



Considering Prior Learning

This resource was developed as part of a Graphics webinar which aired on the 1st of April 2020 and can be viewed on jct.ie within the CPD supports tile under the elective workshops tab.

Webinar Link:

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



This webinar entitled “*Graphics in Action*” focused on how two teachers developed a unit of learning with a focus on the rationale as a lens to move forward. Throughout the webinar the teachers involved discuss the thought process which went into the teaching and learning of the unit. As part of this process the teachers outlined the relevant prior learning that students engaged with leading up to this unit of learning.

What is included in this PDF?

1. Prior learning handout

Included in this PDF is a single A3 page which encompasses some of the main relevant learning that the students have engaged with throughout the course of the year. This page was developed by the teachers involved as a recap for the students prior to engaging with this unit of learning.

Important note: This page was developed for the purpose of recapping prior learning and was not part of the unit of learning or outlined within the unit plan.

A big thank you to the teachers involved for making these resources available to the JCT4 team.

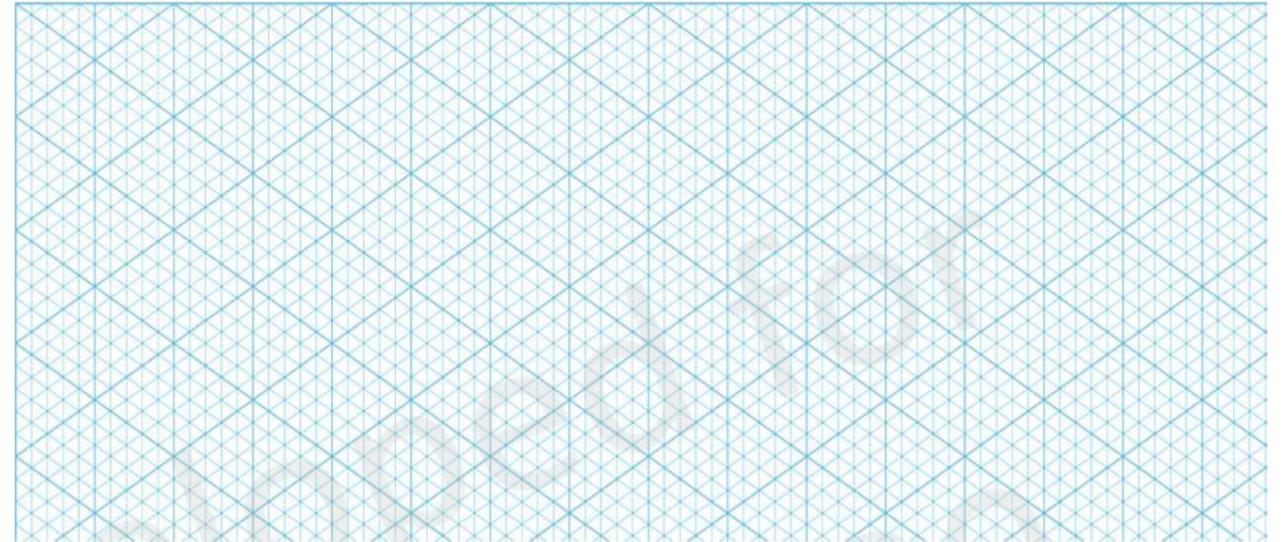
Note: It is recommended that you watch the webinar in conjunction with using this resource to contextualise the resource and make a better connection between prior learning and the unit of



1. Shown is a picture of the **Giant's Causeway** which has a tessellating pattern of hexagonal faces.

- Construct a regular hexagon and outline using annotations the main features of this polygon.

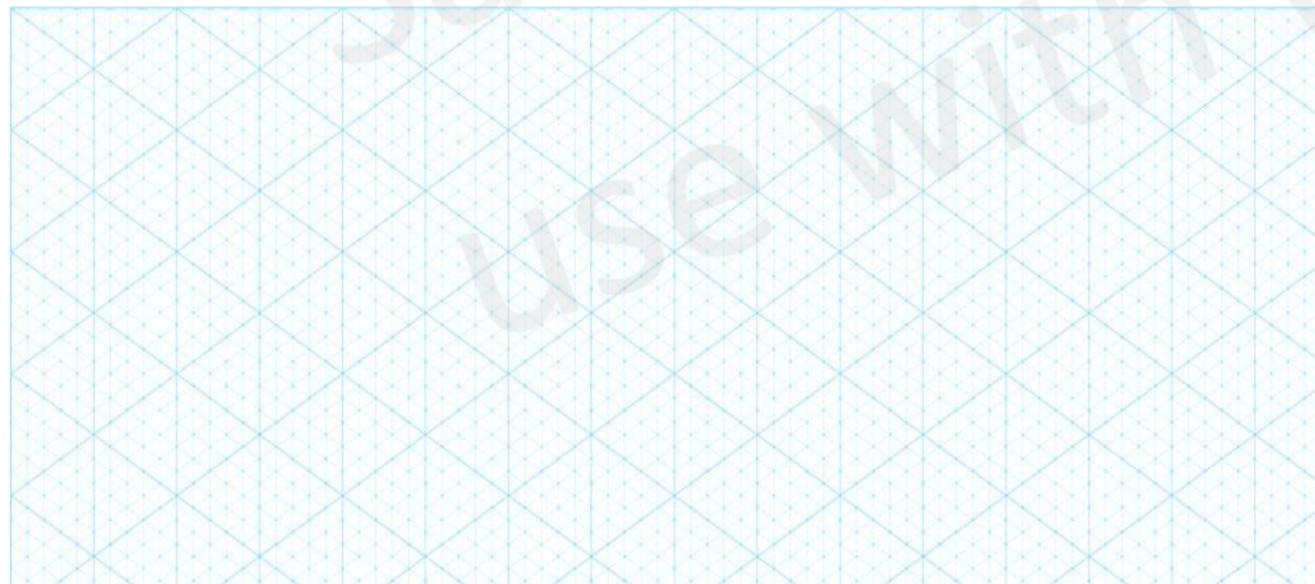
2. Sketch the main geometric object found in the Giant's Causeway. Sketch another geometric object which has at least 5 faces. Model both these objects using CAD.



Outline in the space below 2 CAD commands which will be needed to create the sketched object.

3. Using **prisms** create a design for a **cup**. The design should show the following:

- At least 2 types of prisms used in the design
- Have an height of 120mm or smaller
- Annotated to show all main dimensions and prisms used.
- Colour and/or shading



Prisms are...

4. Using your sketched design create a scaled orthographic projection of your cup. A space is provided on the right to sketch your solution. Project an elevation, plan and end view. Shown below is the xy line.

Sketched Solution

x

y

Create a full-scale CAD model of your finished orthographic projection.

Scale 1:2