SCIENCE SUBJECT LEADERSHIP: PSQM			
Using examples and thinking from your initial self-assessment, consider: Which of these are current strengths? What evidence do you have? You will need to include this in your final submission. Which are key needs for development? These will be the areas to address in your action plan.			
SL Aim *Science subject leadership is strengthened and developed through:*	**PSQM SL Criteria** *Science is valued and improved through the development of effective processes for subject leadership:*	**RAG rating**	**Justify your choice of RAG rating for the criterion, referring to your current practice and the self-assessment statements. This will help to inform your key identified development needs.**
A. the creation and implementation of a clear vision for science	**SL A.** There is a clear vision for science, created and implemented by teachers and children, through principles for teaching and learning.		• Whole school vision exists '**Our church school community seeks to inspire children and adults to love, learn and flourish together so we may become everything God has created us to be'**. • Science vision needs to tie in with the new school vision and doesn't exist at the moment. • A science policy does exist which explains how we deliver the curriculum, roles and responsibilities and information on teaching and learning. • Whole school revisit of Vision, including all stakeholders. However, this now needs to be reviewed and updated following PSQM vision work. • New vision needs to be shared with school community and on every working wall as well as the new whole school Science board. • Working walls do exist in most classrooms. • Science policy and information on the school website is up to date and reviewed regularly.
B. strategic support enabling improvement to take place	**SL B.** Strategic support for subject leadership is provided and includes: • Focussed CPD for subject leader • Regular release time • Resources to facilitate development in science.		• Science is recognised as a core subject but does not have the same status as Maths and Literacy. It is timetabled mainly once a week per class but most classes only timetable for an hour. It also has a smaller budget than Maths and Literacy. • There is an annual budget of £100 for Science which does not cover the new material needed. PTA subsidise new resources. No budget to pay for Science visitors. • Nothing Science specific on School Development Plan. General targets on providing highly effective CPD, ensuring curriculum is coherently planned. • SL does not meet regularly with SLT to discuss Science Development Plan. • SL is given release time to carry out role – this is logged in SL log • SL has not yet had the chance to engage with science professional development activity other than the LA CPD network meetings due to becoming subject lead during lockdown. SL is an ASE personal member. • SL takes part in quarterly LA SL CPD which is then shared with staff in Science staff meeting. Notes recorded on network.
C. an effective monitoring and improvement cycle that informs development in science	**SL C.** There is a monitoring cycle, including pupil voice, that informs actions taken and the development of science.		• Termly review was carried out in Autumn 20 term but asking for photocopies of pages of book and photos of working walls. Mixed responses from staff as not all staff provided information. Review was not undertaken in Spring Term due to lockdown. Observations, learning walks and Team Teaching have not been able to take place due to Covid bubbles. • Pupil voice has been carried out previously by previous SL. Carried out by current SL on 7th May 21. Science Council does not exist at the school. • Feedback from staff was used to change the order of topics taught in both the KS1 and KS2 mixed age planning cycle but has not changed the science development plan. • T&L has made small improvements – working walls, all children have their own science book, science is taught weekly, science clubs run for KS1 and KS2 pre-Covid. Use of Developing Experts has allowed pupils to access Science at home and at school.

SUBJECT LEADERSHIP NEEDS ANALYSIS and ASSOCIATED ACTIONS:					Progress Review	
Key identified development need: (Based on self-assessment and the PSQM criteria. Add rows as required)	Action(s) to address this specific need: (You may add further actions as the year progresses)	Who? (not just the SL)	When? (month or half term)	Intended impact of actions (on children, staff, SLT/governors, SL or parents/carers) and likely sources of evidence (e.g. Vision and Principles statement, Science Development Log, monitoring data, teacher planning and evaluation, pupil outcomes)	RAG rating after training 5	FINAL RAG rating
1. We need to develop a clearer, shared vision and principles for good Science. **SL A**	1. Create a new vision. ✓ and share this with pupils and staff via a launch assembly. 2. Put this on WW in each classroom. ✓ 3. Share this with the wider school community via school website. ✓ 4. Share this via the school newsletter. ✓ 5. Watch the spotlight video on 'What is the curriculum vision for our school?' . ✓ 6. Undertake pupil voice . ✓ 7. Undertake staff voice . ✓ 8. Undertake governor Science is good when… . ✓ 9. Staff meeting to agree Science is good when and principles as per SL Aii to agree principles and vision. ✓ 10. Put up Science is good posters from PSQM in each classroom.✓ 11. Put up Science is good poster on new Science board in corridor.✓ 12. Plan new Science board in corridor to share PSQM journey.✓ 13. Focus on a principle per half term and discuss with staff how we can evidence it. 14. Review and monitor vision and principles on a regular basis. 15. Launch competition for new science mascot and put winning design on new vision poster. ✓	SL/HT Staff HT/SL HT SL SL SL Staff Staff SL SL Staff Staff/Gov Staff	Autumn 1 Summer 2 Summer 2 Summer 2 Summer 1 Summer 1 Summer 1 Summer 1 Summer 1 Summer 1 Summer 1 Summer 2 Spring 2 Summer 1	**INTENDED IMPACT:** • New vision that encompasses science perspective of all of the school community should support a greater enthusiasm for science. • Parents will have a clear vision of what we are trying to do and be better able to support us. • Pupils will have a clearer vision and see that science is not just the thing they do in the classroom. • Anyone visiting us for the first time or going to our website will have no doubt as to what our science vision and principles are about. • Staff will feel like their voices are being heard and that they are contributing to Science – it is not just the responsibility of the SL. • Consistency across classes **LIKELY EVIDENCE:** • Photos • Updated website • Updated science policy • Pupil voice – being able to share vision and principles. • Parent voice • Staff voice • New science board in corridor • New vision		
2. Embed principles of our vision into the planning documents to ensure that science is recognised /embedded as a core subject. **SL A/SL B**	1. Amend MTP planning template so that we can demonstrate which principles are being delivered per Science lesson. ✓ 2. Investigate external grants to support improved funding for developing science principles/ science as a core subject	HT/SL	July	**INTENDED IMPACT:** • Will allow staff to clearly see where they are meeting the new science principles. • Will allow SL/SLT to monitor planning against the principles. • Will support staff in demonstrating to children that the lesson has been planned around the principles which we have come up with. • Improved awareness of grants and funds available to top up and support our science spending.		

