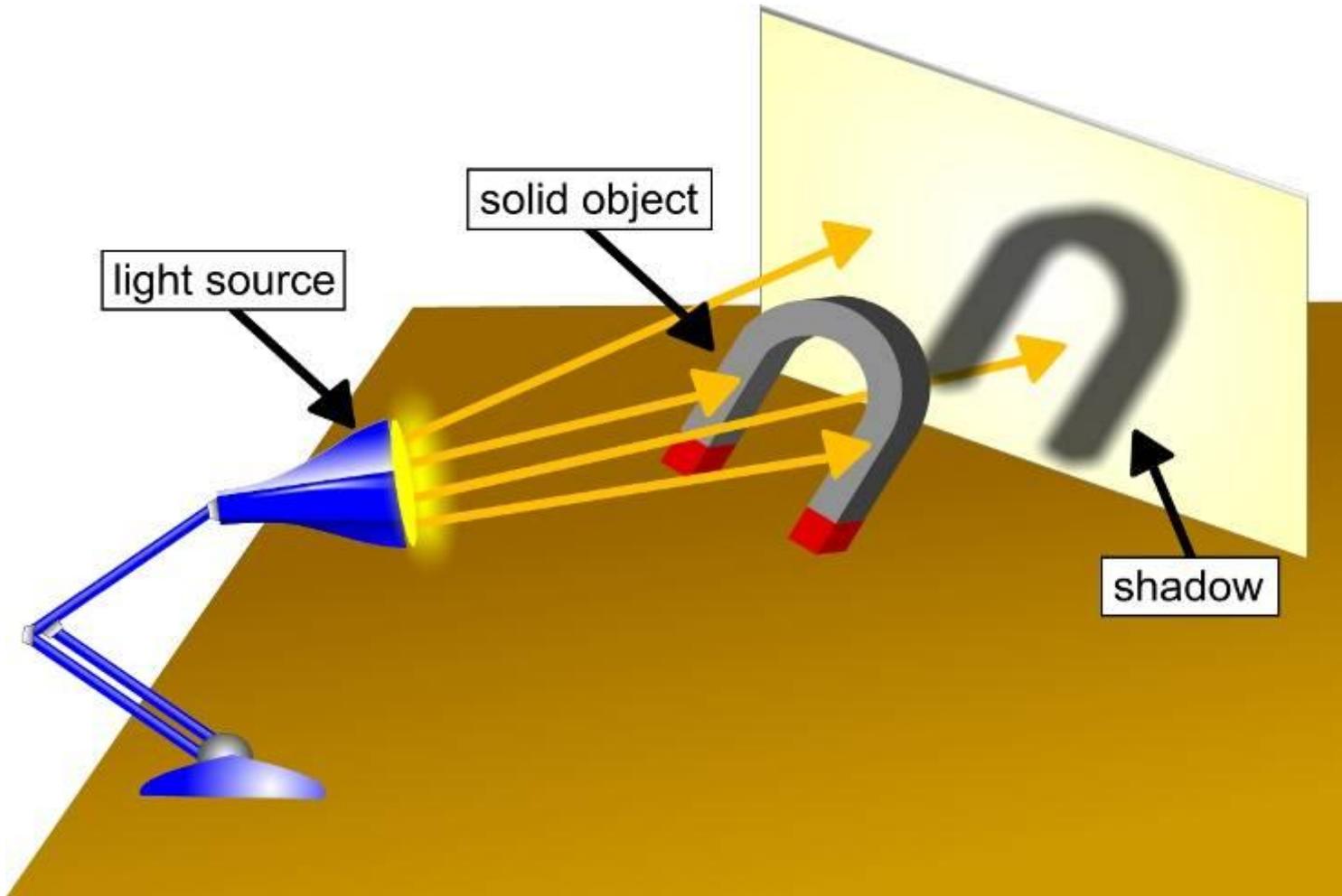


## Unit 6F: How we see things



# Learnanywhere

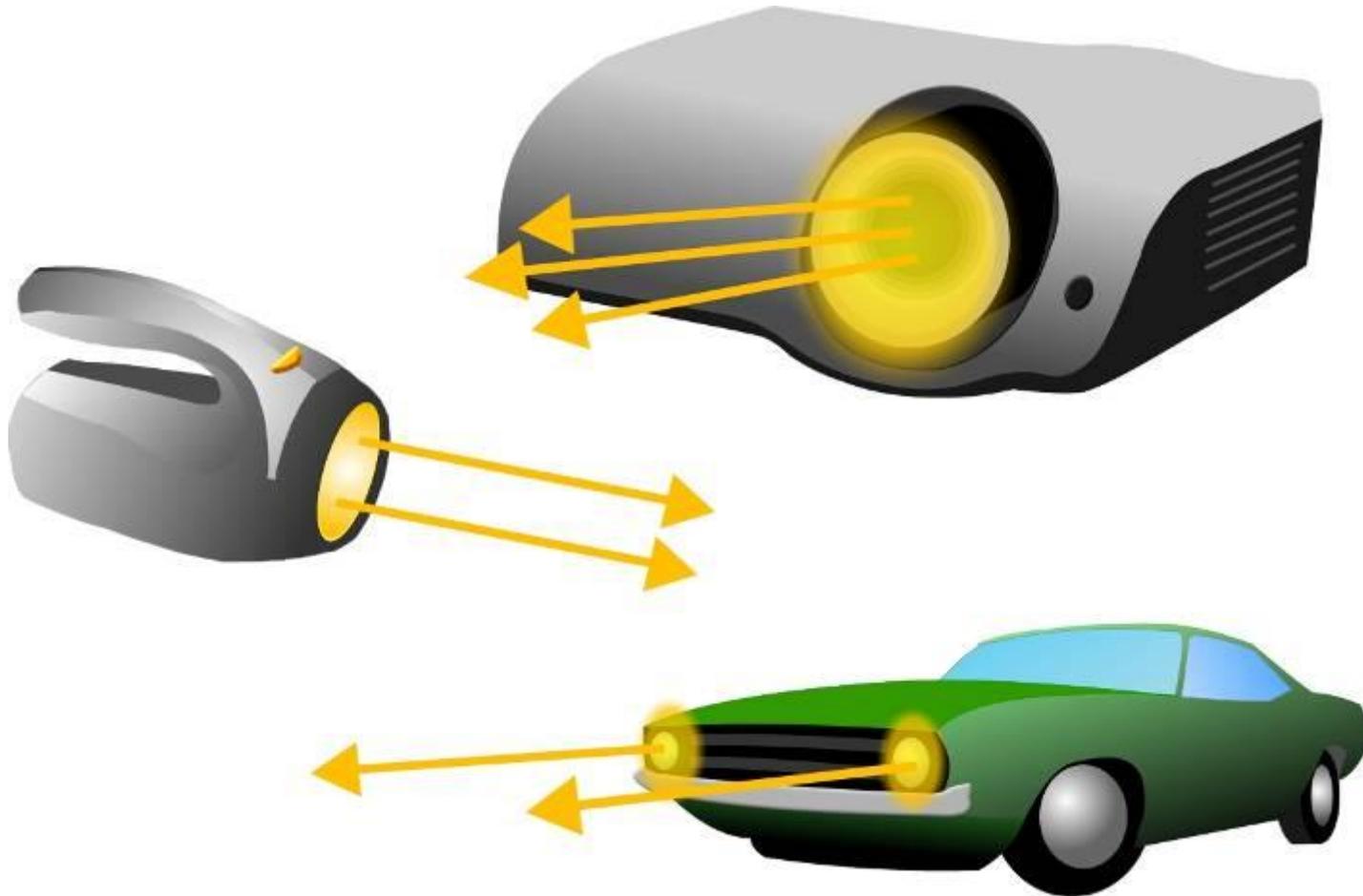
# How we see things

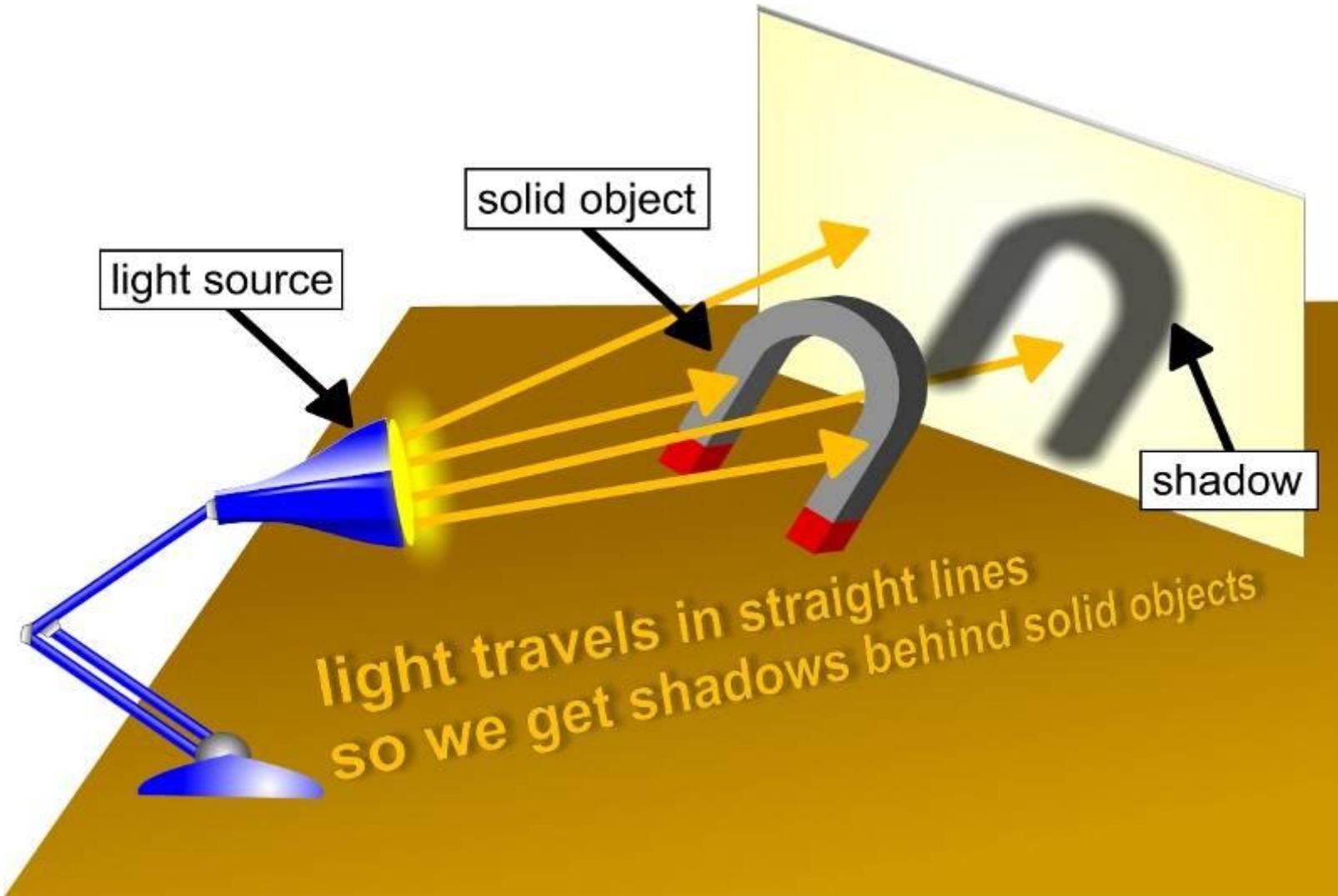


