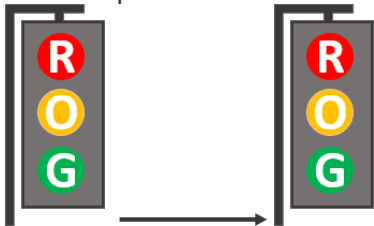# Transforming traffic lights
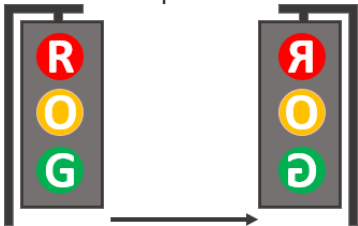
This task is about properties of shapes that change or don't change under transformation.
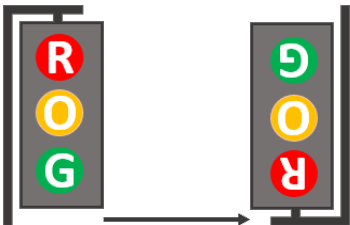The picture of traffic lights was given to 4 students.

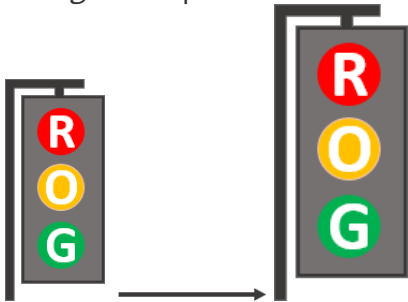

a) Pete *translated* the picture.

b) Hoani *reflected* the picture.

c) Jemma *rotated* the picture 180°.

d) Maria *enlarged* the picture.

Complete the table below to show which properties are ***invariant*** (do not change) and which properties change under each of the transformations. *[Select invariant or changes]*

Invariant Properties			
Transformation	*Length*	*Area*	*Angle Size*
a) Translation	*invariant / changes*	*invariant / changes*	*invariant / changes*
b) Reflection	*invariant / changes*	*invariant / changes*	*invariant / changes*
c) Rotation	*invariant / changes*	*invariant / changes*	*invariant / changes*
d) Enlargement	*invariant / changes*	*invariant / changes*	*invariant / changes*