

## SYMMETRY AND TESSELLATIONS: SUGGESTIONS FOR SUPPLEMENTARY INVESTIGATIONS

WEB SITE	DESCRIPTION	VALUE
Activity 2	<i>SymFace</i>	1/2 point
Activity 2	butterfly patterns	1/2 point
Activity 2	symmetrical traffic signs	1/2 point
Activity 3	ambigram using <i>Ambigram Generator</i>	1/2 point
Activity 4	symmetrical flags	1/2 point
Activity 5	symmetrical hub caps	1/2 point
Activity 5	symmetrical logos	1/2 point
Activity 6	paper chain (christmas, dinosaur, halloween, or animal)	1/2 point
Activity 7	3 tangrams (pieces cut with Ellison die)	1/2 point
Activity 8	snowflake patterns	1/2 point
Activity 9	paper & scissors polygon (other than pentagon or hexagon)	1/2 point
Activity 12	use of kirigami applet	1/2 point
Activity 12	<i>MaKe-a-Flake</i> printout	1/2 point
<b>Activity 12</b>	<b>origami, kirigami or teabag folding</b>	<b>1 point</b>
Activity 12	<b>bonus:</b> superior origami, kirigami and/or teabag folding	1/2 point
Activity 17	kaleidoscope from a potato chip can	1 point
Activity 27	tessellating sponge printing	1 point
Activity 29	wallpaper patterns	1/2 point
Activity 29	geometrical analysis of two new Escher tessellations	1/2 point
Activity 30	tessellating t-shirt from printable Iron On T-shirt transfer	1 point

# POLYHEDRA AND TOPOLOGY: SUGGESTIONS FOR SUPPLEMENTARY INVESTIGATIONS

## POLYHEDRA

WEB SITE	DESCRIPTION	VALUE
Activity 3	gumdrop/mini-marshmallow & toothpick cube	1/2 point
Activity 3	flexible straw icosahedron	1 point
Activity 3	straw & pipe cleaner icosahedron	1 point
Activity 4	colored porpoise dodecahedron	1/2 point
Activity 4	<i>TesselMania! Deluxe</i> polyhedron	1 point
Activity 4 / 28	planetary icosahedron	1 point
Activity 4	paper photocube	1 point
Activity 11	origami balloon globe	1 point
Activity 11	<i>Photuki</i> cube	1 point
Activity 12	butterfly ball	1 point
Activity 13	pop-up calendar from Ellison die	1 point
Activity 15	Christmas Tree Decoration (stella octangula)	1 point
Activity 15	Escher stellated octahedron	1 point
Activity 16	sonobe stellated icosahedron (30 units)	1 point
Activity 16	sonobe cube using a different unit (provide instructions)	1 point
Activity 17 / 18	Ellison elastic geometrics model with extra panels	1/2 point
Activity 26	hexagonal or octagonal <i>photo kaleidocycle</i>	1 point
Activity 27	folding & unfolding cube using wooden blocks	1 point
Activity 27	rhombic dodecahedron calendar	1 point
Activity 29	geodesic clubhouse (photograph with yourself)	1 point

## TOPOLOGY

WEB SITE	DESCRIPTION	VALUE
Class 19	superior quality anamorphic art using polar grid	1/2 point
Class 21	superior quality perspective drawing	1/2 point
Class 22	original Jordan curve maze	1 point
Class 23	topological puzzles	1 point
Class 24	<i>flexifier</i> tetra-tetra-flexagon	1 point
Class 24	<i>hexaflexagon toolkit</i> hexa-hexa-flexagon	1 point