## Some useful words

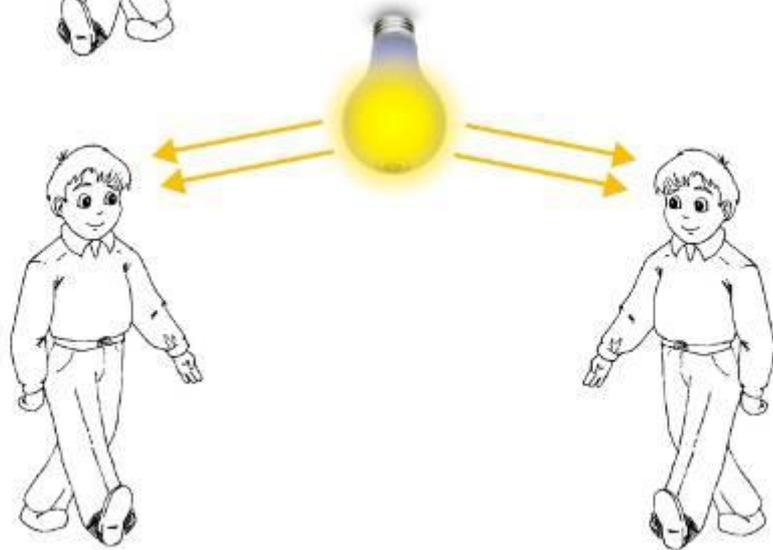
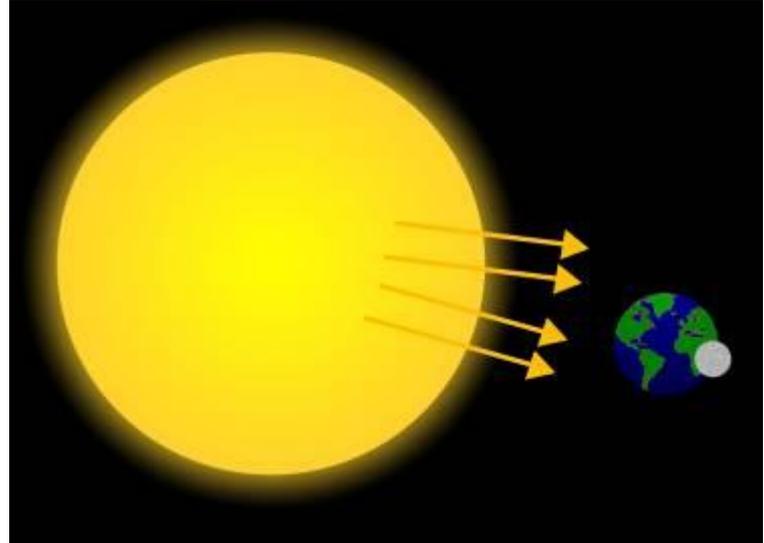
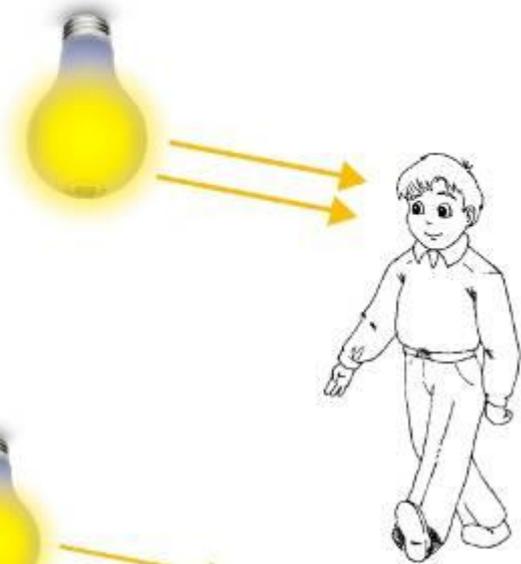