				LIKELY EVIDENCE: • MTPs • Evidence of monitoring. • Completed children evaluation showing principles have been delivered. • Changes to lessons to be more aligned with our principles. • Photos on the new science board. • New science is good when stickers being given out. • List of grants available and decisions about which ones to pursue.		
3. To start to meet regularly with SLT about science/PSQM **SL A/ SL B**	1. Introduce science/SLT meetings for 21/22 to discuss PSQM and action planning from initial self-assessment – discuss possible SDP targets for science linked to PSQM actions. 2. Meet with SLT re: vision and principles poster/competition home ✓ science week ✓ 3. Review Science policy on annual basis to ensure fit for purpose.	SL/HT SL	September April	**INTENDED IMPACT:** • Keep SL/SLT up to date with the latest science information and education changes. • Allow SLT to complete management and monitoring targets. • SL to have a sounding board for ideas and discussion. **LIKELY EVIDENCE:** • SD log updated. • Action planner updated • Minutes recorded.		
4. Look at ongoing CPD for SL in order to support staff with teaching approaches, knowledge etc. **SL B**	1. Find CPD that will address gaps in SL knowledge. PSQM Spotlights – Science Capital . ✓ Developing an exciting school environment for science ✓ Curriculum vision for your school. ✓ Reflective thinking for subject improvement ✓ Reflective leader. ✓ PSQM additional reading – Ofsted Science Research . ✓. Ofsted 2019 – intention and substance ✓ Wellcome Trust Science Leadership ✓ RS Vision for maths and science education . ✓ PSQM Summer Festival 2021 = Outdoor Learning (H Springs) and what is Primary science with Jane Turner . ✓ 2. Find CPD that shows different teaching approaches for different topics. (see RSC CPD below + PSQM summer festival) To register for STEM South West STEM Fest CPD . ✓ 3. Join ASE as a school member. Currently SL has personal membership ✓ 4. Build knowledge of KS3 science to see how it fits in to primary science and check it against our curriculum.✓ 5. Investigate team teaching and its use for delivering staff CPD. 6. RSC funded CPD through PSQM for SLs x 2 = x 4 twilight sessions Session 1 = English & Maths links to Science with RSC Coordinators for South West and Midlands . ✓	SL/Staff SL SL SL SL SL/HT SL SL HT	Ongoing Ongoing Ongoing Ongoing Ongoing November June/Nov/March June	**INTENDED IMPACT:** • SL to have access to CPD. • SL to have access to latest science in education thinking. • SL feel more secure teaching all areas of the primary science curriculum. • SL and staff have access to latest sector information from PSTT **LIKELY EVIDENCE:** • Updated CPD records • Updated science intranet. • Updated science curriculum with list of changes documented. • Downloaded ASE progression documents and shared with staff. • Emails of info sent to staff. • Minutes of CPD and cascade evidence to all staff. • ASE Membership information • CPD evidence forms showing ASE resources being used • Staff showing ASE CPD through their teaching – monitoring outcomes		

