

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

Smart Farming with Hydroponics & LED Grow Lights

Scotland Sciences Curriculum for Excellence - Experiences & Outcomes

Science

Grade 7 - Adopted: 2017

LEVEL / STRAND	SCT .PE.	Fourth Level – Planet Earth
EXPERIENCES	PE.1.	Biodiversity and interdependence

OUTCOMES PE.1.2. I have propagated and grown plants using a variety of different methods. I can compare these methods and develop my understanding of their commercial use. SCN 4-02a

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

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 .TS.	Fourth Level – Topical science
EXPERIENCES	TS.1.	Topical Science

OUTCOMES TS.1.1. I have researched new developments in science and can explain how their current or future applications might impact on modern life. SCN 4-20a

Scotland Sciences Curriculum for Excellence - Experiences & Outcomes

Science

Grade 8 - Adopted: 2017

LEVEL / STRAND	SCT .PE.	Fourth Level – Planet Earth
EXPERIENCES	PE.1.	Biodiversity and interdependence

OUTCOMES PE.1.2. I have propagated and grown plants using a variety of different methods. I can compare these methods and develop my understanding of their commercial use. SCN 4-02a

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

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 .TS.	Fourth Level – Topical science
EXPERIENCES	TS.1.	Topical Science

OUTCOMES	TS.1.1.	I have researched new developments in science and can explain how their current or future applications might impact on modern life. SCN 4-20a
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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
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LEVEL / STRAND	SCT.CDEG	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
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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
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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
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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
LEVEL / STRAND	SCT.FTC	Fourth Level - Food and textiles contexts for developing technological skills and knowledge
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
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