Box System Modification Instructions

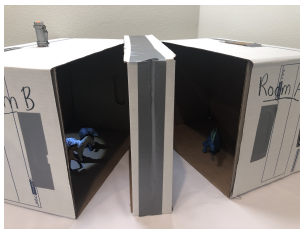
Materials needed for each box system (multiply by 6 for a class set):

- box system with 3 toys in Room B and 1 toy in Room A
- 1 2"-x-2" piece of cardboard or dark paper to cover the hold in Room A
- 1 box cutter
- packing or duct tape
- 1 flashlight, cylindrical shape

1. Cut a hole for the flashlight on top of Room B and add the flashlight. The hole should be about ⅔ of the way toward the back of the box. Trace the flashlight and cut a hole a little smaller than the cylindrical flashlight. Flip the box upside down and put the flashlight in through the hole. The end of the flashlight, where you can turn it on and off should be sticking out the top of Room B.

2. Cover the hole in Room A. Cut a small piece of cardboard or dark paper that is large enough to cover the hole in Room A. Tape it down over the hole. Students may want to remove this piece of cardboard. Tell them this is a great idea that they can add to the ideas for investigations.

3. Assemble the completed box system. Insert Room A and Room B into the lids.Turn the flashlight on in Room B.



4. Check to make sure you're seeing the desired effect. Dim the lights in the classroom. When you look through the viewing hole in Room B, you should see three toys in the light and their reflections. When you look though the viewing hole in Room A, you should see 1 toy in the dark and see through to the three toys in Room B.