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CS330 M1-4  
***Selected 2D Image: Items on a Desk***

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**Items on a Desk: Breakdown into 3D Shapes**

For this image, I identified five major objects that can be translated into basic 3D shapes:

1. **Coffee Cup**: The coffee cup can be represented by a **tapered cylinder** for the body and a **torus** for the handle. The cup’s foam art could be simplified as a **plane** with a texture.
2. **Glasses**: For the glasses, I would use two **tori** for the lenses and **cylinders** for the arms of the glasses.
3. **Notebooks**: The stacked notebooks can be simplified with **boxes** to represent each individual notebook. A **cylinder**would work for the spiral binding on the top notebook.
4. **Pencils**: The pencils would be represented by **cylinders** for the body and **cones** for the tips.
5. **Pine Cone**: The pine cone can be simplified by using a **cone** as the main body with smaller **spheres** to represent the scales.

The coffee cup’s handle and the spiral binding of the notebook both require multiple shapes to accurately represent them. The cup handle uses a torus for the loop and the tapered cylinder for the body, while the spiral binding involves small **cylinders** along the top of the notebook.

To simplify this scene in 3D, I could reduce the detail on the pine cone by using fewer spheres or simplify the spiral binding on the notebook into a single continuous shape instead of individual loops.