

Lyng Primary School Knowledge Organiser

Computing

Topic: Computing



3d modelling – How can technology be used in design?

Spring 1

Year 5

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| What Goldilocks and Step On words will I use? | |
| **Spelling** | **Defintion** |
| 2d shape | A flat shape |
| 3d shape | A solid figure with thickness |
| Offset | Allows you to create a shape quickly. |
| Pan | Allows you to view a shape horizontally or vertically |
| Inference points | A system which will lock cursor in any point – reference to any point – edge, axis, face, guide, imaginary line |
| Dimension | Measurement between 2 points |
| Component | Named collection of geometry that can exist at multiple locations within the model. |

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**Aims of this unit**

* Select, use and combine a variety of software (TinkerCad) on a range of digital devices.
* 2d and 3d models with details
* Community buildings to have clear features – roof, wall, door, sign, windows.
* Use TinkerCad effectively to create layers which will be suitable for 3d printing

**Safeguarding**

Filtering and monitoring system is in place. Children will use their own log in details to track any misuse and to protect the child from harmful websites and pop ups. Children will be reminded of how to stay safe online and to use technology safely and respectfully and to tell a trusted adult if there is anything on their computer that makes them uncomfortable. When using the iPads, the monitoring software will track which iPad has been used to enable us to know which class has used the iPad.

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| Outcomes |
| **All children**   * Draw 2d shapes and lines * Draw simple 3d models * Manipulate shapes into 3d shapes   **Most children**   * Use a range of TinkerCad tools * Manipulate 3d models * Use inference points to draw lines and shapes   **Some children**   * Select the correct tools for different features. |

Spring Term

TinkerCad – 3d Modelling

**In this unit…**

The children will extend their drawing skills to create 3d models online and to be printed.

**Agreed outcome:**

A 3d model of a community building