

## Answer Key - Conclusions

1. To describe a rotation, it is necessary to give the center of rotation and the angle of rotation.
2. Designs will vary.
3. Designs will vary, but all will have 3-fold symmetry.
4. Designs will vary.
5. The center of rotation will always be in the center of the figure.
6. To determine the order of the center of rotation, find a region that is repeated over and over to give the whole design and count how many time it occurs. Alternatively, find the smallest angle you can rotate the figure through so that it remains unchanged; divide the measure of this angle into  $360^\circ$  and the resulting number will be the order of the center.
7. Every rotation about the center of a circle will be a symmetry of the circle.