	Session 2 = TAPS Pyramid, focussed assessments and ASE PLAN . ✓ Session 3 (July) = TAPS focussed assessments cont, Explorify and fiction stories linked to science Session 4 (Nov) = Moderation of in school activities from RSC CPD		July			
	7. To continue with local authority network science meetings x 3 a year June = Ofsted / Misconceptions / teaching rocks and soils WOA and Ogden Trust CPD on Creative cosmos . ✓		Nov/March/June			
	8. Register with PSTT for regular newsletter and cascade to staff. . ✓					
5. Establish a programme of regular monitoring and improvement. **SL C**	1. Set up school calendar to show when Science monitoring will take place.. ✓	SL/HT	June	**INTENDED IMPACT:** • Staff to have access to CPD identified through monitoring outcomes. • Staff to have access to latest science in education thinking. • Staff feel more secure teaching all areas of the primary science curriculum. • Clear process of monitoring which is agreed and supported by staff. • SL will be able to demonstrate that there is consistency across the school. • Children are clear which principles they are being taught as part of their science lessons. • More consistent approach to science teaching against the vision and principles of the school. • Children feel that they have a voice about how Science is taught at our school. • Policy is up to date and reflects the teaching and learning at our school. • Opinions and thoughts of staff, governors and parents are gathered prior to review of the science policy and submission of PSQM. Suggestions for improvement are fed into the science plan **LIKELY EVIDENCE:** • Updated CPD records • Updated science intranet. • Updated science curriculum with list of changes documented. • Scrutiny documents for monitoring that shows consistently what is being looked at. • Pupil voice from both survey and council once it is formed. • Feedback from monitoring activities. • Application and response letters • Photos • Meeting minutes/observation minutes. • Quotes from children. • Children can explain which of the school's new principles they feel have been covered in their lessons. • Copies of survey and responses		
	3. Set up programme of regular Science pupil voice activities. Conduct staff/governor and parent voice	SL/Pupils	Oct/Jan/ April/July			
	4. Carry out PSQM Criterion Activity: SL Ci Knowing about science in your school.	Staff	June/Nov/March			
	5. Introduce staff to the monitoring process so that they know what SL is looking for. Agree with staff how they would like the feedback to be given.	SL/HT	Ongoing			
Establish a programme of regular monitoring to establish that vision and principles are in place. SL A/SLC	6. Agree a timetable with staff as to when examples of planning and pupil work will be collected.	SL/HT SL	Ongoing			
	7. Track science improvement via either a science improvement plan or put it on the SDP.		July			
	8. Use new vision and principles to monitor science in school. Regular staff discussions about use of the vision and which principles have they been using. Regular pupil voice to discuss which principles they have been learning as part of their science lessons.	SL/HT SL	Ongoing			
	9. Create scrutiny document for planning and for book looks which provides an auditable tracker for what SL is looking for when monitoring is undertaken.	SL SL/Gov	September			
	10. Review Science policy on annual basis to ensure fit for purpose.		March			
	11. Investigate setting up of science council/ambassadors made up of children to provide scrutiny and feedback from pupils.		October			

	SUBJECT LEADERSHIP REFLECTION: (towards the END of your PSQM journey) What was the **IMPACT** of your SCIENCE SUBJECT-LEADERSHIP actions on: • you as a leader of science? • your colleagues as science educators? • the children as young scientists? • other members of the school community? **4 or 5 sentences max per key need** and including references to your core documents, e.g. (slide 4, Science Development Log)
	Recommended word count – 500 words

POST-PSQM SUBJECT LEADERSHIP NEEDS and ACTIONS: (After writing your reflection)					(left blank)	
Ongoing/future development need: (Based on the criteria and your reflections. Add rows as required.)	Action(s) to address this specific need:	Who?	When?	Intended impact of actions (on children, staff, SLT/governors, SL or parents/carers)		
1.						

SCIENCE TEACHING: PSQM

Using examples and thinking from your initial self-assessment, consider:
Which of these are current strengths? What evidence do you have? You will need to include this in your final submission.
Which are key needs for development? These will be the areas to address in your action plan.

T Aim *Science teaching is strengthened and developed through:*	**PSQM T Criteria** *Subject leadership responds to development needs in science teaching:*	**RAG rating**	**Justify your choice of RAG rating for the criterion, referring to your current practice and the self-assessment statements. This will help to inform your key identified development needs.**
A. engagement with professional development	**T A.** There is provision and signposting of relevant internal or external professional development and support with which staff engage.		• Science staff meeting are timetabled and held once every big term. The dates tend to tie in with LA network meetings so that SL can provide CPD to staff. Staff meetings are formally recorded, shared and stored on the school network. • CPD materials are downloaded and stored on the school network. Links are then shared with staff via email or the new Intranet page. SL sends out links to useful documents, new materials, ideas for T&L via email. Co-planning takes place between both 3/4/5 teachers and also between both EYFS and KS1 teachers. Both LTP and MTPs are stored on the network.
B. use of a range of effective teaching and learning strategies	**T B.** Teachers are supported to use a range of effective strategies for teaching science which challenge and support the learning needs of all children.		• Not aware of any new strategies being introduced for Science. Need to investigate concept cartoons, science linked to stories, drama, role cards, news stories etc. • SL has attended LA network meetings but pedagogy has not yet been discussed. It was on rota for summer 20 but this got cancelled due to Covid. It is due to be discussed in Summer 21. • Lessons are relatively inclusive but there is no clear evidence to demonstrate additional support for EAL (polish/tamil). Most teachers are differentiating activities for LA and SEN but we need to be more consistent. Also need to consider how we are stretching the highers and provide evidence of all of this.
C. regular and safe use of up-to-date quality resources	**T C.** Resources are audited annually, well-organised and accessible, so that children can regularly and safely use appropriate practical and digital resources, information texts and the outdoor environment.		• Science resources have not been reviewed or checked for some time. Quite a lot of generic resources are broken or have pieces missing. This is now being addressed by SL and PTA have made significant investment. Resources are not always put away or maintained. Some pieces are borrowed for other purposes and then not put back. • Children have some access to science texts but most are out of date. They are kept in the library and children do not have regular access to these books. • School has membership of CLEAPSS. Headteacher and SL are aware of risk assessments and H&S requirements from Science perspective. These are cascaded to staff when changes are made – such as for Covid, but not shared more often. • KS1 and EYFS have access to regular Forest School lessons which does allow them to access some Science outside. KS2 can use the facilities but are not using them on a regular basis. EYFS and some Y1 children have access to an outdoor area which is set up with sensory activities, some of which are Science themed.

TEACHING NEEDS ANALYSIS and ASSOCIATED ACTIONS:

Key identified development need: (Based on self-assessment and the PSQM criteria. Add rows as required)	Action(s) to address this specific need: (You may add further actions as the year progresses)	Who? (not just the SL)	When? (month or half term)	Intended impact of actions (on children, staff, SLT/governors, SL or parents/carers) and likely sources of evidence (e.g. Vision and Principles statement, Science Development Log, monitoring data, teacher planning and evaluation, pupil outcomes)	Progress Review RAG rating after training 5	Progress Review FINAL RAG rating
T A/T B/ T C **1. Establish a programme of internal/external CPD based on needs to ensure that our staff are confident practitioners.**	**1. To Create list of CPD opportunities on Science intranet so that staff can access in their own time.** a) Download all LA network meeting resources and cascade to staff via intranet. b) Continue to develop Science intranet **2. Create paper library of resources to support staff CPD.** a) Put copies of ASE magazine (from new school membership SLB) in the new staffroom so they can look for ideas. b) Put copies of PSTT newsletters in staff room and circulate to staff. c)Create science noticeboard in new staffroom and signpost new information **3. Find subject CPD that will address gaps in staff knowledge.** a) RSC Session 1 – Maths & Science = Maths Lead & SL ✓ (June 21)	SL SL	Ongoing Ongoing	**INTENDED IMPACT:** • Staff to feel supported in teaching the topics they do not like. • Staff can access information easily • Science information can be found in one location • Staff to feel that they are valued by gaining more CPD. • Gathering opinion about CPD requirements will ensure it is targeted and therefore more meaningful. • Staff will use it if they feel it is more relevant to them and they can use it in timely manner after training. • Children to feel more engaged through more exciting science teaching • Children able to talk about the science ideas and not just how cool the experiment is. • Will allow SL/SLT to monitor planning against the principles. • Will support staff in demonstrating to children that the lesson has been planned around the principles which we have come up with. • Staff have a prepared set of lessons and materials to use if they wish.		

