

Curricular Area: Craft, Design and Engineering Level: 2



<p><u>Experience and Outcomes</u> TCH 2- 14a. Through discovery and imagination, I can develop and use problem solving strategies to construct models.</p> <p>TCH 2-14b. Having evaluated my work, I can adapt and improve, where appropriate, through trial and error or by using feedback.</p> <p><u>Learning Outcome</u></p> <p>Pupils can design a structure and identify appropriate resources in the outdoor environment to construct it. If pupils cannot find the resources they need, they can adapt their design according to whatever resources they find. If the design proves not possible to build, they can adapt the design to make construction possible.</p>	<p><u>Resources</u></p> <p>Knowledge of design from Tinkercad (3D modelling software).</p> <p>Materials from the playground: leaves, sticks, cones, stones, wood...</p> <p>Items from the toy store: hoops, tarpaulins, ropes...</p> <p>Items from home: material, string or things found on the floor on nature walks.</p> <p>(Not allowed to pick plants, break branches from trees, destroy any living things)</p>
<p><u>Activity</u></p> <p>Pupils have all created a model design in Tinkercad. They are now going to see if they can find materials in the school grounds to build this model. Pupils are to think about the scale of their model, the shapes that they have created and what materials they may need to build it. They also have to think about whether or not the shapes will support each other.</p>	<p><u>Assessment</u></p> <p>Pupils (and teacher) must review whether the structure resembles the original design. Explain whether any problem solving was needed to achieve the design. If it is different, pupils should explain what changes have been made and why they were needed and what impact those changes had on the design? Were any improvements needed to the design? If so explain.</p> <p>(provide pupils with an evaluation sheet at the end of the task so they can respond to these questions)</p>

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