

Elective Home Education

We have compiled a list of educational resources that home educating families have recommended and shared with us. It is not compulsory to use any of the resources listed.

The resources have been broken down by subject and indicate if there is a cost or not. Some resources indicated as having a cost, may have limited free access/trials. Shropshire Council recognises that children who are home educated are not required to follow the national curriculum, but to support parents in sourcing appropriate resources, we have indicated the appropriate key stage.

Key Stage Breakdown

Key Stage	:	1		2	2			3		4	1
Age	5.	-7		7-	11			11-14		14-	-16
Year Group	1	2	3	4	5	6	7	8	9	10	11

If you have any resources that you recommend, please let us know – eas@shropshire.gov.uk.

Subject	Resource	Details	Key Stage	Cost
English	http://www.letters-and-sounds.com/	Resources for phonics.	1 & 2	×
English	https://www.teachyourmonstertoread.com/	Games designed to look at letters and sounds and reading full sentences. Complements all synthetic phonics programmes.	1	×
English	https://www.jollylearning.co.uk/	Full phonics programme of study. Free online resources.	1 & 2	✓
English	https://readingeggs.co.uk/	Ready to read skills, teaching phonics skills and key literacy skills. Reading Eggs makes learning to read interesting and engaging for kids, with online reading games and activities.	1 & 2	√
English	https://www.worldofdavidwalliams.co m/activities/	Resources and activities related to David Walliams' books.	2	×
English	https://www.nightzookeeper.com/en-gb/parents/	A fun and safe writing community for kids. Improves spelling, grammar and writing skills. Over 1,000 different learning games and activities.	1 & 2	√
English	https://www.catherinemooneytutoring .co.uk/	English Tuition Courses from age 8 to GCSE level: Word Weaver course for young children focusing on creative writing; Pre iGCES; iGCSE courses.	2, 3 & 4	√
English	https://www.spellingshed.com/en-gb/	Spelling resources.	1 & 2	✓
English	https://www.literacyshed.com/	Literacy resources.	1 & 2	✓



English	https://kpcnotebook.scholastic.com/page/about-scholastic-kids-press	Issues and topics covered by kid reporters.	2	×
English	https://www.phonicsshed.com/en-gb/	Phonics resources.	1 & 2	✓
English	https://www.nessy.com/en-gb	Phonics and reading resources.	1 & 2	✓
English	https://literacytrust.org.uk/	Resources for all age groups. Ideas and advice for reluctant writers.	All	×
English	https://www.youtube.com/channel/UC M2vdqz-7e4HAuzhpFuRY8w	Mr Bruff videos for English Language and English Literature lessons.	3 & 4	×
English	https://www.sparknotes.com/	English Literature website with complete texts and revision notes.	3 & 4	✓
English	https://www.bbc.co.uk/programmes/p 00rfvk1	500 words writing competition and resources.	All	×
English	https://spellingframe.co.uk/	Removes the barrier of how to correctly pronounce words to aid learning spellings.	1 & 2	×
Maths	https://www.mathsgenie.co.uk/	Maths videos, worksheets and GCSE revision.	2, 3 & 4	*
Maths	https://www.themathsfactor.com/	Carol Vorderman's programme of study. Rewards and certificates, videos, short warm up activities and practice questions.	1 & 2	✓
Maths	https://ttrockstars.com/	Times Tables app – interactive games that follow a sequenced programme of daily times table practise.	2 & 3	✓
Maths	http://www.mrbartonmaths.com/index.html	Resources, questions, tasks, videos, lessons and links to other websites. Will need to register for access to some areas. Access to past GCSE, iGCSE and SATs papers. Lots of tarsia puzzles will need to download the free software – alternative to worksheets.	2, 3 & 4	×
Maths	https://www.youtube.com/user/mathantics	Maths Antics - many short maths videos on key concepts.	2 & 3	×
Maths	http://www.piximaths.co.uk/	Lessons, activities, resources and student topic assessment sheets.	2, 3 & 4	×
Maths	https://www.mathshed.com/en-gb/	Maths resources.	1 & 2	✓
Maths	https://mathseeds.co.uk/	Interactive lessons and games.	1 & 2	✓
Maths	https://thirdspacelearning.com/	Worksheets to download – many available for free. Register with personal email and just select any local school as base – does not affect registration.	All	√



