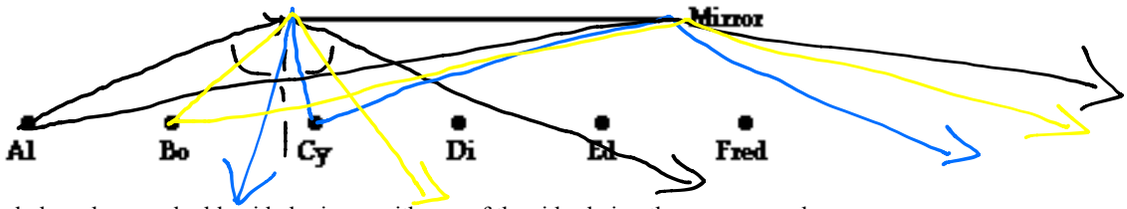
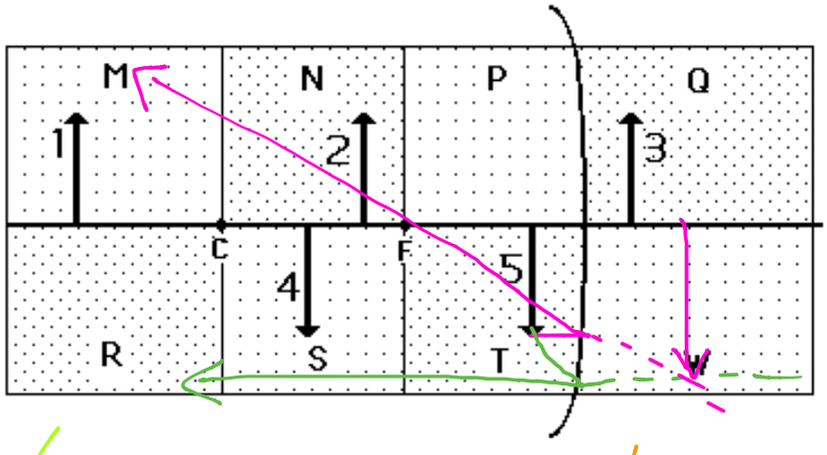
Mirror Reflection: Challenge Questions

Six students - Al, Bo, Cy, Di, Ed, and Fred sit *in front of* a plane mirror and attempt to see each other in the mirror. Answer the following questions: Who can Al see? Who can Bo see? Who can Cy see? Who can Di see? Who can Ed see? And who can Fred see?



The diagram below shows a double-sided mirror, with one of the sides being the concave and one being the convex side. The principal axis, focal point, and center of curvature are shown. The region on both sides of the mirror is divided into eight sections (labeled M, N, P, Q, R, S, T, and W). Five objects (labeled 1, 2, 3, 4, and 5) are shown at various locations about the double-sided mirror. Use the diagram to answer the question.



What section would the image of each object be located?

The image of object 1 would be located in section _____. S/R

The image of object 2 would be located in section _____. R or P

The image of object 3 would be located in section _____. Nowhere

The image of object 4 would be located in section _____. M

The image of object 5 would be located in section _____. W