**Sequence 3**

Maybe choose a different colour for this sequence. You might want to hide any construction lines and circles but keep the original points H,A,B,C (the orthocentric set) and the 4 triangles.

Using the same diagram as before: construct the 4 circumcentres. There are now lots of right angles around so you might not be surprised that these 4 circumcentres form an orthocentric set for 4 triangles that you have not drawn.

Construct the 4 triangles.

Test what you see by wiggling a vertices to get extreme or special cases.

You might wonder about medial circles too. Draw the medial circle for one of your 4 new triangles.

Test what you see to extreme cases.

Convince?

Save your work and start a new file for the next sequence.