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Maths	http://www.conquermaths.com/	Diagnostic testing, lessons, age appropriate questions and activities, monitoring of progress and certificates. Can try some free lessons.	All	✓
Maths	http://www.corbettmaths.com/	Videos and exam style questions on all maths topics. Answers to all questions. 5 different levels. 5 different maths questions a day.	All	×
Maths	http://www.khanacademy.org/	American site for Maths lessons, practice and tests (some terminology is different).	All	×
Maths	http://www.mathsisfun.com/	American website that covers all year groups – lessons, games, puzzles and worksheets (some terminology is different).	All	*
Maths	https://nrich.maths.org/	Curriculum linked resources.	All	×
Maths	https://home.absolutemaths.co.uk/	Full programme of study for KS3 or GCSE. Pay for package with tutor support or independent study.	3 & 4	√
Maths	https://www.10ticks.co.uk/MathsHomeLearning	Engaging maths worksheets, simple to follow video guides, interactive tests, fun quizzes and maths games.	All	√
Maths	https://whiterosemaths.com/	Full schemes and accompanying online packages of maths work.	All	✓
Maths	https://www.onmaths.com/	A range of GCSE practice papers and questions, many can be accessed for free.	4	\
Maths	https://www.mathplayground.com/	A variety of maths games.	1 & 2	×
Science	https://explorify.wellcome.ac.uk/	Science videos and activities.	2	×
Science	http://www.mysteryscience.com/	USA site with some free resources.	1 & 2	√
Science	https://www.woodlandtrust.org.uk/	Various ideas for competitions, projects and activities.	1 & 2	×
Science	http://www.toucanbox.com/	Art and Craft activities based on science.	1, 2 & 3	✓
Science	https://melscience.com/GB-en/	Chemistry experiment kits.	2	√
Science	https://www.stwater.co.uk/about- us/education-zone/primary-education/	Worksheets on anything water based.	1 & 2	×
Science	https://www.bbc.co.uk/programmes/b 006mywy	Science and nature videos. Will also link to OU resources specific to areas of study.	2	×
Science	https://www.ecokidsplanet.co.uk/	Subscription science magazine.	2	✓



Science	https://www.field-studies-council.org/	Field studies resources.	4	×
Science	http://www.kiwico.com/	STEM Explore Create and Learn – Fun and enriching science and art projects. USA site.	All	✓
Science	http://www.youtube.com/channel/UC qbOeHaAUXw9II7sBVG3_bw	GCSE revision with supported experiments that can be used for exam preparation.	4	
Science	https://www.freesciencelessons.co.uk/	Science videos.	4	×
Science	http://www.nhm.ac.uk/	Lots of information and ideas for project-based work as well as being a great place to visit.	All	*
Science	https://www.youtube.com/channel/UC rVuQ5h4DcNANn7tg_afd4Q?app=deskt op	Prof Brian Cox videos on all science based topics.	2, 3 & 4	×
Science	https://www.southwestscienceschool.com/	Complete package for GCSE Science subjects. Online videos, activities and access to tutors.	4	✓
Science	https://education.nfuonline.com/	Primary STEM teaching resources and projects, closely linked to the National Curriculum & related to farming and farm related engineering.	1, 2 & 3	*
Science	https://www.whizzpopbang.com/	Science Magazine	1 & 2	✓
Science	https://www.letterboxlab.com/	Everything you need to inspire your little scientist in a flexible and convenient monthly subscription.	2 & 3	✓
Science	https://www.youtube.com/theatreofscience	Award-winning science teacher streaming free, live lessons.	1, 2 & 3	✓
Science	https://kitchensinkscience.co.uk/	A series of simple practical investigations that could be carried out at home with just the apparatus that can mostly be found in your kitchen, garden shed, garage, etc.	2, 3 & 4	√
Science	https://www.potgang.co.uk/	Gardening subscription box.	All	✓
ICT	https://codekingdoms.com/	Coding Tutorials.	2 & 3	✓
ICT	https://blockly.games/	Beginner quizzes in programming.	All	×
ICT	https://thecodingtrain.com/	Videos for beginners coding.	All	×
ICT	https://barclayscodeplayground.co.uk/student-homepage-bdl/begin-your-coding-adventure/	Beginner coding activities.	All	*
ICT	https://scratch.mit.edu/	Coding activities.	All	×



