

Learning objectives and skills

Advent		Lent		Pentecost
The Earth and Beyond	Get Sorted Everyday Materials	Everyday Materials Circle of Life	Reproduction in Plants and Animals Our Changing World Marvellous Mixtures	All Change! Marvellous Mixtures
The Earth and Beyond 1: What do we already know? 2: What's in space?	Get Sorted 1: New topic front cover and vocabulary check	5: Mystery material: What will happen if we add water to the material?	Reproduction in Plants and Animals 1: New topic front cover and	All Change! 1: New topic front cover and vocabulary check
 Recording data and results of increasing complexity 	2: What do we already know?	 Taking measurements, using a range of scientific 	vocabulary check	2: What do we already know?
using scientific diagrams and labels, classification keys, tables, scatter graphs,	3: How can we compare and group materials?	equipment, with increasing accuracy and precision, taking repeat readings	2: What do we already know?3: How do flowering plants	3: Are the changes that happen around us reversible or non-
bar and line graphs 3: What's in space (part 2)	 Recording data and results of increasing complexity 	when necessary.	 reproduce? Reporting and presenting 	reversible?Reporting and presenting
Recording data and results	using scientific diagrams and		findings from enquiries,	findings from enquiries,
of increasing complexity using scientific diagrams	labels, classification keys, tables, scatter graphs, bar	Circle of Life 1: New topic front cover and	including conclusions, casual relationships and	including conclusions, casual relationships and
and labels, classification keys, tables, scatter graphs,	and line graphs	vocabulary check 2: What do we already know	explanations of and degree of trust in results, in oral	explanations of and degree of trust in results, in oral and
bar and line graphs	4: Is a solid always hard?Reporting and presenting	3: What is a life cycle? • Reporting and	and written forms such as displays and other	written forms such as displays and other presentations.
4: What is a year?	findings from enquiries,	presenting findings from	presentations.	and other presentations.
 Reporting and presenting findings from enquiries, 	including conclusions, casual relationships and	enquiries, including conclusions, casual	4: Are all flowers on all plants	
including conclusions, casual relationships and	explanations of and degree of trust in results, in oral and	relationships and explanations of and	the same?Identifying scientific	4: How much gas can be
explanations of and degree of trust in results, in oral and	written forms such as displays and other	degree of trust in results, in oral and	evidence that has been used to support or refute	produced by non-reversible change?
written forms such as displays and other	presentations.	written forms such as displays and other	ideas or arguments.	 Using test results to make
presentations.	5: Is a liquid always runny?	presentations.	5: Do all plants reproduce by producing seeds?	predications to set up further comparative and fair
5: What is a day?	Planning different types of scientific enquiries to	4: What do we know about the	Reporting and presenting	tests.
 Reporting and presenting findings from enquiries, 	answer questions, including recognising and	 life cycles of mammals? Reporting and 	findings from enquiries, including conclusions,	5: How long does it take for iron nails to rust?
including conclusions, casual relationships and	controlling variables where necessary.	presenting findings from enquiries, including	casual relationships and explanations of and degree	 Planning different types of scientific enquiries to
explanations of and degree of trust in results, in oral and		conclusions, casual relationships and	of trust in results, in oral and written forms such as	answer questions, including
written forms such as	6: Are all metals the same?	explanations of and degree of trust in	displays and other presentations.	recognising and controlling variables where necessary.
displays and other presentations.	Identifying scientific evidence that has been	results, in oral and	6: How do amphibians and	6: What happens when a candle
6: How does the Sun help us to	used to support or refute ideas or arguments.	written forms such as displays and other	insects reproduce? Reporting and presenting	 burns? Reporting and presenting
measure time?Taking measurements,		presentations.	findings from enquiries, including conclusions,	findings from enquiries, including conclusions,
using a range of scientific equipment, with increasing	7: Are all plastics the same?Planning different types of	5: What do we know about the life cycles of amphibians?	casual relationships and explanations of and degree	casual relationships and
accuracy and precision,	scientific enquiries to	 Reporting and presenting findings from enquiries, 	of trust in results, in oral and written forms such as	explanations of and degree of trust in results, in oral
taking repeat readings when necessary.	answer questions, including recognising and	including conclusions,	displays and other	and written forms such as displays and other
7: What time is it around the	controlling variables where necessary.	casual relationships and explanations of and	presentations. 7: How does the human life cycle	presentations.
world?Recording data and results	8: To review our learning this topic and add to our mind map	degree of trust in results, in oral and written forms	compare with other mammals? Reporting and presenting	7: How long does it take for things to rust?
of increasing complexity using scientific diagrams		such as displays and other presentations.	findings from enquiries, including conclusions,	 Reporting and presenting
and labels, classification	Everyday Materials	6: What do we know about the	casual relationships and explanations of and degree	findings from enquiries, including conclusions,
keys, tables, scatter graphs, bar and line graphs	Everyday Materials	life cycles of insects?	of trust in results, in oral	casual relationships and explanations of and degree