	b) Register on Reachout CPD and send invites to staff✓ 4. **Continue co-planning approach** (KS2 H &J, KS1 – B & A) **5. Staff survey/audit to check on CPD needed + record staff CPD completed** **6. To use monitoring outcomes (SLC) to identify staff CPD needs** **7. Use regular staff meetings to focus on PSQM actions and needs:** a) Science is good staff meeting + menti ✓ 8. Gather staff feedback on Developing Experts.✓ 9. Get renewal price for Developing Experts and discuss with HT✓ **10**. Implement a science scheme which supports staff✓	SL Staff Staff SL/Staff SL SL	Ongoing Ongoing May/Nov June June July	• Supports staff knowledge across the curriculum • Planning for science is easier • Easier to track curriculum coverage • Provision of materials for home learners **LIKELY EVIDENCE:** • Survey questions and responses • Planning • Feedback from staff on CPD • CPD List on intranet MTPs • Evidence of monitoring. • Completed children evaluation showing principles have been delivered. • Changes to lessons to be more aligned with our principles. • Photos on the new science board. • Screenshots • Planning • Feedback from staff • Use of materials • Photos of folder • Photos of new staffroom noticeboard		
2. Consistent use of working walls and classrooms in order to support teaching and learning of all learners. **T B**	1. Agree with staff consistent approach to working walls to include vocab, vision, principles, Science is Good when poster, use of photos, progression, working scientifically cycle. ✓ 2. Introduction of living lab to each classroom.	SL/Staff Staff	June September	**INTENDED IMPACT:** • Children can access information easily • Science information can be found in one location in the classroom • Support for more vulnerable learners available on the WW • Raised science profile within the classroom. • Each classroom to have something scientific on display in order to inspire children • Supports SL/HT in monitoring **LIKELY EVIDENCE:** • Photos of WW • Feedback from children and staff about use of walls		
3. Investigate different teaching strategies to increase confidence of staff and allow variety. **T B**	1. Gather staff feedback on which teaching strategies they feel comfortable and not so comfortable with. 1. Look for CPD on different strategies (concept cartoons, support for SEND, drama, role cards, extension for HA) based on the outcome of the staff survey. RSC CPD – Explorify Using fiction stories linked to science	SL SL	November December	**INTENDED IMPACT:** • Staff have a variety of different teaching strategies as part of their approach to teaching science. • Different strategies can be used for different topics and children feel more enthused. **LIKELY EVIDENCE:** • Updated planning • Staff and pupil feedback		
4. Implement regular audit of pupil resources **T C**	1. Complete audit of existing science equipment ✓ 2. Agree list of equipment to be purchased by PTA✓ 3. Purchase data loggers/weather equipment/basic working scientifically equipment ✓ 4. Train staff on how to use data loggers. ✓ 5. Get feedback from staff and pupils on new resources	SL SL/HT SL/HT SL SL	April May May June Oct/Jan/ April/July	**INTENDED IMPACT:** • Resources are in good condition and fit for purpose • Enough resources are available • Staff and pupils know what resources we have • Staff feel confident handling resources • Children have an improved experience **LIKELY EVIDENCE:** • Photos • Evidence in planning • Resource spreadsheet sorted per topic		

	6. Sort out Science books in library and make topic books more accessible – once building work complete.	Staff	November	• Feedback from pupils and staff		
5. Use outdoor space more effectively for Science **T C**	1. Purchase new outside blackboards for big questions, observations.✓ 2. Planters in front playground 3. Observation station in both front and back playgrounds – furnish with binoculars, clipboards, scavenger hunts, weather info, bird info, tree info 4. Provide CPD for staff on teaching science outside via staff meeting. ✓ 5. Send copy of TAPS Primary Science Outdoors to all staff. ✓ 6. Forest school training for more staff. ✓	SL/HT School community SL SL/Staff SL HT	June Autumn Autumn June July Ongoing	**INTENDED IMPACT:** • Children get outside more • Greater science capital as they link the outside environment to science learning • Staff are more confident about teaching science outside • Staff get CPD **LIKELY EVIDENCE:** • Photos • Evidence in planning • Feedback from staff and children • Training records •		

	TEACHING REFLECTION: (towards the END of your PSQM journey) What was the **IMPACT** of your SCIENCE TEACHING actions on: • you as a leader of science? • your colleagues as science educators? • the children as young scientists? • other members of the school community? **4 or 5 sentences max per key need** and including references to your core documents, e.g. (slide 4, Science Development Log)
	Recommended word count – 500 words

POST-PSQM TEACHING NEEDS and ACTIONS: (After writing your reflection)					(left blank)	
Ongoing/future development need: (Based on the criteria and your reflections. Add rows as required.)	Action(s) to address this specific need:	Who?	When?	Intended impact of actions (on children, staff, SLT/governors, SL or parents/carers)		
1.						

SCIENCE LEARNING: PSQM

Using examples and thinking from your initial self-assessment, consider:
Which of these are current strengths? What evidence do you have? You will need to include this in your final submission.
Which are key needs for development? These will be the areas to address in your action plan.

L Aim *Science learning is strengthened and developed through a shared understanding of:*	**PSQM L Criteria** *Subject leadership develops teachers' practice:*	**RAG rating**	**Justify your choice of RAG rating for the criterion, referring to your current practice and the self-assessment statements. This will help to inform your key identified development needs.**
A. the purposes and process of science enquiry	**L A.** Children are taught to use different enquiry types to answer scientific questions about the world around them, through the use of scientific enquiry skills.		• Questions – some evidence that staff are using questions as part of their planning as this is listed on MTPs. Inconsistently applied on MTPs and sometimes hard to tell from books. • Have evidence that children use different types of enquiry (mapped on curriculum documents). Need children to understand that there are different enquiry skills and these need to be focused on regularly so children understand why you have different types of enquiry. Last year's Science week focussed on WS skills. This year we are focussing on pattern seeking. • No evidence that children are being independent throughout the school to plan an investigation themselves. They are undertaking investigations but often these are directed by the teacher so not getting the most benefit in critical thinking skills. Not enough evidence to show that children are able to evaluate what they have done. Need to consider how to undertake evaluation for younger children.
B. the purposes of science assessment and current best practice	**L B.** A range of strategies and processes for formative, summative and statutory assessment are used, which reflect a shared understanding of the purposes of assessment in science and current best practice.		• Teachers are using assessment in Science in different ways. Some use SC and LO in books which are then marked. Some feedback is provided but not consistently. In EYFS and some Y1, Assessment is done electronically using Tapestry to record evidence. Not consistently and need to consider if we are using the best assessment depending on activity etc. • Teachers do make in-school and statutory summative judgments but nothing is formally documented in a process. Data is recorded following the school's assessment process in spreadsheets on the network. • SL does not yet have enough evidence to prove that all children are making progress. Covid has stopped book looks, learning walks etc. Clearer assessment information for staff will support this.
C. the importance of, and strategies for, developing all children's science capital	**L C.** Initiatives that encourage all children to think that science is relevant and important to their lives, now and in the future, are supported and promoted		• • Use of some external speakers supports the children in learning about making links with Science in their own lives. • Teaching approaches do make links to school's locality and personal experiences and now staff need to consider 'science capital', agree what we mean by this and how we can build on this within and outside science lessons.