ICT	https://www.freecodecamp.org/	Free coding courses.	3 &4	×
ICT	https://idea.org.uk/	The Inspiring Digital Enterprise Award, known as iDEA, is an international award winning programme that helps you develop and demonstrate your digital, enterprise and employability skills for free.	3 & 4	×
History	http://www.historyforkids.net/	Quizzes, worksheets and resources.	2	*
History	http://www.history-for- kids.com/british-history.html	Collection of poems on the themes of British History.	2 & 3	×
History	https://www.bbc.co.uk/cbbc/shows/horrible-histories	Videos with support lessons.	2 & 3	*
History	https://www.squaducation.com/	National Curriculum support with free videos, interactive quizzes, teacher support notes and a virtual classroom.	All	✓
History	https://www.iwm.org.uk/learning/hom e-learning-hub	Lots of information and ideas for project-based work as well as being a great place to visit.	All	×
History	https://www.annefrank.org/en/	Lots of information and ideas for project-based work as well as being a great place to visit.	All	×
Geography	https://www.geoguessr.com/	Explore the world in a geography game, browse maps and complete daily challenges.	2, 3 & 4	×
Geography	https://www.seterra.com/	Games that gives you access to over 400 quizzes about countries, capitals, flags, oceans, lakes and more.	2, 3 & 4	×
Geography	https://www.3dgeography.co.uk/	Geography resources.	All	×
Cooking	https://www.gousto.co.uk/	Cooking subscription box.	All	√
Cooking	https://www.hellofresh.co.uk/	Cooking subscription box.	All	✓
Cooking	https://www.bbcgoodfood.com/	A variety of recipes.	All	×
Cooking	https://www.jamieoliver.com/get-kids- cooking/	A variety of child-friendly recipes.	All	×
Cooking	https://realfood.tesco.com/recipes/coll ections/easy-recipes-for-kids.html	A variety of child-friendly recipes.	All	*
PE	https://www.gonoodle.com/	PE sessions.	1 & 2	×
PE	https://www.youtube.com/playlist?list =PLyCLoPd4VxBsXs1WmPcektsQyFbXTf 9FO	Joe Wicks PE lessons.	All	×
Languages	https://www.rosettastone.co.uk/	Supports the learning of foreign languages.	All	✓



Languages	https://www.duolingo.com/	Supports the learning of foreign languages.	All	×
Languages	https://onethirdstories.com/	The fun way to introduce kids to a new language, delivered to your door every month.	1 & 2	√
Languages	https://www.memrise.com/	Memrise teaches you a language used in real-world contexts, based off your interests.	2, 3 & 4	✓
Art	https://kidscraftroom.com/	Art resources.	1 & 2	✓
Art	https://www.easypeasyandfun.com/	Art resources.	1 & 2	×
Art	https://www.paulcarneyarts.com/	Art curriculum to follow.	3 & 4	✓
Art	https://www.vangoghmuseum.nl/en/s econdary-education/lessons	Art resources.	3 & 4	×
Art	https://www.toucanbox.com/gb	Boxes of learning and laughter to inspire little crafters.	1 & 2	✓
Art	https://www.youtube.com/playlist?list =PLflf8xbnbx65Z2oa2F9uqKZxJJn-4Nynr	You Tube tutorial videos on Disney art.	All	*
Music	https://www.classicsforkids.com/kids/	Resources and activities.	1 & 2	×
Music	https://www.youtube.com/c/MusicwithMrGray/videos	Videos to play along to. You need to be able to read music.	1 & 2	×
PSHE	https://www.bbc.co.uk/teach/ks2- pshe/zbrg7nb	Video lessons covering all PSHE topics.	2	×
PSHE	https://barclayslifeskills.com/young- people/	Lessons and resources for life skills in finance, insurance, CV writing etc.	4	×
PSHE	https://nationalcareers.service.gov.uk/ skills-assessment	Skills check for young people.	4	×
PSHE	https://youthpolitics.org.uk/	Political information for young people.	4	×
PSHE	https://pshe-association.org.uk/	Resources and teaching ideas on a variety of PSHE subjects.	All	✓
PSHE	https://www.winstonswish.org/pshe- lessons/	Lessons on loss and bereavement.	All	×
PSHE	https://www.loudmouth.co.uk/	Resources and lesson plans covering 'uncomfortable' subjects.	All	√
PSHE	https://www.bbc.co.uk/teach/gcse- national-5-citizenship/z6dyqp3	Video lessons covering all PSHE topics.	3 & 4	×
Combined	http://www.pawprintfamily.com/	Complete project packs: activities, certificates, resources, challenge packs, badges.	1 & 2	*
Combined	http://www.hamilton-trust.org.uk/	Complete learning packs.	1 & 2	✓



