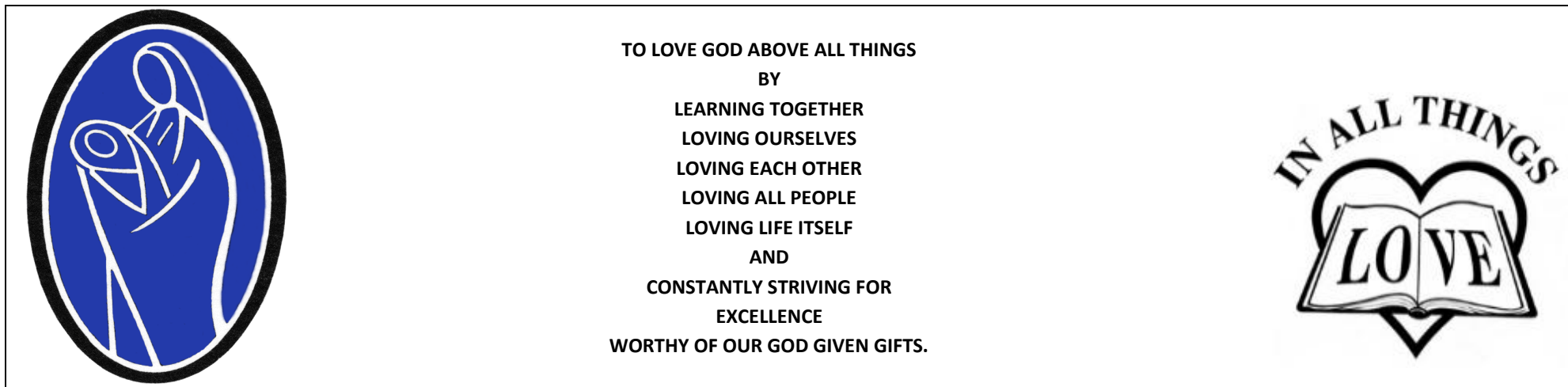




Reception Computing Teaching and Progression

This document expands the Reception foundations in the whole-school Computing progression grid. Children develop their understanding through All About Instructions, Exploring Hardware and Introduction to Data, alongside play, talk and everyday routines. Practical experiences build confidence in following and giving instructions, using technology for a purpose and organising information.

Birth to 5 Matters informs the links to technology, communication and language, mathematics, literacy and personal development. ELG links identify contributions towards wider end-of-Reception expectations. Experiences are adapted to children's interests and starting points, with repeated opportunities to revisit learning.

Key knowledge	Key skills
Instructions tell us what to do; their order affects what happens.	Give, follow and improve a short practical sequence.
Devices have controls that produce effects.	Explore a control, notice its effect and describe a purpose.
A camera can record something for others to see.	Take and discuss a chosen photograph with support.
Information can be organised into groups.	Sort objects, explain a rule and try a different grouping.
Pictures can show information about a collection.	Contribute to a simple pictogram and compare its groups.
We use technology with care, permission and adult help.	Take turns, follow agreed routines and ask for help.

All About Instructions

Unit	Birth to 5 Matters links	Key computing teaching points and vocabulary	Activities and children's choices Continuous provision and teacher-led	Progression and ELG links
All About Instructions	Range 5 — Speaking and Understanding Explain familiar events and respond to instructions; ask about what happens next. Range 6 — Speaking Use talk to order ideas and actions. Mathematics Measures, Range 5: recall events in sequence. Spatial Reasoning, Range 6: give and follow directions. Characteristics of Effective Learning Predict, check and try another approach.	Follow a brief instruction, then a sequence of linked actions. Discuss why order matters. Explore what happens when a step is unclear or missing. Use first, next and last; ask for clarification and test a changed step. Vocabulary instruction, first, next, last, order, follow, predict, change	Teacher-led Children direct a puppet through a familiar routine. Seeing their words followed literally helps them notice a missing detail, change the instruction and try again. Children's choices Provide sequence pictures, dressing-up props and construction materials. Children can explain how to put on a costume or describe how a partner could copy a model. Use an obstacle route or small-world scene to practise directions and positional words.	Children move from joining in with a familiar action to following and giving an ordered sequence. They use order and positional words, predict an outcome and explain a change when something does not work. ELG contributions Listening, Attention and Understanding: respond and clarify. Speaking: explain ideas. Self-Regulation: attend and follow instructions involving several actions.

Learning is revisited through dressing, handwashing, building and outdoor routes. Children have opportunities to follow a partner's directions, identify a missing step and explain how a revised sequence helps them achieve their goal.

