Silver Threads:	Research	ldentifying and Classifying	Observing Over Time	Pattern Seeking	Comparative and Fair Testing.
EYFS	Listen attentively and	Explore the natural world	Explore the natural world	Explore the natural world	Participate in small
Taken from ELG 2021	respond to what they hear	around them, making	around them, making	around them, making	group, class and one-to-
, , , , , , , , , , , , , , , , , , ,	with relevant questions,	observations and drawing	observations and drawing	observations and drawing	one discussions, offering
	comments and actions	pictures of animals and	pictures of animals and	pictures of animals and	their own ideas, using
	when being read to and	plants.	plants.	plants.	recently introduced
	during whole class	Participate in small	Understand some	Participate in small	vocabulary.
	discussions and small	group, class and one-to-	important processes and	group, class and one-to-	Express their ideas and
	group interactions.	one discussions, offering	changes in the natural	one discussions, offering	feelings about their
	Make comments about	their own ideas, using	world around them,	their own ideas, using	experiences using full
	what they have heard	recently introduced	including the seasons and	recently introduced	sentences.
	and ask questions to	vocabulary.	changing states of	vocabulary.	Offer explanations for
	clarify their	Express their ideas and	matter.	Express their ideas and	why things might happen,
	understanding.	feelings about their	Participate in small	feelings about their	making use of recently
	Offer explanations for	experiences using full	group, class and one-to-	experiences using full	introduced vocabulary.
	why things might happen,	sentences.	one discussions, offering	sentences.	
	making use of recently	Offer explanations for	their own ideas, using	Offer explanations for	
	introduced vocabulary.	why things might happen,	recently introduced	why things might happen,	
	Know some similarities	making use of recently	vocabulary.	making use of recently	
	and differences between	introduced vocabulary.	Express their ideas and	introduced vocabulary.	
	the natural world around		feelings about their		
	them and contrasting		experiences using full		
	environments, drawing on		sentences.		
	their experiences and		Offer explanations for		
	what has been read in		why things might happen,		
	class.		making use of recently		
			introduced vocabulary.		

Silver Threads:	Research	Identifying and	Observing Over Time	Pattern Seeking	Comparative and Fair
		Classifying			Testing.
Year I and 2	Be curious.	ldentify, group and	Use simple equipment to	Notice patterns and	Carry out simple
Taken from Science	Ask simple scientific	classify things.	observe closely.	relationships with	comparative tests.
Programme of Study	questions and recognise		Use simple equipment to	guidance.	Gather and record data
Working Scientifically	that they can be		make observations over	Ask simple scientific	to help answer questions.
	answered in different		time.	questions about what they	Talk about what has been
(Pupils are not expected to	ways.		Ask simple scientific	notice.	found out using simple
cover each aspect for	Find things out using		questions about what they	Gather and record data	scientific language.
every area of study, but	secondary sources of		notice.	to help answer questions.	Record findings with help.
to have met expectations	in formation.		Gather and record data	Talk about what has been	
by the end of Year 2.)	Talk about what has been		to help answer questions.	found out using simple	
	found out using simple		Talk about what has been	scientific language.	
	scientific language.		found out using simple	Record findings with help.	
	Record findings with help.		scientific language.		
			Record findings with help.		

Silver	Research	Identifying and	Observing Over Time	Pattern Seeking	Comparative and Fair
Threads:		Classifying			Testing.
Year 3 and 4	Ask their own relevant	Set up simple	Help make decisions about what	Set up simple practical	Recognise when a simple
	scientific questions.	practical enquiries.	observations to make, how long to	enquiries.	fair test is necessary and
Taken from	Make some decisions about the	Use simple keys.	make them for and the type of	Begin to look for naturally	help to decide how to set it
Science	most appropriate type of	Report findings in	simple equipment that might be	occurring patterns and	up.
Programme of	scientific enquiry to use to	different ways	used to answer scientific	relationships and decide what	Set up simple comparative
Study Working	answer their questions.	using scientific	questions.	data to collect to identify	and fair tests.
Scienti fically	Find things out using	language, including	Set up simple practical enquiries.	them.	Carry out simple
	secondary sources of	oral and written	Make systematic and careful	Help make decisions about how	comparative and fair tests.
(Pupils are not	information to answer	explanations.	observations.	to record and analyse data	Help make decisions about
expected to	scientific questions.	Make predictions	Take accurate measurements	gathered.	how to record and analyse
cover each	Recognise when and how	and raise further	using standard units.	Gather, record, classify and	data gathered.
aspect for	secondary sources might help to	questions with	Use a range of equipment,	present data in a variety of	Gather, record, classify
every area of	answer questions that cannot	support.	including thermometers and	ways to answer scientific	and present data in a
study, but to	be answered through practical		data loggers.	questions.	variety of ways to answer
have met	investigations.		Gather, record, classify and	Report findings in different	scientific questions.
expectations by	Record findings using simple		present data in a variety of	ways using scientific language,	Report findings in different
the end of	scientific language, drawings,		ways to answer scientific	including oral and written	ways using scientific
Year 4.)	labelled diagrams, keys, bar		questions.	explanations.	language, including oral
	charts, and tables.		Report findings in different	With help, pupils should look	and written explanations.
	Report findings in different		ways using scientific language,	for changes, patterns,	With help, pupils should look
	ways, including oral and		including oral and written	similarities and differences in	for changes, patterns,
	written explanations, displays		explanations.	their data in order to draw	similarities and differences
	and presentations.		With help, pupils should look for	simple conclusions and answer	in their data in order to
			changes, patterns, similarities	questions.	draw simple conclusions and
			and differences in their data in	Suggest improvements to what	answer questions.
			order to draw simple conclusions	they have done.	Suggest improvements to
			and answer questions.	Make predictions and raise	what they have done.
			Suggest improvements to what	further questions with support.	Make predictions and raise
			they have done.		further questions with
			Make predictions and raise		support.
			further questions with support.		

