Tinkercad self-directed resource

This resource is a non-linear approach to exploring and developing skills within the Tinkercad software. This resource is designed to emulate and support an online elective CPD event which took place around this software package in term one of the 2020/2021 academic year.

What is Tinkercad?

Tinkercad is a cloud-based CAD software which may serve as an ideal introductory CAD software for Junior Cycle students as it encourages 3D modelling, without the need for 2D sketches.

How is this resource structured?

This resource is structured into 3 Microsoft Forms supported by a CPD booklet which aims to develop knowledge and proficiency in the Tinkercad software, while also considering how this software could contribute to the overall student experience in Junior Cycle Graphics.

Part 1   *Introduction to Tinkercad*
Part 2   *Grouping and ungrouping solids*
Part 3   *Control, accuracy and added features*

More detail on what is covered in each part and accompanying links to the Microsoft Forms can be found on the next page.

How do I know where to start?

On the following page you will find the main information covered in each part. Choose an appropriate part which will match your prior experience with Tinkercad. This resource is non-linear and can be engaged with however you see fit.
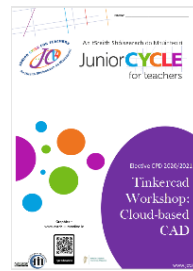
How can I best engage with the resource?

To best engage with the resource, you should have an account with Tinkercad and use the software in tandem with the Microsoft Forms. It is also recommended that you have a copy of the CPD booklet which is referenced in the resource.

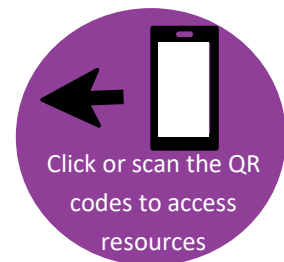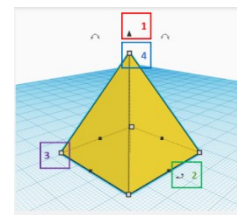To register for your free Tinkercad account, click the icon below.

CPD booklet

This CPD booklet is designed to scaffold engagement with the Microsoft Forms. The Booklet is referenced directly in "Part 2" and "Part 3" and is an essential support for those parts.

Part 1:

Part 1 is a basic introduction to Tinkercad. Topics which will be explored in this part are:
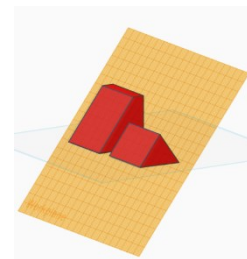
- Tinkercad signup process
- Tinkercad dashboard
- Tinkercad workspace
- Manipulating solids
- Changing viewing orientation
- Changing colour of solids

Part 2:

Part 2 focuses on grouping of solids to create more complex solids. Topics which will be explored in this part are:

- Grouping solids
- Ungrouping solids
- Rotation of solids
- Manipulating the 'Workplane'
- Importing files
- Exporting designs
- Sending designs to other software

Part 3:

Part 3 focuses on control, accuracy, and additional features within Tinkercad. Topics which will be explored in this part are:

- Organising designs within Tinkercad
- Editing the workspace
- Proportional enlargement and reduction
- Aligning designs
- Using the 'Ruler'
- 'Duplicate and Repeat' command
- Tinkercad Classroom