES AND OUTCOMES	TDS.3.	I can debate the possible future impact of new and emerging technologies on economic prosperity and the environment. TCH 4-01c
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EXPERIENCES AND OUTCOMES	TDS.4.	I can examine a range of materials, processes or designs in my local community to consider and discuss their environmental, social and economic impact, discussing the possible lifetime cost to the environment in Scotland or beyond. TCH 4-02a
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LEVEL / STRAND	SCT.FTC	Fourth Level - Food and textiles contexts for developing technological skills and knowledge
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EXPERIENCES AND OUTCOMES FTC.5. By examining and discussing the features of everyday products used within the home, I am gaining an awareness of the factors influencing design and can evaluate how these products meet the needs of the user. TCH 4-11c

LEVEL / STRAND	SCT.CDE G.	Fourth Level - Craft, design, engineering and graphics contexts for developing technological skills and knowledge
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EXPERIENCES AND OUTCOMES CDEG.4. Showing creativity and innovation, I can design, plan and produce increasingly complex items which satisfy the needs of the user, at home or in the world of work. TCH 4-14a

EXPERIENCES AND OUTCOMES CDEG.7. By examining and discussing the features of everyday products, I am gaining an awareness of the factors influencing design and can evaluate how these products meet the needs of the user. TCH 4-14d

Scotland Technologies Curriculum for Excellence - Experiences & Outcomes
Technology Education
Grade 8 - Adopted: 2009

LEVEL / STRAND	SCT.TDS	Fourth Level - Technological developments in society
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EXPERIENCES AND OUTCOMES TDS.2. Having investigated a current trend of technological advance in Scotland or beyond, I can debate the short- and long-term possibilities of the technological development becoming a reality. TCH 4-01b

EXPERIENCES AND OUTCOMES TDS.3. I can debate the possible future impact of new and emerging technologies on economic prosperity and the environment. TCH 4-01c

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LEVEL / STRAND	SCT.FTC	Fourth Level - Food and textiles contexts for developing technological skills and knowledge
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EXPERIENCES AND OUTCOMES FTC.5. By examining and discussing the features of everyday products used within the home, I am gaining an awareness of the factors influencing design and can evaluate how these products meet the needs of the user. TCH 4-11c

LEVEL / STRAND	SCT.CDE G.	Fourth Level - Craft, design, engineering and graphics contexts for developing technological skills and knowledge
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EXPERIENCES AND OUTCOMES CDEG.7. By examining and discussing the features of everyday products, I am gaining an awareness of the factors influencing design and can evaluate how these products meet the needs of the user. TCH 4-14d