Progression in Working Scientifically Silver Threads Curriculum Mapping – What does it look like?

Silver	Research	ldentifying and	Observing Over Time	Pattern Seeking	Comparative and Fair Testing.
Threads:		Classi fying			
Year 5 and	Ask their own relevant	Plan the most	Plan the most appropriate ways	Plan the most appropriate ways	Plan the most appropriate ways to
6	scientific questions.	appropriate ways	to answer scientific questions	to answer scientific questions	answer scientific questions using
	Use evidence to justify	to answer	using different types of	using different types of	different types of scientific enquiry.
Taken from	their scientific ideas.	scienti fic	scientific enquiry.	scientific enquiry.	Recognise when and how to set up
Science	Plan the most appropriate	questions using	Make their own decisions about	Make their own decisions about	comparative and fair tests.
Programme	ways to answer scientific	different types	what observations to make, what	what observations to make, what	Recognise which variables need to be
of Study	questions using different	of scientific	measurements to use and how	measurements to use and how	controlled and why.
Working	types of scientific	enquiry.	long to make them for.	long to make them for.	Make their own decisions about what
Scienti fically	enquiry.	Use and develop	Choose the most appropriate	Choose the most appropriate	observations to make, what
	Find things out using a	classi fication	equipment to make measurements	equipment to make measurements	measurements to use and how long to
(Pupils are	wide range of secondary	keys and other	and explain how to use it	and explain how to use it	make them for.
not expected	sources of information to	information	accurately.	accurately.	Choose the most appropriate
to cover	answer scientific	records to	Take increasingly accurate	Take increasingly accurate	equipment to make measurements
each aspect	questions.	identify, classify	measurements using a range of	measurements using a range of	and explain how to use it accurately.
for every	Begin to separate opinion	and describe	scientific equipment with	scientific equipment with	Take increasingly accurate
area of	from fact.	living things and	precision.	precision.	measurements using a range of
study, but to	ldentify scientific evidence	materials.	Decide to take repeat readings	Decide to take repeat readings	scientific equipment with precision.
have met	that has been used to		when appropriate.	when appropriate.	Decide to take repeat readings when
expectations	support or refute ideas or		Decide how to record data and	Decide how to record data and	appropriate.
by the end	arguments.		results using scientific diagrams	results using scientific diagrams	Decide how to record data and
of Year 6.)	Begin to recognise that		and labels, classification keys,	and labels, classification keys,	results using scientific diagrams and
	scientific ideas change		tables, scatter graphs, bar and	tables, scatter graphs, bar and	labels, classification keys, tables,
	and develop over time (See		line graphs.	line graphs.	scatter graphs, bar and line graphs.
	Ogden trust Ideas Over		Explain causal relationships in	Explain causal relationships in	Explain causal relationships in the
	Time sheet).		the data from their enquiries.	the data from their enquiries.	data from their enquiries.
	Read, spell and pronounce		Identify and explain evidence	Identify and explain evidence	Identify and explain evidence from
	scientific vocabulary		from their enquiries that	from their enquiries that	their enquiries that refutes or
	correctly.		refutes or supports their theory.	refutes or supports their theory.	supports their theory.
			Continued over page	Continued over page	Continued over page

Explain the degree of trust in	Explain the degree of trust in	Explain the degree of trust in results.
results.	results.	Use their scientific knowledge and
Use their scientific knowledge	Use their scientific knowledge	understanding to explain their
and understanding to explain	and understanding to explain	findings.
their findings. Draw conclusions based on their data and observations. Use results to identify whether further tests and observations might be needed. Report and present findings from enquiries in oral and written forms, such as displays and other presentations.	their findings. Draw conclusions based on their data and observations. Use results to identify whether further tests and observations might be needed. Report and present findings from enquiries in oral and written forms, such as displays and other presentations.	