	Marvellous Mixtures Feel The Force		
nd	Marvellous Mixtures		
	5: What makes a difference to how fast		
v?	 sugar or salt dissolves? Planning different types of scientific 		
open า-	enquiries to answer questions, including recognising and controlling variables where necessary.		
nting es, s, casual	6: How can we get drinkable water from seawater?		
legree of l and displays ons.	 Planning different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary. 		
	 7: How can we purify materials? Planning different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary. 		
le			
make ıp and fair	Feel The Force 1: New topic front cover and vocabulary check		
	2: What do we already know?		
or iron pes of o ncluding itrolling sessary.	 3: How can we measure forces? Taking measurements, using a range of scientific equipment, with increasing accuracy and precision, taking repeat readings when necessary. 		
andle	4: Why does an object fall?		
enting ies,	 Identifying scientific evidence that has been used to support or refute ideas or arguments. 		
is, and	5: What makes things move?		
degree oral uch as	 Planning different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary. 		
or	6: How can we slow down falling objects?		
enting ies, is, and	Using test results to make predications to set up further comparative and fair tests.		

8: 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

9: What are our conclusions about sunrise and sunset times?

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

10: Why does the Moon change shape?

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

11. Space PowerPoint.

12: To review our learning this topic and add to our mind map

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.

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.

7: 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.

8: What makes a successful life cycle?

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

9: 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

10: Why should we conserve endangered animlas?

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

11: Endangered animal posters

12:: Why do animals make incredible journeys as part of their life cycles?

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

13. To review our learning this topic and add to our mind map and written forms such as displays and other presentations.

Our Changing World 1: What signs of plant reproduction can we observe around our school?

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

2: How can we grow more plants, without using seeds?

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

3: Which plants are best to plant in our growing space? How can we ensure that produce is ready at the right time?

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

4: How can we ensure that plants in our growing space yield as many crops as possible?

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

5. To review our learning this topic and add to our mind map

of trust in results, in and written forms suc displays and other presentations.

8: To review our learning this topic and add to our mind map

Marvellous Mixtures

1: New topic front cover and vocabulary check

2: What do we already know? 3: How can we separate mixtures?

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

4: What happens when we mix liquids and solids?

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

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ch	as

7: Does the shape of an object affect its movement in a liquid?

• Taking measurements, using a range of scientific equipment, with increasing accuracy and precision, taking repeat readings when necessary.

8: Do all heavy things sink?

• 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.

9: How far can you stretch?

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

10: How can we use levers to help us?

• Taking measurements, using a range of scientific equipment, with increasing accuracy and precision, taking repeat readings when necessary.

11: How can we lift a heavy load?

 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.

12: Can a wheel with teeth make work easier?

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

13. To review our learning this topic and add to our mind map

#BTK and Links with other subjects							
Computing- Website about Space	#BTK- Caring for God's creation	#BTK- Caring for God's creation Art- Plants and animals	Art- Plants and animals	#BTK- Water as a precious res Geography- Water	source		
Key Vocabulary							
Orbit Rotate Axis Planet Solar System Star Gravity Moon	Solid Liquid Gas Viscosity Magnetic Elasticity Insulate Recycleable	Mammals Amphibians Insects Birds Grow Reproduction Aging Birth	Stigma Pollen Filament Anther Style Ovary Ovule Seed	Purify Dissolve Separate Oxygen Reaction Reversible/irreversible Saturated Insoluble	Friction Newtons Gravity Air Resistance Thrust Water Resistance Float/sink Forces		

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

ontrolling variables where necessary.

ision, taking repeat readings when necessary.

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

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