LEARNING NEEDS ANALYSIS and ASSOCIATED ACTIONS:					Progress Review	
Key identified development need: (Based on self-assessment and the PSQM criteria. Add rows as required)	Action(s) to address this specific need: (You may add further actions as the year progresses)	Who? (not just the SL)	When? (month or half term)	Intended impact of actions (on children, staff, SLT/governors, SL or parents/carers) and likely sources of evidence (e.g. Vision and Principles statement, Science Development Log, monitoring data, teacher planning and evaluation, pupil outcomes)	RAG rating after training 5	FINAL RAG rating
1. Ensure that all staff know what Science capital is. **L C**	1. SL to complete science capital CPD – spotlight / PSQM session Watch the youtube on Science capital. ✓ 2. Staff meeting to teach staff what Science capital is. ✓ 3. Look at framework to decide on the key needs/actions that we need to do. ✓ 4.	Staff SL SL	Summer 2 Summer 2 June	**INTENDED IMPACT:** • Staff being more encouraging and supportive of pupils learning science as they can see it is not just down to lessons. • Pupils being able to think more about science jobs and what they could do when they grow up. • Greater relevance for pupils about science in the real world. **LIKELY EVIDENCE:** • Staff meeting minutes. • Staff being able to talk about science capital. • Pupils being able to talk about science capital.		
2. Develop children's science capital.	1. Send message home to parents about jobs in science so we can build a register of people who could come in and talk about science in the real world.✓	HT	Summer 1	**INTENDED IMPACT:** • School community feels more engaged about science at woodchester school. • Children can see that it is not just the teachers who know about science and will see the links to the real world.		

a)Build register of speakers who can come in and talk about science jobs. **b)List of good types of media to access to improve science capital.**	2. Send message to staff.✓ 3. Send message to governors. 1. Put something in the local parish magazine – is there anyone TV programmes that pupils, staff can watch at home. 2. Any events to be celebrated or mentioned – ISS passes, Winchcombe meteorite 4. Investigate Whizz, Pop, Bang type magazines.local?	SL HT SL SL/Staff Staff	Summer 2 Summer 2 Autumn 1 Summer 2 / Autumn 1 Ongoing	• Children and staff are inspired by more relevant, real life examples. **LIKELY EVIDENCE:** • Register of people we can invite in to talk about different topics. • Photos of visits Newsletter articles of visits. **INTENDED IMPACT:** • Science capital increases for children • Families feel involved • Teachers have more engaged children who share home activities in school **LIKELY EVIDENCE:** • Updated website • Photos • Calendar • Children telling us what they have read or watched.		
5. Identify local science events that may be of interest to pupils, staff, families and communicate these on regular basis. **L C**	1. Send home details of Cheltenham Science Festival.✓ 2. Tweet/DoJo daily ideas from CSF.✓ 3. Investigate any other local sources – Westonbirt, Ecotricity, Renishaw, Slimbridge, Forest Green Rovers. 4. Discuss using twitter with HT. 5. Set up after school club for KS1 and KS2 ✓	SL SL/HT SL SL SL	Summer 1 Autumn 1 Summer 2 September July	**INTENDED IMPACT:** • Parents and families get engaged whilst at home. • Children more passionate as there are activities for them to try at home. • Children come into school and tell us what they have done at home. • Parents feel more enthusiastic about science as they can see it is not scary! **LIKELY EVIDENCE:** • Photos • List of events that pupils and families have participated in. • Screenshots of DoJo/twitter		
6. Celebrate science that is done at home or school to show that it is still improving science capital. **L C**	1. Encourage families to send in photos of anything they have done at home. 2. Put more suggestions up on the school website – places to visit, books that would make good presents. 3. Set up a Science selfie competition once a term. Winner could get a £5 book voucher. 4. Celebrate Science in class with stickers – mention in celebration worships. ✓	HT/SL SL/HT/Staff School community School community	September December September September	**INTENDED IMPACT:** • Science capital increases for children • Families feel involved • Teachers have more engaged children who share home activities in school **LIKELY EVIDENCE:** • Updated website • Photos • Children telling us where they have been and what they thought.		
7. Develop new strategies for formative, summative and statutory assessments. **L B**	1. To complete TAPS pyramid baseline for current assessment (RSC funded CPD session 2) 2. To introduce TAPS focussed assessments – single WS skill (RS funded CPD session 2/3) 3. To consider ASE PLAN resources for summative assessment (RSC funded CPD sessions 2/3) 4. Carry out PSQM criterion activity:LBi with staff 5. Watch PSQM spotlights on assessment 6. SL additional reading on assessment – to share with SLT/assessment lead in school	SL/Staff SL/Staff SL/Staff SL/Staff SL SL/DHT	July September September September July July	**INTENDED IMPACT:** • SL is able to • Reduced assessment workload for science • Greater consistency in assessment • Good quality information to SLT and SL • Assessment fit for purpose and more beneficial for all stakeholders. • Address issues that arise through assessment. • List of misconceptions gathered so that this can be fed into Staff CPD. **LIKELY EVIDENCE:** • Meeting minutes from INSET/SM • Consistent format of assessment data • Whole school picture for assessment in science • Dates on school calendar for assessment CPD • Science policy updated to reflect science assessment changes.		

