

Learning objectives and skills					
Advent		Lent		Pentecost	
Our Changing World The Earth and Beyond Get Sorted	Get Sorted Everyday Materials	Everyday Materials Circle of Life	Reproduction in Plants and Animals Our Changing World Marvellous Mixtures	Our Changing World Marvellous Mixtures Materials: All Change!	Materials: All Change! Our Changing World Feel The Force
Our Changing World	4: Is a liquid always runny?	5: Mystery material: What will	Reproduction in Plants and	Our Changing World	7: How long does it take for things to
1: What signs of plant	Planning different types of	happen if we add water to the	Animals	3: Which plants are best to plant in	rust?
reproduction can we observe	scientific enquiries to	material?	1: How do flowering plants	our growing space? How can we	Reporting and presenting findings
around our school?	answer questions,	<ul> <li>Taking measurements,</li> </ul>	reproduce?	ensure that produce is ready at the	from enquiries, including
<ul> <li>Recording data and results</li> </ul>	including recognising and	using a range of scientific	Reporting and presenting	right time?	conclusions, casual relationships and
of increasing complexity	controlling variables where	equipment, with increasing	findings from enquiries,	Planning different types of	explanations of and degree of trust in
using scientific diagrams	necessary.	accuracy and precision,	including conclusions,	scientific enquiries to answer	results, in oral and written forms
and labels, classification	Eulo a liquid alwaya ruppy? (part	taking repeat readings	casual relationships and	questions, including	such as displays and other
keys, tables, scatter graphs, bar and line graphs	5: Is a liquid always runny? (part two)	when necessary.	explanations of and degree of trust in results, in oral	recognising and controlling variables where necessary.	presentations.
bar and line graphs	<ul> <li>Planning different types of</li> </ul>	6: Are all bikes the same?	and written forms such as	valiables where hecessary.	Our Changing World
The Earth and Beyond	scientific enquiries to	Reporting and presenting	displays and other	Marvelous Mixtures	4: How can we ensure that plants in our
1: What's in space?	answer questions,	findings from enquiries,	presentations.		growing space yield as many crops as
Recording data and results	including recognising and	including conclusions,	procession of	6: How can we get drinkable water	possible?
of increasing complexity	controlling variables where	casual relationships and	2: Are all flowers on all plants	from seawater?	Planning different types of scientific
using scientific diagrams	necessary.	explanations of and	the same?	Planning different types of	enquiries to answer questions,
and labels, classification		degree of trust in results,	Identifying scientific	scientific enquiries to answer	including recognising and controlling
keys, tables, scatter graphs,	6: Are all metals the same?	in oral and written forms	evidence that has been	questions, including	variables where necessary.
bar and line graphs	Identifying scientific	such as displays and other	used to support or refute	recognising and controlling	
	evidence that has been	presentations.	ideas or arguments.	variables where necessary.	Feel The Force
2: What is a year?	used to support or refute				1: How can we measure forces?
<ul> <li>Reporting and presenting findings from enquiries,</li> </ul>	ideas or arguments.	7: Spencer Silver and sticky notes: What's the stickiest	3: Do all plants reproduce by producing seeds?	7: How can we get drinkable water from seawater? (part two)	<ul> <li>Taking measurements, using a range of scientific equipment, with</li> </ul>
including conclusions,	7: Are all metals the same? (part	glue?	<ul> <li>Reporting and presenting</li> </ul>	<ul> <li>Planning different types of</li> </ul>	increasing accuracy and precision,
casual relationships and	two)	<ul> <li>Using test results to make</li> </ul>	findings from enquiries,	scientific enquiries to answer	taking repeat readings when
explanations of and degree	<ul> <li>Identifying scientific</li> </ul>	predications to set up	including conclusions,	questions, including	necessary.
of trust in results, in oral and	evidence that has been	further comparative and	casual relationships and	recognising and controlling	
written forms such as	used to support or refute	fair tests.	explanations of and degree	variables where necessary.	2: Why does an object fall?
displays and other	ideas or arguments.	0. On an ann Cilean an d-atialas	of trust in results, in oral		Identifying scientific evidence that
presentations.		8: Spencer Silver and sticky	and written forms such as	8: How can we purify materials?	has been used to support or refute
3: What is a day?	8: Are all plastics the same?	notes: What's the stickiest	displays and other	Planning different types of     action tife enguiring to enguir	ideas or arguments.
•	<ul> <li>Planning different types of orientific enquiring to</li> </ul>	glue? (part two)	presentations.	scientific enquiries to answer	3: What makes things move?
<ul> <li>Reporting and presenting findings from enquiries,</li> </ul>	scientific enquiries to answer questions,	<ul> <li>Using test results to make predications to set up</li> </ul>	Our Changing World	questions, including recognising and controlling	Planning different types of
including conclusions,	including recognising and	further comparative and	2: How can we grow more plants,	variables where necessary.	scientific enquiries to answer
casual relationships and	controlling variables where	fair tests.	without using seeds?	vanables where necessary.	questions, including recognising
explanations of and degree	necessary.		Identifying scientific	9: How can we purify materials?	and controlling variables where
of trust in results, in oral and		Circle of Life	evidence that has been	(part two)	necessary.
written forms such as	9: Are all plastics the same?	1: What is a life cycle?	used to support or refute	Planning different types of	· · · · · · · · · · · · · · · · · · ·
displays and other	(part two)	Reporting and	ideas or arguments.	scientific enquiries to answer	4: How can we slow down falling
presentations.	<ul> <li>Planning different types of</li> </ul>	presenting findings from		questions, including	objects?
	scientific enquiries to	enquiries, including	Reproduction in Plants and	recognising and controlling	Using test results to make
4: How does the Sun help us to	answer questions,	conclusions, casual	Animals	variables where necessary.	predications to set up further
measure time?	including recognising and	relationships and	4: How do amphibians and		comparative and fair tests.
Taking measurements,	controlling variables where	explanations of and	insects reproduce?	10. What will be man if we add a	F. Deep the plane of an all in the th
using a range of scientific	necessary.	degree of trust in results, in oral and	Reporting and     presenting findings from	10: What will happen if we add a	5: Does the shape of an object affect its
equipment, with increasing accuracy and precision,	10. To bounds or not to boundary	written forms such as	presenting findings from enquiries, including	sprinkle of salt to a combination of liquids?	movement in a liquid?
taking repeat readings when	10: To bounce or not to bounce: Why are sports balls so	displays and other	conclusions, casual	Reporting and presenting	<ul> <li>Taking measurements, using a range of scientific equipment, with</li> </ul>
necessary.	different?	presentations.	relationships and	findings from enquiries,	range of scientific equipment, with increasing accuracy and precision,
nooodury.	Planning different types of	procentations.	explanations of and	including conclusions, casual	taking repeat readings when
5: What time is it around the	scientific enquiries to answer	2: What do we know about the	degree of trust in results,	relationships and	necessary.
world?	questions, including	life cycles of mammals?	in oral and written forms	explanations of and degree of	incocoury.
Recording data and results		Reporting and	such as displays and	trust in results, in oral and	6: Do all heavy things sink?
of increasing complexity		presenting findings from	other presentations.		, ,