Exploring Hardware

Unit	Birth to 5 Matters links	Key computing teaching points and vocabulary	Activities and children's choices Continuous provision and teacher-led	Progression and ELG links
Exploring Hardware	Range 5 — Technology Explore familiar controls and notice their effects with support. Range 6 — Technology Operate equipment for a purpose, create content and follow agreed routines. Range 6 — Literacy Writing Use images, marks and words to convey meaning. Speaking Explain the subject of a photograph and the reason for choosing it.	Explore safe, familiar hardware and describe how it is used. Practise choosing a subject, holding the camera steady and checking the photograph. Compare two images, choose the clearer one and explain which details matter. Revisit permission before photographing a person. Vocabulary camera, photo, button, screen, keyboard, mouse, device, still	Teacher-led Compare a keyboard, mouse and camera. Predict what a control might do before trying it together. Practise asking permission before photographing a person. Children's choices Offer an adult-supported photo station for recording a model, painting or discovery. Children choose a picture for a class album and dictate a caption explaining their choice. Reopen the album to recall the event and discuss how the picture helps someone else understand it.	Children move from exploring an effect to choosing and using a control for a purpose. They plan what to photograph, check what the image shows and explain a choice, with growing care and independence. ELG contributions Speaking: describe choices. Managing Self: explain rules. Building Relationships: cooperate and take turns. Creating with Materials: explain how a photographed creation was made.

Learning is revisited through photographs of models, artwork and discoveries. Children return to their images, explain why they chose them and discuss how a photograph helps someone else understand an experience.

Introduction to Data

Unit	Birth to 5 Matters links	Key computing teaching points and vocabulary	Activities and children's choices Continuous provision and teacher-led	Progression and ELG links
Introduction to Data	Range 5 — Mathematics Comparison: compare small groups within five. Counting and Cardinality: count each item once and recognise that the final number gives the total. Range 6 — Mathematics Comparison and Cardinality: compare amounts, count a chosen collection up to 10 and connect it with a numeral. Speaking Explain the grouping rule and what a picture record shows.	Use a clear rule to sort objects. Explore questions answered with yes or no. Introduce a physical branching route and a pictogram with one picture per item or response. Count each group, compare the totals and check that an item has not been counted twice. Re-sort the same collection using a different rule. Vocabulary data, sort, group, same, different, yes, no, pictogram	Teacher-led Sort a mixed collection and explain why an object placed in an unexpected group needs moving. Build a class pictogram about a simple choice. Children's choices Provide loose parts, hoops and picture labels. Children invent a sorting rule, challenge a partner to work it out and change the rule. Revisit the pictogram to ask their own questions, compare more, fewer or equal and check the answer with the original objects or votes.	Children move from matching objects to explaining and changing a sorting rule. They use yes or no questions, contribute to a pictogram and compare what its groups show. ELG contributions Speaking: explain reasoning. Numerical Patterns: compare quantities within 10. Number: recognise quantities up to five without counting.

Learning is revisited through sorting classroom resources, snack choices and collections from play. Children count or recognise small groups, compare more, fewer or equal, and check a picture record against the original objects or responses.

Learning revisited throughout the year

Children revisit following instructions, choosing controls, sorting and representing information through daily routines and continuous provision. Familiar experiences provide opportunities to predict, test, explain and try again. Photographs, models, gestures and talk enable children to communicate what they know in different ways.

Safe and considerate use develops throughout all three units. Children practise asking permission, taking turns, handling equipment carefully and stopping to tell a trusted adult when something worries them. Adults model purposeful use and help children balance technology with other ways of playing, exploring and learning.

Progression across Reception

All About Instructions begins with familiar actions and routines. Children develop from responding to a single instruction towards following and giving an ordered sequence, predicting what will happen and explaining a change. Exploring Hardware builds from noticing the effect of a control towards choosing a device for a purpose, taking a photograph and discussing whether it shows what they intended.

Introduction to Data develops early comparison and sorting into explaining a consistent rule, changing the grouping and representing a collection with pictures. Children increasingly use language and evidence to explain a choice or result. Repeated experiences and responsive support enable children with different starting points to develop greater independence across the year.

Relevant Early Learning Goal contributions

Computing contributes to the goals below through purposeful activities. These are selected connections rather than complete ELG assessment criteria; there is no separate statutory Computing or Technology ELG.

Communication and Language — Listening, Attention and Understanding: respond to what is heard and ask questions to clarify meaning. Speaking: explain a sequence, choice, prediction or sorting rule using relevant vocabulary.

Personal Social and Emotional Development — Self-Regulation: attend and follow instructions involving several ideas or actions. Managing Self: explain rules and persevere. Building Relationships: cooperate and take turns.

Mathematics — Number: recognise quantities up to five without counting. Numerical Patterns: compare quantities within 10, identifying more, fewer or equal amounts.

Expressive Arts and Design — Creating with Materials: use photographs to share children's own creations and explain the process used to make them.

Progression and the link to Year 1

Children move from exploring familiar controls, following practical instructions and matching objects towards making purposeful choices, giving an ordered sequence and explaining how information has been grouped. All About Instructions prepares children for Year 1 Commands unplugged and Bee-Bots, where they make instructions more precise, predict a route and identify a command that needs changing.

Exploring Hardware prepares children for Improving Mouse Skills and Digital Imagery. Purposeful control develops into clicking and dragging, selecting tools and navigating an activity. Taking and discussing a photograph develops into planning a photo story, capturing clear images and making simple edits. Introduction to Data provides foundations for grouping and organising digital images and explaining how a collection has been arranged.

Safe routines, permission, turn-taking and asking a trusted adult for help continue through Year 1 Online safety and every Computing unit. Teachers build from children's varied experiences and revisit practical foundations as needed, so progression reflects growing understanding and independence rather than fixed developmental deadlines.