POW!!

Week beginning 01.03.21

Air nets

You will see the mathematician attempt to assemble the net into a solid 3D shape, sometimes successfully and sometimes unsuccessfully.

Before watching the mathematician fold each net, consider these questions:

1. Can you imagine folding the net up into a solid shape?

2, Do you think that the net will fold into a shape with all sides clicked together?

3. Can you imagine the shape of the final solid if the net does indeed correctly fold together?

As you watch the mathematician fold each net, consider these questions:

1. Were you correct? Was the result a surprise in any way?

2. Try again to imagine how the shape folded together.

3. Draw an accurate drawing of the net. Can you see which sides joined together? Can you indicate this clearly on your diagram?

Link for the Video: https://youtu.be/p7gkitKJefQ

If you have access to Polydron, try building each net and replicating the final solid, where one was created.

1. Could you make a solid shape from the net in the cases where our mathematician failed, or is it actually impossible to make the net into a solid shape?

Finally, consider the mathematical properties of the nets:

1. How might you be able to look at a net and be certain that the net will not fold up into a solid?

2. How might you be able to be certain that the net will fold up into a solid?

In what cases might you be unsure as to whether or not a net will fold up correctly?

3. Can you give a good set of conditions for a net being a good possible

candidate for folding up into a solid?