Combined	https://www.studyladder.co.uk/	Resources for a variety of subjects. Earn points to change avatars and receive certificates.	1 & 2	√
Combined	http://www.primaryresources.co.uk/	Lesson plans, activity ideas and resources.	1 & 2	×
Combined	https://ed.ted.com/	Covers most curriculum and life-based topics. Videos, quizzes, deeper learner, discussion-based questions.	2, 3 & 4	×
Combined	https://dontmemorise.com/	Maths and science videos.	2, 3 & 4	×
Combined	https://www.q-files.com/home/	Children's online library of knowledge covering history, geography and science.	2 & 3	✓
Combined	https://www.firstnews.co.uk/	UK Independent Children's National Newspaper subscription.	2 & 3	✓
Combined	https://www.teachingpacks.co.uk/	Complete packs of teaching resources.	1 & 2	×
Combined	https://www.theschoolrun.com/	Variety of resources including SEN.	1 & 2	×
Combined	https://home.oxfordowl.co.uk/	Variety of resources.	1 & 2	×
Combined	https://www.quizshed.com/en-gb/	Subject based quizzes to create or use.	2 & 3	✓
Combined	https://teachmykids.co.uk/signup	Maths and English worksheets.	1 & 2	✓
Combined	https://doodlelearning.com/for- parents	Interactive questions and games for Maths and English.	1 & 2	✓
Combined	https://www.cambridgeinternational.o rg/programmes-and- qualifications/cambridge-lower- secondary/	KS programmes and links to resources.	1, 2 & 3	√
Combined	https://www.twinkl.co.uk/	Full curriculum guidance, lessons, progress checkers and weekly timetables. Very good for all age groups and SEN.	All	✓
Combined	https://www.bbc.co.uk/cbbc/curations/blue-peter-badges	Various resources and challenges where children can earn a Blue Peter Badge.	1, 2 & 3	*
Combined	https://www.senteacher.org/	SEN resources for all age groups.	All	×
Combined	https://www.bbc.co.uk/bitesize	Lessons for all ages in all subjects.	All	×
Combined	https://www.tes.com/	Website for all key stages with a variety of free and paid for lessons and resources.	All	√
Combined	https://www.curriculumonline.ie/Home/	Irish curriculum site. Useful syllabus downloads in a variety of subjects.	All	×
Combined	https://www.thenational.academy	Over 10,000 lessons for all year groups in all subjects.	All	×



Combined	https://senecalearning.com/en-GB	All curriculum areas – tutorials and questions with progress tracker. Good for GCSE revision.	3 & 4	✓
Combined	https://quizlet.com/en-gb	Subject based quizzes.	All	×
Combined	https://kahoot.com/	Website to create assessments and quizzes.	All	×
Combined	https://www.topmarks.co.uk/	Resources & games.	All	×
Combined	https://www.edplace.com/	Videos, activities, parent account, easy to monitor your child's progress. 20% off with EDWISE20	All	✓
Combined	https://www.abcmouse.com/abc/	Step-by-Step Learning Path with rewards. Covers English, maths, the world around us, art and colours.	1 & 2	✓
Combined	https://www.adventureacademy.com/	Immersive virtual universe for those seeking knowledge and adventure. Covers maths, English, science, social studies and more.	2 & 3	√
Combined	https://www.littlecraftersboxes.co.uk/	A mix of eco-conscious large, medium and small projects in keeping with the learning theme of the month. Achieve AQA unit awards.	All	~
Combined	https://www.tlclive.com/	Tutoring support and online maths, science and English tuition.	All	✓
Combined	https://ryans.world/work/	Sunlight Entertainment is Ryan Kaji's family-owned and operated production company that develops family-friendly content, and is driven to help kids learn	1 & 2	×
Combined	https://clmeducationalresources.com/	Themed learning activity packs e.g. Minecraft, Roblox, Pokemon, Fortnite & Harry Potter, oceans, minibeasts.	1, 2 & 3	√
Combined	https://the2poundtuitionhub.com/	Live lessons on a range of topics. Lessons get uploaded shortly afterwards for access at other times.	All	√
Combined	https://www.proudtobeeme.co.uk/	A range of tuition courses and awards	2, 3	✓
Carabiand	harman di santana santa	available face to face (Bridgnorth area).	& 4	✓
Combined	https://www.elearnwithamy.com/	Fun and affordable daytime webinars and online sessions for home educated children around the world.	All	•
Combined	https://www.littlemagictrain.com/	Multisensory resources that use movement, music, stories and imagination to help your child to learn and achieve. Email: Hello@littlemagictrain.com and say "Shropshire Home Ed" for discounts.	1	V



