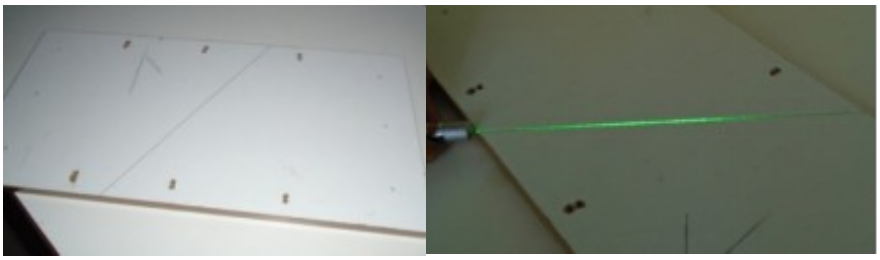
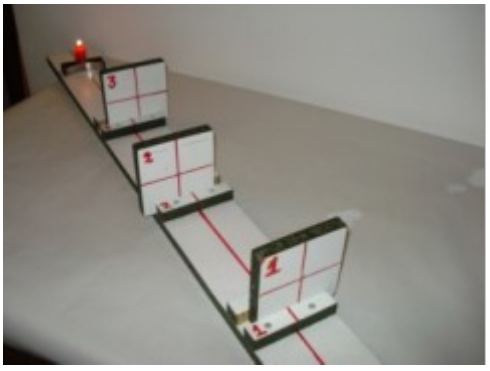
Team 1

Linear propagation of light – Shadow

1. Using the pencil, the paper and the laser-pointer, try to check the linear light – propagation.



2. Place the “diaphragms” on the corresponding positions, use the fired-up candle or the laser pointer and check what you can see through the holes...

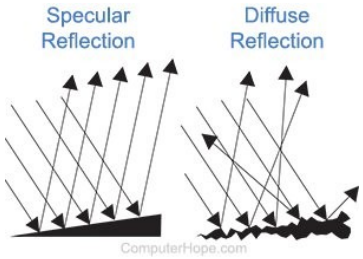


3. Make your shadows to shake hands or …anything you can imagine!

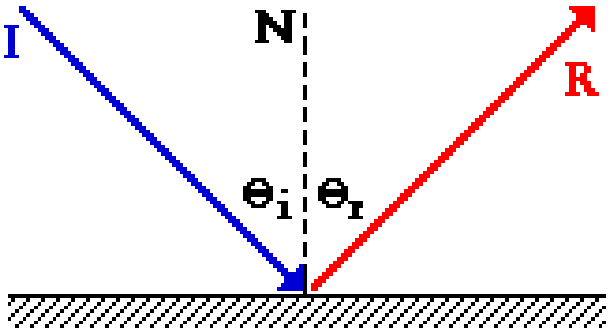
Team 2

Meeting Objects

1. Use the Laser-Pointer on different surfaces (mirror, napkin, al-foil). Try to focus on the micro-shape of the surface, and imagine why you can see your face reflecting on the mirror but not on the wall!



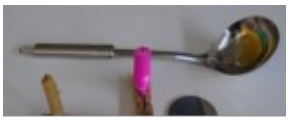
2. Use the mirror and the laser pointer to reproduce the main law of the reflection: The angle of incidence is equal to the reflection angle.

