





Sample activity to develop materials management skills

This resource was developed as part of an Applied Technology 2020/2021 CPD webinar "Developing Project Management Skills in Applied Technology" which took place on the 2nd November 2020. All materials used during this webinar can be viewed in the Technologies section of <u>www.jct.ie</u> within the Elective Workshops tile.

Website Link:

https://www.jct.ie/technologies/cpd_supports_applied_technology_elective_workshops

During the webinar, attendees considered the purpose of developing materials management skills as part of a project management process. The learning experiences below showcase an Applied Technology teachers' approach in providing opportunities for students to develop project management skills. These tasks explore how students can develop their understanding of material use and efficiency in Applied Technology.

What is included in this PDF?

Included in this resource are suggested sample activities focused on developing an understanding of material use and efficiency in Applied Technology.

• Material Efficiency- Sample Activities

A big thank you to the teachers and students involved for making this resource available to the JCt4 Applied Technology team.

Note: It is recommended that you watch the Elective webinar to contextualise the purpose of this resource

Junior Cycle Applied Technology Material Efficiency – Sample Activities



Tasks

The suggested tasks in this resource explore ways to engage students in developing their understanding of material use and efficiency in Applied Technology.



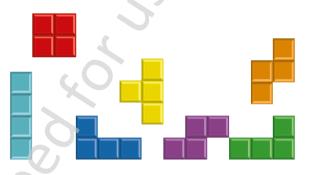
Class Discussion

- How can we be more efficient when using materials and components?
- Students could share their ideas and collaborate in class discussions remotely using a class Padlet. <u>Video: How to Teach Remotely with Padlet</u>



Suggested Tasks:

• Use the game Tetris to demonstrate material efficiently within a defined space This might be particularly useful if using recycled material or offcuts.



See the link: https://tetris.com/play-tetris

- Demonstrate marking a range of difficult or irregular shapes for drilling, cutting and the sequence in which to carry out these manufacturing processes.
 - Focus on identifying and minimising waste sections.
 - Focus on H&S guidance in clamping and supporting materials for drilling and cutting.
 - Demonstrate how we might use prototypes, developments, and nets to transfer material dimensions to a chosen material.

Class Discussion

• Discuss the environmental impact of our material choice? Focusing on the sustainability principle of Reduce, Reuse, Recycle.