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Combined	https://cognitoedu.org/home.html	A variety of maths and science GCSE	4	~
		resources, many can be accessed for		
		free.		
Combined	https://learnlaughplay.co.uk/	Flexible online learning designed for	All	✓
		home educating families.		
Combined	https://www.childrensuniversity.co.uk/	Children's University is an award	All	✓
	childrens-university-online/	scheme for children that encourages,		
		tracks and celebrates their		
		participation in learning beyond the		
		classroom.		
Combined	https://humanateestutor.com/	Live humanities lessons. Lessons get	2, 3	✓
		uploaded shortly afterwards for access	& 4	
		at other times.		
Free courses	https://www.skillsforlifenetwork.com/tr	Free functional skills courses. Not	4	✓
	aining-course/free-online-functional-	accredited.		
	skills-courses/			
Free courses	https://www.reed.co.uk/courses/free?f	Reed has a variety of free courses.	3 & 4	×
1100 0001303	ag=search	need has a variety of free courses.	١٥۵١	
Free courses	https://nationalcareers.service.gov.uk/f	The National Careers Service has a	3 & 4	×
rree courses	ind-a-course/the-skills-toolkit	range of free courses from maths,	3 & 4	**
	ind-a-codi se/ the-skins-toolkit	English and IT to well-being.		
Free courses	https://www.open.edu/openlearn/free-	The Open University has hundreds of	3 & 4	*
riee courses			3 & 4	^
	courses/full-catalogue	free courses in a wide variety of		
F	https://www.ac.theananla.meant.ac.ul./	subjects.	204	×
Free courses	https://www.youthemployment.org.uk/	Youth Employment has a range of free	3 & 4	^
	careers-advice-help/choices/online-	courses aimed at preparing young		
	skills-and-careers-courses/preparing-	people for their future.		
_	for-your-future-online-course/			
Free courses	https://pll.harvard.edu/catalog/free#:~:	A variety of free online courses	3 &4	×
	text=Free%20Courses%201%20Predicti	through Harvard University (Make sure		
	onX%3A%20Lost%20Without%20Longit	you select free in the filters).		
	ude%20Explore,Structure%20%208%2			
	OPricing%20Strategy%20%20More%2			
	<u>Oitems</u>			
Free courses	https://alison.com/courses	From Art to Zoology, Alison has	3 & 4	×
		thousands of free online courses.		
Online	https://wolseyhalloxford.org.uk/	Full programme of study with live	3 & 4	✓
programme		lessons and tutor support.		
Online	https://kingsinterhigh.co.uk/	Full programme of study with live	3 & 4	✓
programme		lessons and tutor support.		
Online	https://myonlineschooling.co.uk/	Full programme of study with live	3 & 4	✓
programme		lessons and tutor support.		
Online	http://www.cloudlearn.co.uk/	Full programme of study with live	4	✓
programme		lessons and tutor support.		
Online	https://www.theonlineschool.co.uk/	Full programme of study with live	3 & 4	✓
programme		lessons and tutor support.	5 🗸 -	
Programme	<u>l</u>	16550115 dila tator support.	1	