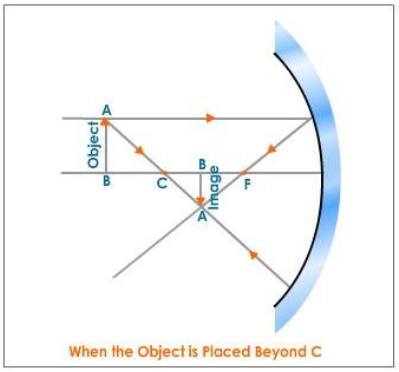


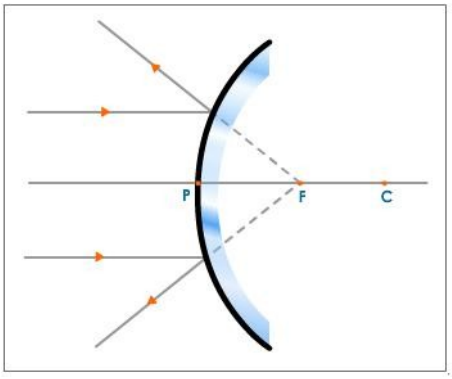
Team 3

Reflecting and absorbing the light

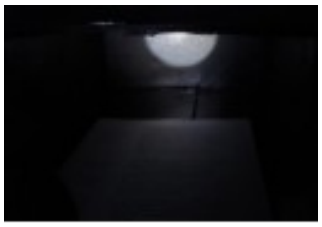
1. The spoon acts as a double purpose mirror…







2. Try to read in the dark room.. But the light source is the same… What is happening?

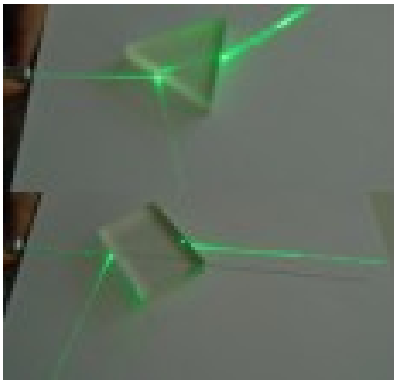


3. What do you suggest for searching for ... clues?

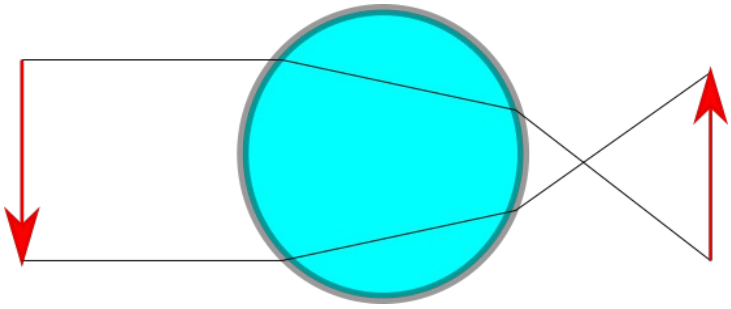
Team 4

Impressive refractions

1. Play with the prisms and the light… Where do you think that the light beam travels faster?



2. The straight line that became curved!
   Go left… or right!

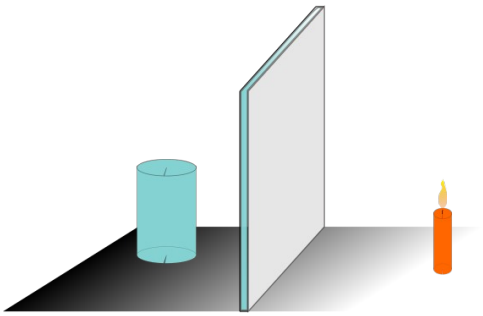


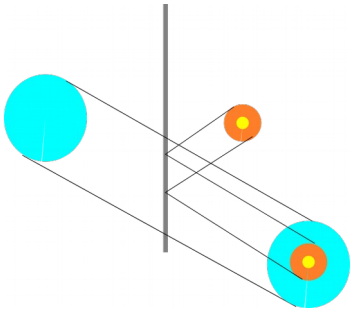
3. Place the candle in the middle of cd-disk, fire it up and look at your “construction” from above… Enjoy!

Team 5

Games

1. Place the glass on a vertical position, using the peg. Place the candle at a distance of about 20cm. On the other side of the glass, place a glass of water (no mater the distance…). Fire up the candle and look towards the glass. Try to see the fire ...in the water! (The blended virtual and real images)





2. Place the cylinder in front of your eye, and look towards your palm with both eyes (one eye through the cylinder, one eye directly..) Do you see the hole?!