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| **Resources** | **How is it organised and why**  | **Link to EYFS / Research / C of EL** | **Adult Role** |
| **Inspiration*** Pictures of maps, blueprints, interesting buildings, buildings that the children are interested in, etc.
* Non-fiction books about design, architecture and construction
* Map of the world

**Open ended building materials*** Sticks
* Driftwood
* Fabric pieces
* Balsa wood
* Cardboard tubes
* Large buttons
* Stones, pebbles, shells
* Astroturf pieces

**Tools for measuring*** Measuring tape
* Rulers
* Spirit level

**Planning and designing*** IPad
* Labels
* Clip boards
* Pencils
* Graph paper
* Safety goggles
* Hi-vis jackets

**Construction Resources*** Lego, mobile and other construction type materials
* Wooden fences/ farmyard resources
* Train set pieces and trains
* Wooden car park
* Range of Vehicles
 |  Spacious, light filled area with plenty of floor space* Open ended construction materials placed in labelled containers- balsa wood etc.
* Safety goggles hanging up on hooks
* Tools pictured in labelled containers,
* Clipboards and pencils located within easy reach
* Lego and other construction materials placed on open shelves in labelled containers.
* An area designated for “work in progress” with children encouraged to care for ongoing projects.
* Inspiration and reference materials placed on a shelf/ on the wall so children can extend their investigations/creation
 | * Open ended materials provide many possibilities linked to EAD
* Tools for measuring linked to Maths
* Choosing materials to build and construct linked to PSE
* Using different sized material and holding them in place linked to PD
* Using construction resources like Lego require hand muscle strength linked to PD
* Children respect other constructions through the protected “work in progress area” linked to PSE
* Working in close proximity to others, respecting their space linked to PD and PSE
* Planning creations linked to Maths
* Working on large scale construction with others linked to PD
* Using tools safely and appropriately linked to PSE and PD
* Feeling confident in one’s ability to work on something with a purpose in mind linked to PSE, PD,
* Engineering practices- making constructions stable linked to Maths and UW
* Designing structures linked to Maths and UW
* Making comparisons linked to Maths
* Investigating inclines and declines, how things work linked to UW
* Representing their lived experiences through constructing linked to PSE
* Using story books and reference materials of buildings around the world linked to UW and Literacy
* Talking through their ideas linked to CL
* Drawing up ideas linked to Literacy
* Talking through the process linked to CL
* Explaining their product or outcome linked to PSE
* Using technology as a way to communicate their construction linked to UW and PSE
* Recognise environmental print linked to Literacy
* Finding creative solutions to challenges linked to CEL
 | * Focus on children's dispositions of learning i.e. observe the way children approach their learning (characteristics of effective learning)
* Listen and observe how children interact with the environment, the materials and others (peers).
* Allow children the joy of experiencing materials/ resources for the first time.
* Use what you see and hear to reflect with children to clarify ideas.
* View oneself as a co-learner, a knowledgeable other.
* Relaunch materials in a provoking way that targets deep learning, stimulating neural pathways
* Support children with the design process, for example, encouraging children to draw lines on a cardboard box before cutting and so on
* Introduce new techniques to children with purpose rather than novelty
* Encourage children to discover and problem solve through drawing on reference books and so on
* Be there for children to help clarify their thinking/designs
* Foster resilience in children by reflecting together when they are faced design/construction challenge
* Create collaborative "critical" spaces by encouraging children to provide feedback on peers constructions
* Model “thinking out loud” investigative language…
* *I wonder…*
* *I think…*
* *It could be…*
* *Maybe if I…*
* *How did you think of that?*
* *What makes you think that?*
* *I didn’t think of it in that way, could you explain your idea further?*
* *That has got me thinking…*
* Some of the key vocabulary may include:
* *Create*
* *Design*
* *Decision*
* *Choice*
* *Structure*
* *Stable*
* *Hold/ squeeze*
* *Direction (Up/down/above)*
* *In/out*
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