Online	KS3 Courses Key Stage 3 Home	Full programme of study with tutor	3 & 4	✓
programme	Schooling Oxford Home Schooling	support.		
Curriculum	https://www.cgpbooks.co.uk/resources	Downloadable end of year checklist to	1 & 2	×
Information	/free-pupil-checklists-for-every-year-of-	assess progress and stage.		
	primary			
Curriculum	https://www.gov.uk/government/collec	Official national curriculum	3	×
Information	tions/national-curriculum	documents.		
Curriculum	https://shropshire.gov.uk/schools-and-	Downloadable end of key stage	3 & 4	×·
Information	education/school-attendance-or-	expectations available under related		
	exclusion/elective-home-education/	documents.		
Curriculum	qualification-guidance.pdf	Qualification guidance information.	4	×·
Information	(shropshire.gov.uk)			
Exam	https://www.jcq.org.uk/private-	Joint Council for Qualifications –	4	×
Information	<u>candidates/</u>	oversees all exams & timetables. Has		
		information for private candidates.		
Exam	https://heqa.uk/	Home Educators' Qualifications	3 & 4	×
Information		Association		
Exam	https://www.crestawards.org/	CREST Awards - a scheme that inspires	All	✓
Information		young people to think and behave like		
		scientists and engineers.		
Exam	https://www.asdan.org.uk/	ASDAN is an education charity and	3 & 4	\checkmark
Information		awarding organisation providing		
		courses, accredited curriculum		
		programmes and regulated		
		qualifications to engage, elevate and		
		empower young people.	_	
Exam	https://www.aqa.org.uk/programmes/u	The Unit Award Scheme (UAS) is a	3 & 4	✓
Information	<u>nit-award-scheme</u>	unique way to record learner		
		achievement. Its 'can do' approach is		
		used to boost student confidence,		
_		engagement and motivation.		
Exam	https://www.artsaward.org.uk	Arts Award takes children and young	All	✓
Information		people on a creative journey,		
		exploring the arts world, discovering		
		their potential as artists, developing		
		leadership skills – and gaining a		
		recognised qualification along the way.		
Exam Board	http://www.aqa.org.uk/	Offers GCSE and Functional Skills	4	×
Frank Brand	http://www.adayaal.com/	exams. Downloadable syllabus.		
Exam Board	http://www.edexcel.org.uk/	Offers GCSE and Functional Skills	4	×
Frank Brand	http://www.com.com	exams. Downloadable syllabus.		
Exam Board	http://www.ocr.org.uk/	Offers GCSE and Functional Skills	4	×
Frank Brand	http://www.ciaaac.l/	exams. Downloadable syllabus.		
Exam Board	http://www.wjec.co.uk/	Offers GCSE and Functional Skills	4	×
		exams. Downloadable syllabus.		



Exam Board	https://www.cambridgeinternational.or	Offers iGCSE. Downloadable syllabus.	4	×
	g/			
Books & Supplies	https://www.cgpbooks.co.uk/	Ace your GCSE exams with CGP! Sam Parker Work backs COSE NO. COSE COSE COSE COSE COSE COSE COSE COSE	All	✓
Books & Supplies	https://collins.co.uk/pages/letts-revision	Collins easy learning Tolling the time Comprehension Spelling Writing Workbook	All	•
Books & Supplies	Home Bargains B & M Your local supermarket	Variety of art supplies. Check out their book section for work-books and revision guides.	All	√
Books & Supplies	https://www.whsmith.co.uk/	Art supplies and a wide variety of books – they have a good selection of work-books and revision guides.	All	√
Books & Supplies	https://www.waterstones.com/	Art supplies and a wide variety of books – they have a good selection of work-books and revision guides.	All	√
Books & Supplies	https://www.theworks.co.uk/c/books	Art supplies and a wide variety of books – they often have work-books and revision guides.	All	✓
Books & Supplies	https://www.therange.co.uk/	Art supplies.	All	✓
Books & Supplies	https://www.hobbycraft.co.uk/	Art supplies.	All	✓
Books & Supplies	https://www.daydreameducation.co.uk /products/revision-guides-pocket- posters	Revision Guide CCSE BIOLO FORM Revision Cuide CCSE CHEMIS COSE CHEMIS COSE CHEMIS COSE CHEMIS COSE CHEMIS COSE CHEMIS COSE CHEMIS COSE CHEMIS COSE CHEMIS COSE CHEMIS COSE CHEMIS COSE CHEMIS COSE CHEMIS COSE CHEMIS COSE CHEMIS COSE CHEMIS COSE CHEMIS COSE CHEMIS COSE CHEMIS COSE CHEMIS COSE CHEMIS COSE CHEMIS CHEMIS COSE CHEMIS CH	All	V