




DRAWING – ELIIPSES and VIEWPOINT

PRIOR LEARNING -about ellipses and viewpoint

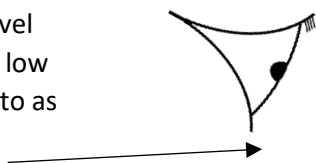
An ellipse looks like a squashed circle but it can also look like a circle that is tilted away from or towards us. In the example below this New Zealand One Dollar coin looks more like a circle when it is flat in front of us. As it spins the circle becomes an ellipse until we only see the edge and then the ellipse begins to ‘un-squash ‘ as we begin to see more and more of the other side. There is a special mathematical formula for an ellipse



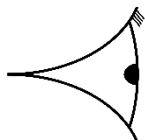
An ellipse	Not an almond shape	Not an oval
A tilted or squashed circle	‘Eye’ shape with pointy ends	A racetrack shape
<div>✓</div> 	<div>✗</div> 	<div>✗</div> 

Viewpoint is the height and angle from which an artist draws their objects and this relates to where the horizon line.

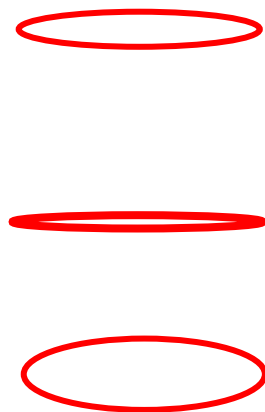
High viewpoint = above eye level looking up at the tin can. Very low viewpoints are often referred to as ‘worm’s eye view)



Viewpoint = eye level at the middle



Low viewpoint = below eye level looking up at the tin can. Very low viewpoints are often referred to as ‘worm’s eye view)



https://commons.wikimedia.org/wiki/File:Eye_symbol_lateral.svg – can and coin images authors’own.

Looking at examples of ellipses in art.

Look at artworks that use ellipses and different viewpoints. Discuss what viewpoint the subject matter is drawn from, what makes you think this and how realistic this looks. Make thumbnail sketches or use photocopies of the works to trace the ellipses you see.



Left – thumbnail of a painting by Hannah Hoch 'Glasses'

Other artists that also use ellipses in still life arrangements are Giorgio Morandi, Cezanne, Patrick Caulfield

Alternatively many still-life examples online can be found that incorporate ellipses

Practical task - observing:

- 1) Get a small box and place 2- 3 cylindrical objects like jars, tin cans or mugs inside. Black paper can be used for the background and white for the surface the objects sit on.
- 2) Observe what happens to the; horizon line (where the back wall and surface meet and the ellipses of the cylinders (see images below)
- 3) Do some experimenting with cylindrical and square objects by moving around them and discussing what you observe.

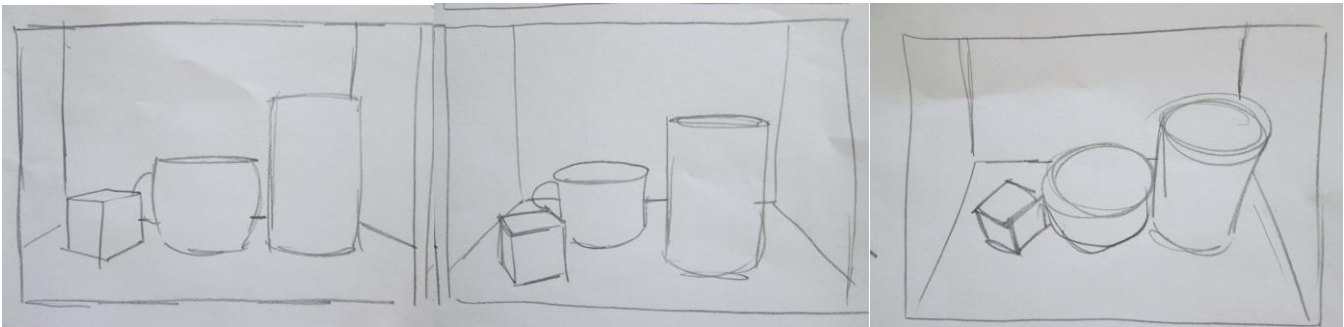


Practical task - Recording ellipses from observation –



As a warm up exercise students could trace from still life photographs of a box or draw from one set up before them with 2-3 simple objects.

Explain that these drawings are detective work and are not intended to be beautiful, fully resolved artworks. Sketches like this are to learn about drawing.



Students can draw a series of simple line images from the still life beginning with the horizon-line and ellipses from a range of different viewpoints. See if they can arrange their drawings from low to high viewpoint angles individually or as a group.

Drawing a resolved still-life using ellipses

Now investigate online tutorials about drawing using ellipses and shading with students and experiment with shading techniques such as cross-hatching..

Get students to select 1-3 cylindrical objects and arrange them on a table so the back edge of the table acts as a horizon line (they could also bring objects to school or complete at home)

Try drawing this arrangement with some shading.

Details beyond the horizon line could be included or students could experiment with a dark/light tone to contrast with objects.

