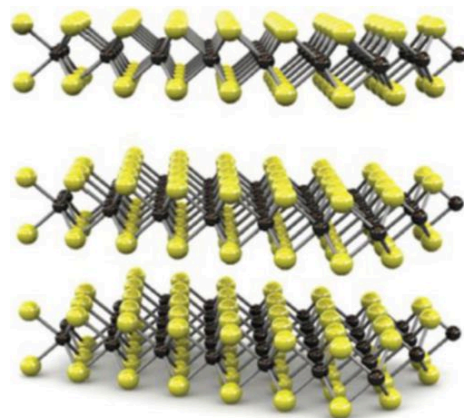




Molybdenum disulfide (MoS₂)

Molybdenum disulfide has a more complex structure with two types of atoms, molybdenum (Mo) and sulfur (S) in a S-Mo-S sandwich. It can also conduct electricity and even emit light!

1. You will need toothpicks, and two colors of marshmallow to represent Mo and S atoms.
2. Take 3 marshmallows (for S) and place them on the template below.
3. Take 3 toothpicks and connect these with a common marshmallow (for Mo) on top, like a tripod. Move the tripod aside.
4. Take 3 marshmallows (for S) and place them on the triangular template below. Flip the tripod you made in step 2 upside down, and take 3 toothpicks to connect the Mo marshmallow to the 3 S marshmallows below, making sure that the S marshmallows are directly above each other. You've now made kind of a double-tripod with the Mo in the middle.
5. Take 1 marshmallow (for S) and place it on the template next to the double-tripod, and use two of the S marshmallows from step 4. Connect them to a new Mo marshmallow using 3 toothpicks. Flip this structure upside down.
6. Take 1 marshmallow (for S) and place it on the template next to the existing structure, and take 2 toothpicks to connect to the structure from step 5 to the Mo marshmallow.
7. Repeat steps 4-6 to expand the structure.
8. You've just made a model of MoS₂!





MoS₂ Template

Print this page out and place the S marshmallows on the circles:

