**Scale Diagrams Activities**

**Option 1: Caricature**

1. **Draw a caricature of your partner’s face on graph paper**
   1. **Make sure the eyes, ears, nose, eyebrows, and mouth are in the picture**
2. **Use scale factors to make enlargements and reductions to the parts of the face listed above**
   1. **Enlarge the eyes by a factor of 2**
   2. **Reduce the ears by a factor of 2/3**
   3. **Reduce the nose by a factor of ¾**
   4. **Enlarge the eyebrows by a factor of 2**
   5. **Enlarge the mouth by a factor of 3/2**

**Option 2: Floorplan**

1. **Decide on the real-life dimensions of the room that you would like to design and choose a scale factor so you can draw the room on graph paper**
   1. **Show your calculations on the back of the page**
   2. **Label the dimensions of your diagram**
2. **Decide on the real-life dimensions of three to five important pieces of furniture for the room and apply the scale factor that you chose in part 1 to find the dimensions for the graph paper. Draw these items in your scale diagram.**
   1. **Show your calculations on the back of the page**
   2. **Label the dimensions of your diagram**