

Name: \_\_\_\_\_

Date: \_\_\_\_\_

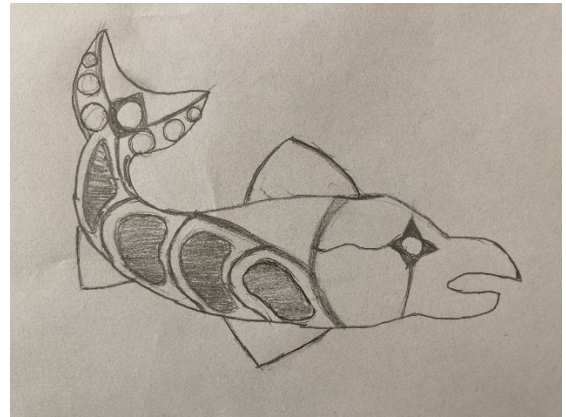
**Learning Goal 5.1**

I can graph integral coordinates in the four quadrants.

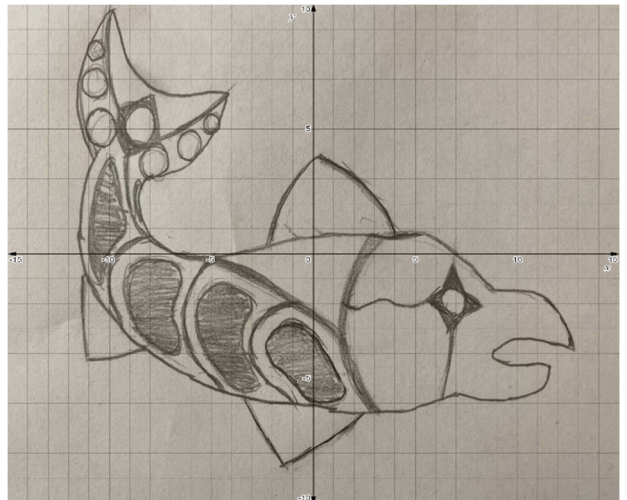
In this project you will be reinforcing your knowledge linear patterns, tables, and graphing co-ordinates by creating a piece of artwork in Desmos.

**Step 1: Retrieve the picture from your Outlook account.**

We are going to recreate a piece of art made especially for us by a Burnaby South student, Kiki DesJarlais. I have emailed the whole class the picture we are going to be recreating. It is in your school email account:  
student#@edu.burnabyschools.ca

**Step 2: Insert the image into the graphing software at desmos.com**

- Leave the picture where it is inserted.
- Change the following features of the photo
  - width to 22.5
  - height to 30
  - angle of  $\pi/2$  or another angle if you prefer!
- Log into desmos by either making an account or using an existing google account so that you can save your work (the green button on the top left of your screen).
- Save your work!

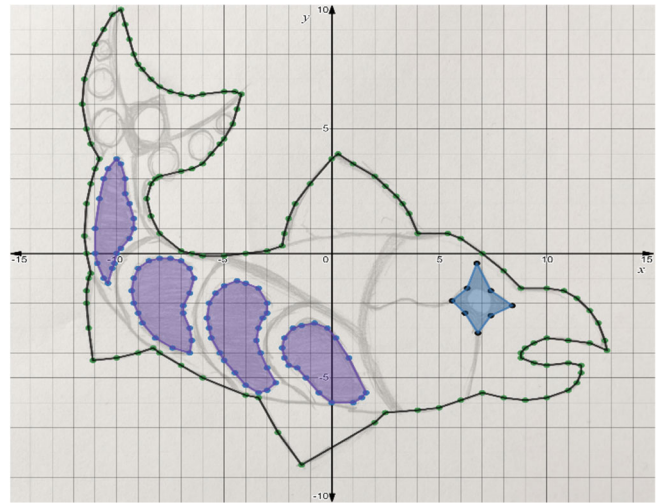


**Step 3: Create the design in Desmos**

Draw your shapes first by creating a table (type table in the command line). Then use the polygon function (e.g.  $\text{polygon}(x_1, y_1)$ ).

**Tips:**

- Use folders to store different parts of your drawing. That way you can keep it organized.
- Create the polygon at the same time as the table, then you can make sure your points are going in the right order!
- Start with a small shape to get the hang of the process – the full outline is going to be a big table!
- Pick a direction to move around the shape and don't switch directions!
- If you left click on a feature (table or polygon) you can change the attributes of that feature.
- Zoom! It will help you find more accurate points! But not too close or you'll never finish ...

**Step 4: The Finale**

Export your Desmos design (without gridlines or axes – use the wrench icon on the top – right of the screen). Colour it in a way that makes your heart happy.

**Tips:**

- Turn 'off' the picture before you export.
- Export your work as a **large square or rectangle** with the lines at medium weight.
- Insert the picture into a word document, in a landscape layout.
- Type your name off to the side and email Ms. L your file for printing.

**Make sure you hand in:**

- a printout of your final product (coloured) and
- self assessment

**Make sure you email your desmos link to Ms. L**  
**[stephanie.langille@burnabyschools.ca](mailto:stephanie.langille@burnabyschools.ca)**








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**Self-Assessment****Reasoning and Analyzing**






- The design should resemble the original picture
- The level of detail is challenging, and work shows signs of creativity. This will show in the number of points used to create each of your shapes.

		Emerging	Developing	Proficient	Extending
How did you do?					
Reasoning and Analyzing					
<ul style="list-style-type: none"> <li>• How would you rate your reasoning skills for this task?</li> </ul>					

Explain your rating. What are you proud of? Is there anything you would do differently next time?

**Communicating and Representing**

- Your recreation should include the full outline of the fish, plus **at least 3** of the internal features.
- Any features that are not added in desmos need to be added by hand after you have printed your recreation.
- Work is neat and easy to read.
- Finished product is neat, coloured and well presented.

		Emerging	Developing	Proficient	Extending
How did you do?					
Communicating and Representing					
<ul style="list-style-type: none"> <li>• How would you rate your communication skills for this task?</li> </ul>					

Explain your rating. What are you proud of? Is there anything you would do differently next time?