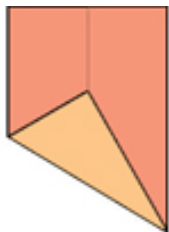## MAKING SIXTY

Why does this fold create an angle of sixty degrees?

Make a centre crease down the length of the paper then open it up.

Next fold one corner over and onto the centre crease so that the fold line passes through the corner next to it (on the short side of the paper).

You have created some angles of 60 degrees and of 30 degrees.

Can you prove this?

Now fold a square in half in different ways. What do you notice?

HELP

Draw and cut out an equilateral triangle.

Fold IT along a line of symmetry.

Work with a partner. Talk about how the line of symmetry splits the equilateral triangle into two congruent 30-60-90 degree triangles.

Look at your triangle in different orientations as you turn it around.

Does this help you to explain why the angle is 60º in the Making Sixty paper folding?
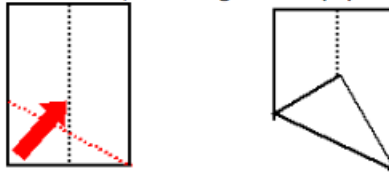
NEXT

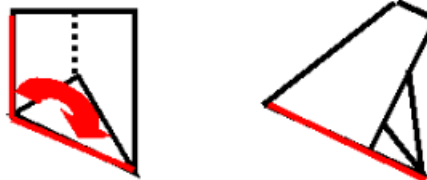Follow on by utilising this fold to make equilateral triangles.

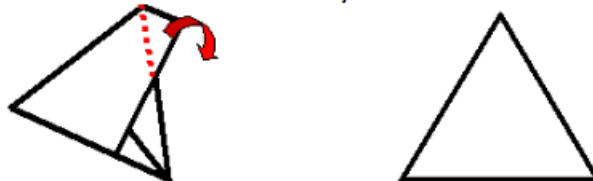1. Fold the paper in half long-ways, then open it out flat.

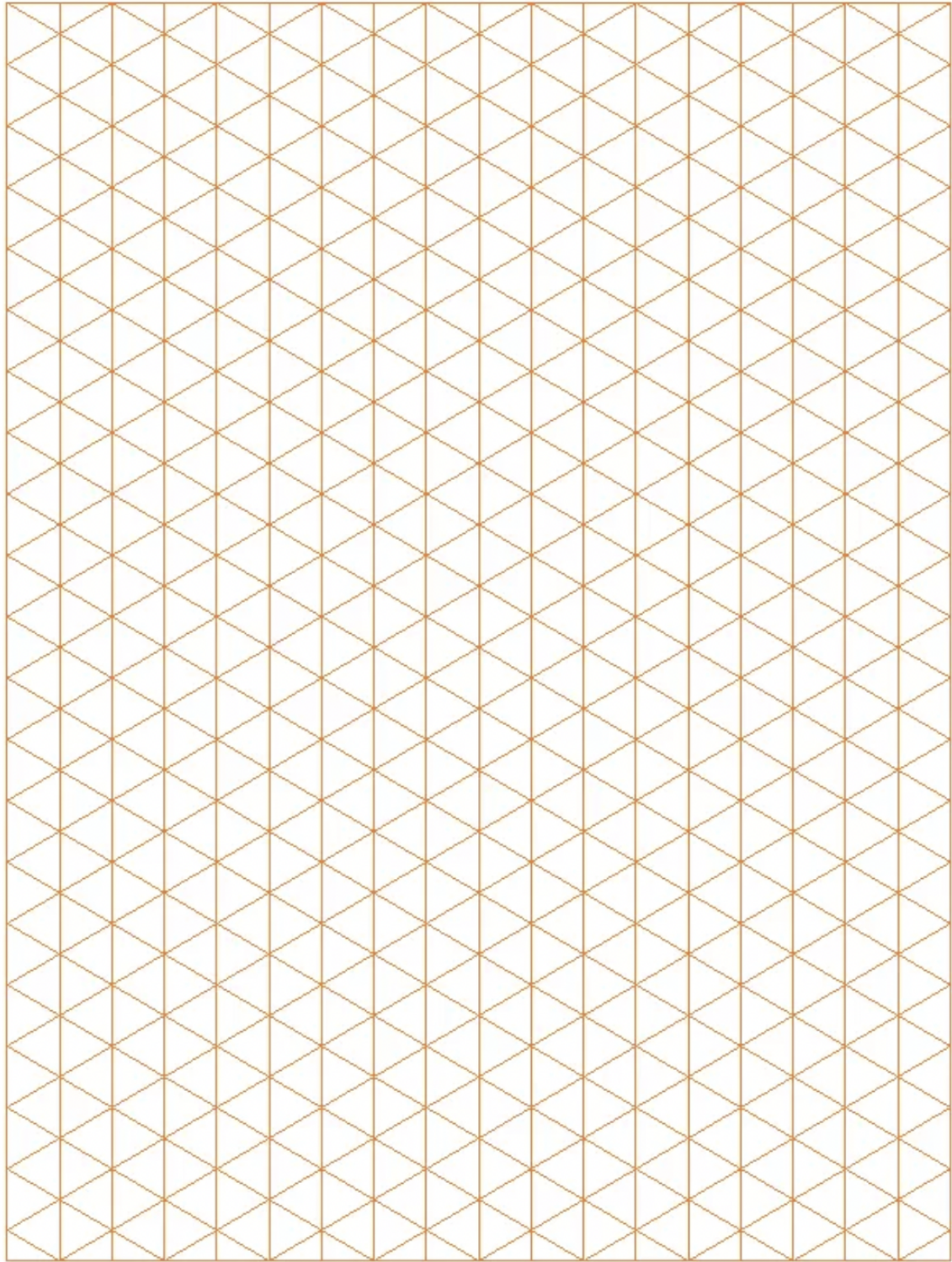2. Fold a bottom corner up to touch the fold line, making a sharp point on the other corner.

3. Now fold the two RED edges together.

4. Fold under the corner and then tuck it in out of the way. Turn over to the smooth side.

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