using scientific diagrams and labels, classification keys, tables, scatter graphs, bar and line graphs

#### 6: Why do we have seasons?

 Recording data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, scatter graphs, bar and line graphs

### 7: What are our conclusions about sunrise and sunset times?

 Identifying scientific evidence that has been used to support or refute ideas or arguments.

### 8: Why does the Moon change shape?

 Using test results to make predications to set up further comparative and fair tests.

#### Get Sorted

### 1: How can we compare and group materials?

 Recording data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, scatter graphs, bar and line graphs

#### 2: Is a solid always hard?

 Reporting and presenting findings from enquiries, including conclusions, casual relationships and explanations of and degree of trust in results, in oral and written forms such as displays and other presentations.

### 3: Is a solid always hard? (part two)

 Reporting and presenting findings from enquiries, including conclusions, casual relationships and explanations of and degree of trust in results, in oral and written forms such as displays and other presentations.

### recognising and controlling variables where necessary.

#### 11: To bounce or not to bounce: Why are sports balls so different?

Planning different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary.

#### Everyday Materials

1: Which materials are used in our school buildings, what for and why?

Reporting and presenting findings from enquiries, including conclusions, casual relationships and explanations of and degree of trust in results, in oral and written forms such as displays and other presentations.

## 2: Weighty problem: Which is the best carrier bag?

 Planning different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary.

### 3: Which is the best type of plate to use?

 Planning different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary.

# 4: Cool box conundrum: Can the same container keep cold things cold and hot things hot?

 Taking measurements, using a range of scientific equipment, with increasing accuracy and precision, taking repeat readings when necessary. enquiries, including conclusions, casual relationships and explanations of and degree of trust in results, in oral and written forms such as displays and other presentations.

### 3: What do we know about the life cycles of amphibians?

• Reporting and presenting findings from enquiries, including conclusions, casual relationships and explanations of and degree of trust in results, in oral and written forms such as displays and other presentations.

### 4: What do we know about the life cycles of insects?

 Reporting and presenting findings from enquiries, including conclusions, casual relationships and explanations of and degree of trust in results, in oral and written forms such as displays and other presentations.

### 5: What do we know about the life cycles of birds?

 Reporting and presenting findings from enquiries, including conclusions, casual relationships and explanations of and degree of trust in results, in oral and written forms such as displays and other presentations.

### 6: What makes a successful life cycle?

 Identifying scientific evidence that has been used to support or refute ideas or arguments.

#### 7: How are humans helping endangered animals to complete their life cycles?

 Identifying scientific evidence that has been used to support or refute ideas or arguments

### 5: How do mammals and birds reproduce?

 Reporting and presenting findings from enquiries, including conclusions, casual relationships and explanations of and degree of trust in results, in oral and written forms such as displays and other presentations.

## 6: How does the human life cycle compare with that of other mammals?

 Recording data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, scatter graphs, bar and line graphs.

#### Marvelous Mixtures

#### 1: How can we separate mixtures?

 Planning different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary.

### 2: What happens when we mix liquids and solids?

• Using test results to make predications to set up further comparative and fair tests.

### 3: What happens when we mix liquids and solids? (part two)

• Using test results to make predications to set up further comparative and fair tests.

### 4: What makes a difference to how fast sugar or salt dissolves?

• Planning different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary.

## 5: What makes a difference to how fast sugar or salt dissolves? (part two)

 Planning different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary.

#### written forms such as and other presentation

### Materials: All Change!

1: Are the changes that ha around us reversible or no reversible?

> Reporting and prese findings from enquir including conclusion casual relationships explanations of and of trust in results, in and written forms su displays and other presentations.

## 2: How much gas can be produced by non-reversibl change?

Using test results to predications to set u further comparative tests.

### 3: How long does it take for nails to rust?

 Planning different ty scientific enquiries t answer questions, in recognising and cor variables where neo

### 4: What happens when a c burns?

 Reporting and prese findings from enquir including conclusion casual relationships explanations of and of trust in results, in and written forms su displays and other presentations.

### 5: What would make the be rocket fuel?

 Planning different ty scientific enquiries t answer questions, in recognising and cor variables where nec

### 6: What would make the be rocket fuel? (part two)

 Planning different ty scientific enquiries t answer questions, in recognising and cor variables where neo

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		conclusions, casual relationships
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ies,		far can you stretch?
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degree		scientific diagrams and labels,
oral		classification keys, tables, scatter
uch as		graphs, bar and line graphs
	0. 11	an we use lovers to help us?
		can we use levers to help us?
		Taking measurements, using a
le		range of scientific equipment, with
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		necessary.
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cessary.	10: Can	a wheel with teeth make work
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		<ul> <li>8:: Why do animals make incredible journeys as part of their life cycles?</li> <li>Identifying scientific evidence that has been used to support or refute ideas or arguments</li> <li>#BTK and Linl</li> </ul>		ects	
Computing- Website about Space	<b>#BTK-</b> Caring for God's creation	<b>#BTK-</b> Caring for God's creation <b>Art-</b> Plants and animals	Art- Plants and animals	<b>#BTK-</b> Water as a precious resource <b>Geography-</b> Water	
		Кеу	Vocabulary		
Orbit Rotate Axis Planet Solar System Star Gravity	Solid Liquid Gas Viscosity Magnetic Elasticity Insulate	Mammals Amphibians Insects Birds Grow Reproduction Aging	Stigma Pollen Filament Anther Style Ovary Ovule	Purify Dissolve Separate Oxygen	Friction Newtons Gravity Air Resistance
Moon	Recycleable	Birth	Seed	Reaction Reversible/irreversible Saturated	Thrust Water Resistance Float/sink
				Insoluble	Forces

	Working scientifically statements.			
Planning	• Planning different types of scientific enquiries to answer questions, including recognising and co			
Observing	• Taking measurements, using a range of scientific equipment, with increasing accuracy and precise			
Recording	<ul> <li>Recording data and results of increasing complexity using scientific diagrams and labels, classifications to set up further comparative and fair tests.</li> </ul>			
Concluding	<ul> <li>Reporting and presenting findings from enquiries, including conclusions, casual relationships and and written forms such as displays and other presentations.</li> </ul>			
Evaluating	• Identifying scientific evidence that has been used to support or refute ideas or arguments.			

Friction	
Newtons	
Gravity	
Air Resistance	
Thrust	
Water Resistance	
Float/sink	
Forces	

controlling variables where necessary.

cision, taking repeat readings when necessary.

fication keys, tables, scatter graphs, bar and line graphs.

nd explanations of and degree of trust in results, in oral