





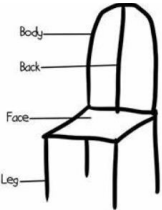
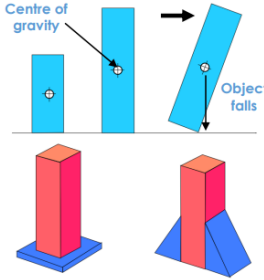

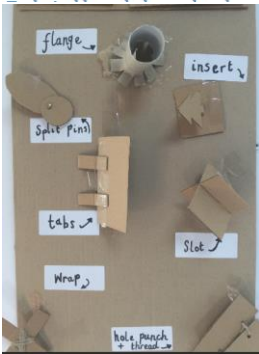
Springdale First School




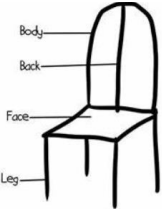


Imagine, Believe, Achieve

Year 1 Design and Technology -

★ Children's prior learning in this area	★ Cultural Capital Opportunities	★ Key vocabulary and glossary
<p>Select and use tools to cut and shape paper.</p> <p>Junk modelling.</p> <p>Joining materials/techniques – sellotape/masking tape/hole punches/staples/squeezeie scissors.</p>	<p>Study of stable structures.</p> 	<p>Structure – a building or objects that has been constructed.</p> <p>Construct – to build or make something.</p> <p>Stable – an object not liekly to fall or break.</p> <p>Sturdy – strong or solidly built.</p> <p>Freestanding – standing alone without needing to be held up or supported.</p> <p>Butress – wider base on a structure to support freestanding.</p> <p>Design – to plan something before making it.</p> <p>Evaluate – how did something work.</p>

Enquiry Question – What is a structure?	Enquiry Question – How are these structures stable?	Enquiry Question – How can I join materials together?
Concept - Enquire 	Concept - design 	Concept – make 
<p>Children will know what a freestanding structure is.</p> <p>stickily knowledge</p> <p>R&R – What sort of things have you built that stand up alone?</p> <p>Explore different freestanding structures through visuals – discuss with the children what freestanding means and how they can identify a freestanding structure.</p> <p>Focus on different chairs and look at how they are freestanding.</p> <p>Task:</p> <ul style="list-style-type: none"> • Practise - On tables chn can explore different structures (toys/models/games) – which ones stand alone? Which ones fall over easily? • Apply - Chn to sort objects into freestanding and not freestanding. • Deepen – explain why objects are/are not freestanding. 	<p>Children will know what makes a freestanding structure stable.</p> <p>stickily knowledge</p> <p>R&R – What is a freestanding structure? How do you know?</p> <p>Discuss sorting last lesson and how chn know that a structure is freestanding.</p> <p>Focus on chairs – link to Goldilocks?</p> <p>Task:</p> <p>Explore ways in which a structure can be made more stable/sturdy.</p>  <p>Practise - Model a falling object – adding a buttress/platform under to support it.</p> <p>Introduce vocab sturdy/stable/buttruss/wider base.</p> <ul style="list-style-type: none"> • Apply - Through junk modelling, chn to explore making objects more stable by adding supports in. • Deepen – chn to explain why they become stable. 	<p>Children will know different joining techniques and how they will support their structure.</p> <p>stickily knowledge</p> <p>R&R – What can be used to make a freestanding structure more sturdy?</p> <p>Refer back to junk modelling in rec – what sort of things could we use to join materials together?</p> <p>Show children how to join sheet materials and reclaimed boxes together using different tapes and glues.</p>   <p>Task:</p> <p>Practise – model different joining techniques (flange) – masking tape/glue/sellotape/split pins/paper clips – to join the structure and make it more sturdy.</p> <p>Apply - They will investigate which method is stronger.</p> <p>Deepen – which technique worked well – explain why.</p>

Enquiry Question – What will my freestanding structure look like?	Design a freestanding structure.	Enquiry Question – Was your product fit for purpose?
Concept – design 	Concept – make 	Concept – evaluate 
<p>Children will know how to design their product using a design criteria.</p> <p>sticky knowledge</p> <p>R&R – What is a free standing structure and how does it stand up?</p> <p>Talk to the children about what their structure must have/be in order to be freestanding. Look back at different chairs.</p> <p>Ensure joining techniques and materials are included.</p> <p>Practise - Using a design criteria (flip) model drawing & labelling a design of their chair.</p>  <p>Apply – children to design their own freestanding chair.</p> <p>Who will your product be for?</p>	<p>Children will follow their design to make their product using the tools/materials/techniques selected.</p> <p>sticky knowledge</p> <p>Give children time to look at their design and gather the correct materials/tools/joining materials ready to make their chair.</p> <p>Apply - Following their design, children to make their product. Discuss and bubble up when questioning the children about the techniques used and why.</p>	<p>Children will evaluate their product against the design criteria.</p> <p>sticky knowledge</p> <p>R&R – Give me 5! Tell me five things you know about freestanding structures.</p> <p>Children to test out their product – is it fit for purpose?</p> <p>Practise – test out product – is it fit for purpose? How do you know?</p> <p>Apply – Evaluate product against design criteria – look at a checklist together then children can fill it out according to their product.</p> <p>Talk about what went well and what might be improved.</p> <p>Deepen – Explain what went well and why and then what might be improved and why.</p>