Computing Subject Specific Target exemplars:

This is a working document, intended to support the setting of subject specific targets on lesson observation forms and at weekly mentor meetings. Ideas for history specific targets are here and can be adapted. Targets can require wider thinking and revisiting of prior learning at any stage in the course where it would be helpful to a trainee.

Target area:	Possible Computing Targets	Suggested activities to achieve this
Curriculum	Develop an understanding of how KS3 and KS4 are sequenced	Study scheme of work to identify key concepts and how they change and develop over the different year groups
	Explore how the school's curriculum meets the requirements of the national curriculum	Focusing on the topic of X, work with the national curriculum for computing document to identify where the schools curriculum addresses this topic and how it is assessed
	Become familiar with exam board specifications for new GCSE Computing courses	Access exam board websites to compare and contrast exam specifications for GCSE Computer Science. Note the additional support available via the exam websites, such as teaching advice past papers and examiner reports
	Extend your curriculum subject knowledge beyond the GCSE CS specification.	Review your subject knowledge related to "alternate" specifications at KS4 e.g. iMedia and/or level 3 qualifications e.g. A-Level Computer Science
	Become familiar with GCSE question types	Attempt a timed GCSE past paper without reference to the mark scheme - note errors you make. Mark the paper using the mark scheme - note the advice you would give to students to avoid errors. Read the examiner report, noting emerging themes.
	Examine how curriculum choices at KS3 could affect options choices, with a particular focus on gender bias.	Explore with your mentor how girl's are encouraged to consider future study in computing through the formal and informal curriculum (e.g. computer clubs) at KS3. List the contexts used in KS3 computing and talk to male and female pupils about their attitudes to those contexts and the subject in general.
Subject knowledge	Understand the level of knowledge required by KS4 pupils in the topic of X	Answer exam paper questions to develop knowledge of X and consider the knowledge and skills required by pupils.
	Consider the foundational concepts and knowledge of X and how mastery of this topic is achieved and assessed.	Work with expert colleagues to understand the essential concepts, knowledge, skills and principles of X
	Identify common misconceptions in computing and explore how they can be used to help pupils master important concepts.	Research the misconceptions inherent in a specific computing topic. Develop a teaching sequence which either explains the misconception or causes pupils to experience the misconception and then correct it.

	Review you current level of subject knowledge.	Using your subject knowledge audit as a baseline identify any gaps between your own knowledge and the requirements at KS4 - based on the school's curriculum and exam specification. Identify resources with your mentor to fill your SK gaps.
	Identify engaging contexts which can engage pupils - especially when teaching abstract concepts.	Identify real-world applications of computing and IT via news reports, company websites and employee case studies. Prepare a short dual coded slide-deck to illustrate why this is important in pupils' lives.
	Integrate knowledge of Computing careers into a lesson.	Identify a career (or range of careers) linked to a topic you are teaching. Develop an activity to engage pupils in considering that career path.
	Develop pupils' computational thinking skills	Plan a series of starters/plenaries with a variety of activities that explicitly engage pupils in computational thinking.
Teaching & Learning / Pedagogy	Consider how to introduce new material by linking to prior learning	Make use of tasks that link to pupils prior learning and explicit link these to new material
	Learn how to develop students understanding of abstract ideas by modelling new processes and ideas	Practise using modelling to explain the key aspects of X
	Develop your use of analogies, illustrations and examples to explain a foundational computing concept	Identify a single topic within a lesson e.g. introducing variables. Collect a range of analogies, illustrations and examples - select which would be most appropriate for your class with a clear justification.
	Analyse how expert colleagues balance exposition, repetition and skill practice in computing.	Observe a lesson and analyse the lesson plan to identify the balance of exposition, skills and repetition of concepts over time. Discuss your findings with your expert colleague
	Develop your understanding of the PRIMM methodology	Plan a series of activities which take pupils through a subset of the PRIMM methodology - note that you would not be expected to cover all aspects in a single lesson.
	Plan to use and evaluate Parson's problems	Develop a Parson's problem activity to integrate into a programming lesson
	Plan to use and evaluate an unplugged activity	Identify an unplugged approach to teach an abstract concepts. Plan to teach the approach paying particular attention to the clarity of task instruction, behaviour management routines and consolidating the knowledge during and after the activity. Evaluate the approach.
Assessment	Develop the necessary skills for pupils to succeed in exams	Analyse sample exam questions and mark schemes to identify what the examiners are looking for and 'what a good answer looks like'. Use this to support pupils in developing the necessary skills needed to succeed in computing exams.
	Design a plenary activity to consolidate and assess pupil understanding	Consider the objectives of the learning sequence and consider the best way to assess students knowledge within a plenary

	Plan a sequence of graduated questions	Plan the structure and content of questioning for a lesson - questions should be graduated by complexity and structured to ensure all pupils are expected to participate
	Share success criteria with pupils	Prepare a WAGOLL and WAPOLL for a task - plan how you will use this to help pupils generate and identify success criteria
	Provide feedback for pupils	Provide verbal and / or written feedback for a task - focussing on specific assessment criteria and closing the learning gap
	Plan a peer and/or self assessed activity	Provide pupils with the necessary scaffolds to assess a peers work (or their own) in an objective manner. Model how to provide constructive feedback on the task
	Moderate marked work	Work with an expert colleague to moderate or benchmark the standard of work across a cohort of pupils