	7. To meet with SLT to agree assessment process for next school year. 8. Train staff in either staff meeting or INSET (TA) 9. Review progress on assessment and revise accordingly. 10. Gather staff view on assessment at end of each big term. 11. Complete PSQM reading in order 12. ASE PLAN progression documents – share with staff. ✓ 13. Investigate different ways to gather evidence and make sure it is fit for purpose. 14. Look at use of big questions (LA) and whether they can be used to help assessment. 15. Share ASE PLAN exemplification and focussed assessment documents with staff. 16. Investigate use of floor books (paper or Tapestry) across all classes.	SL/DHT Staff SL SL SL SL SL SL SL	July September February Dec/March/July Ongoing June Ongoing October September October	• Output from science lessons geared more towards data needed for assessment. • Updated SD Log • Information stored within portfolio •		
8. Review working scientifically skills delivery and progression. **L B/LA** ***Need to address evaluating as a specific working scientifically skills highlighted as weak in last year's monitoring***	1. Review plans against skills to identify good coverage and gaps. 2. Agree with staff how we plug any gaps in working scientifically skills eg evaluating from last year 3. Agree with staff how we make it clearer to the children that we are teaching specific working scientifically skills. 4. SL to trial/test out TAPS new working scientifically cycle before rolling out to other staff. ✓ 5. Put copy of TAPS working scientifically cycle on each working wall.	SL SL SL SL	September October October October	**INTENDED IMPACT:** • Skill progression across year groups clearly visible • Children understand the difference between topic knowledge and working scientifically skills • Staff have planning showing delivery of skills teaching • Children need to be more reflective and evaluate what they have done – what would they do differently next time. **LIKELY EVIDENCE:** • Progression matrix • Updated MTP • Photos • Feedback from staff and children		
9. Improve consistency of delivering teaching the full range of different science enquiry types ***From previous monitoring: Focus on child's independence Planning own investigations and asking questions being built into planning*** **L A**	1. Ensure all staff are clear on different enquiry types (range of x 5).✓ 2. Add enquiry types to science unit planning template. 3. Planning to start to include children independently planning for the full range of science enquiry (fair test/pattern seeking/ observing/ research/ sorting & classifying) 4. Planning to start to include children asking own questions linked to a specific type of science enquiry - Sign up for Great Science Share ✓ 5. Monitor for range of enquiry types being taught and how independent children are being in lessons	SL SL SL Staff	June July July September	**INTENDED IMPACT:** • Children can independently plan own investigations. • Children need to be able identify the 'type' of science enquiry they are planning/ completing in lessons • The range of enquiry needs to include children's own questions **LIKELY EVIDENCE:** • Updated MTP • Copies of cycle document on each classroom wall • Photos • Feedback from staff and children		

	LEARNING REFLECTION: (towards the END of your PSQM journey) What was the **IMPACT** of your SCIENCE LEARNING actions on: • you as a leader of science? • your colleagues as science educators? • the children as young scientists? • other members of the school community? **4 or 5 sentences max per key need** and including references to your core documents, e.g. (slide 4, Science Development Log)
	Recommended word count – 500 words

POST-PSQM LEARNING NEEDS and ACTIONS: (After writing your reflection)					(left blank)	
Ongoing/future development need: (Based on the criteria and your reflections. Add rows as required.)	Action(s) to address this specific need:	Who?	When?	Intended impact of actions (on children, staff, SLT/governors, SL or parents/carers)		
1.						

