# Leintwardine Endowed CE Primary School Learning Journey Itinerary

## 'Letting Our Light Shine'

| SUBJECT : Computing | YEAR : B | TERM : Summer 1 | YEAR GROUPS : 5/6 |
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## Key Question: Can you design, refine and print a 3D model to fit a specific criteria?

Previous Knowledge – We would expect children to already be able to:

### END OF UNIT OBJECTIVES

| Some children will not yet have met what is expected and will show that they are **emerging** because they can: | Most children will show that they have reached the **expected** level because they can: | Some children will have gone beyond the expected level and will show that they are **exceeding** because they can: |
|---|---|---|
| - Know what the 2Design and Make tool is for.<br>- Name a viewpoint in 2Design and make it whilst designing a building.<br>- Adapt one of the vehicle models by moving the points to alter the shape.<br>- Explore how to edit any 3D model.<br>- Refine one of their designs to prepare it for printing with support.<br>- Print their design as a 2D net and then created a 3D model with support.<br>- Explore the use of 3D printing. | - Explain what the 2Design and Make tool is for.<br>- Explore the different viewpoints in 2Design and make whilst designing a building.<br>- Adapt one of the vehicle models by moving the points to alter the shape of the vehicle while still maintaining its form.<br>- Explore how to edit the polygon 3D models to design a 3D model for a purpose.<br>- Refine one of their designs to prepare it for printing.<br>- Print their design as a 2D net and then create a 3D model.<br>- Explore the possibilities of 3D printing. | - Explain what the 2Design and Make tool is for and why the positives of using it.<br>- Explore the different viewpoints in 2Design and make whilst designing a building and discuss what you have done.<br>- Adapt two of the vehicle models by moving the points to alter the shape of the vehicle while still maintaining its form.<br>- Explore how to edit the polygon 3D models to design a 3D model and present the purposes of your model.<br>- Refine one of their designs to prepare it for printing.<br>- Print their design as a 2D net and then create a 3D model – writing instructions for what you have just done.<br>- Explore and present the possibilities of 3D printing. |

### ASSESSMENT OPPORTUNITIES
Saving to the Purple mash server and look at their final outcome.
Through questioning, asking and answering – regular sweeps of the classroom to look at their programming.

| ENRICHMENT OPPORTUNITIES | SUBJECT SPECIFIC VOCABULARY | CROSS-CURRICULAR LINKS |
|---|---|---|
| Helping children to remember more through sticky learning and a vocabulary recap at the beginning of the lesson. | Designing, undo, review, purpose, template, fix, model, features, document, generated, refine, redo, dimensional, printing, packaging, adapted, job, viewpoints, possibilities, edit, shapes, forms, exploring, model | **Links that we can make to help children make sense of what we want them to know and be able to do.**<br><br>DT- planning, designing and reviewing different creations. |