SCIENCE WIDER OPPORTUNITIES: PSQM

Using examples and thinking from your initial self-assessment, consider:
Which of these are current strengths? What evidence do you have? You will need to include this in your final submission.
Which are key needs for development? These will be the areas to address in your action plan.

WO Aim *Science is enriched by:*	**PSQM WO Criteria** *Children's experiences of science are enriched:*	**RAG rating**	**Justify your choice of RAG rating for the criterion, referring to your current practice and the self-assessment statements. This will help to inform your key identified development needs.**
A. cross-curricular planning that links science to other areas of learning	**WO A.** Curriculum planning links science to other areas of learning.		• Staff are starting to link Science more regularly to other curriculum subjects. For example Rocks, fossils etc linked to Literacy PoR. Previous staff meetings have discussed ideas on how to link Science and Maths, Science and History. • Teachers do not identify and map science skills to a range of other subjects. • Science is not contextualised within other subjects.
B. provision of a variety of opportunities that deepen and extend learning	**WO B.** There is participation in some external initiatives, topical science events and family learning.		• Pre-Covid, science club was run for the first time by STEMKids. Club was available alternately for KS1 or KS2. • Some parents did participate in science activities at home during lockdown but there is no evidence that parents are outside of lockdown. Covid has stopped parents from coming in to school and trying things with their child. • Links were made with Dyson, Royal Microscopical Society, RHS pre covid with arrangements to borrow kit but these are all on hold at present. • Current issues such as climate change, world ocean day, earth day are raised in some classes but not all. • No links exist between us and secondary schools to support transition in Science.

WIDER OPPORTUNITIES NEEDS ANALYSIS and ASSOCIATED ACTIONS:

Key identified development need: (Based on self-assessment and the PSQM criteria. Add rows as required)	Action(s) to address this specific need: (You may add further actions as the year progresses)	Who? (not just the SL)	When? (month or half term)	Intended impact of actions (on children, staff, SLT/governors, SL or parents/carers) and likely sources of evidence (e.g. Vision and Principles statement, Science Development Log, monitoring data, teacher planning and evaluation, pupil outcomes)	Progress Review RAG rating after training 5	Progress Review FINAL RAG rating
1.Look for networking opportunities locally to provide CPD /lessons/planning etc. **WOB/LC**	1. Build new links with local secondary schools. 2. Look for local STEM ambassadors as a new opportunity. 3. Look for local businesses who can come and talk to staff about what they do. 4. Create register of parents with science type jobs (LC) 5. Poster advertising science type jobs so that parents can share etc.	SL/HT SL SL SL SL	January January January September September	**INTENDED IMPACT:** • Better understanding of Science in KS3 and what comes after primary science. • Staff with specialist skills can provide CPD to primary staff. • Children have better transition to secondary schools. • Specialist science staff and people with science jobs can empower pupils and make them more enthusiastic. **LIKELY EVIDENCE:** • Register of possible contacts. • Photos of visits • Newsletter/twitter/DoJo records of visits.		
2. Introduction of whole school initiatives for wider opportunities **Eg science week** **WO B/L C**	1. Plan and deliver whole school Science week.✓ 2. Agree theme and approach at Science staff meeting.✓ 3. Update website showing success of Science week. To book for Cheltenham Festival June 21 ✓	SL SL SL/HT	June April July	**INTENDED IMPACT:** • Children feel engaged in science • Children feel that they are exploring science but not in the normal way. • Staff feel supported and that it is not creating extra work • Opportunity to celebrate science within the wider school community. • Opportunity for children to explore science outside of the usual topic learning • Sense of school togetherness despite being done in bubbles • Challenge misconceptions • Use of big questions to show progression through the school		

				LIKELY EVIDENCE: • Pupil voice • Staff feedback • Updated website • Class findings • Newsletter		
3. Link cross curricular to other topics. **WO A**	1. Add cross -curricular links to science to MTP planning template. To identify and map science skills 2. CPD for staff to support linking science skills to other topics.	SL SL	July Spring 1	**INTENDED IMPACT:** • **LIKELY EVIDENCE:**		

	WIDER OPPORTUNITIES REFLECTION: (towards the END of your PSQM journey) What was the **IMPACT** of your SCIENCE WIDER OPPORTUNITIES actions on: • you as a leader of science? • your colleagues as science educators? • the children as young scientists? • other members of the school community? **4 or 5 sentences max per key need** and including references to your core documents, e.g. (slide 4, Science Development Log)
	Recommended word count – 500 words

POST-PSQM WIDER OPPORTUNITIES NEEDS and ACTIONS: (After writing your reflection)					(left blank)	
Ongoing/future development need: (Based on the criteria and your reflections. Add rows as required.)	Action(s) to address this specific need:	Who?	When?	Intended impact of actions (on children, staff, SLT/governors, SL or parents/carers)		
1.						