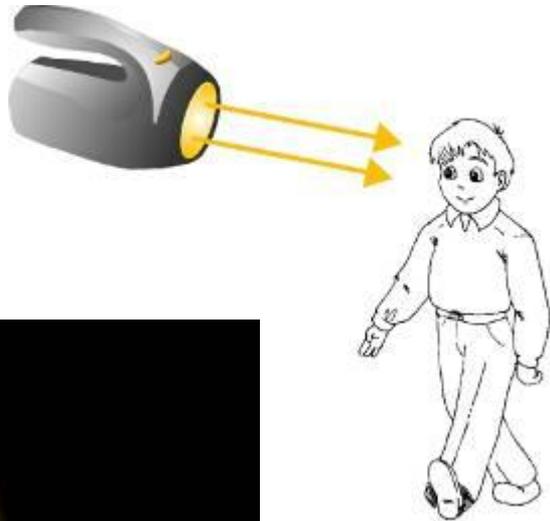
<b>Opaque</b>	<i>A material that light cannot pass through</i>
<b>Reflect</b>	<i>When light 'bounces' off a surface in particular shiny surfaces such as mirrors</i>
<b>Reflection</b>	<i>An image viewed in a mirror, for example</i>
<b>Light beam</b>	<i>A thin column of light such as projected by a torch</i>
<b>Mirror</b>	<i>A shiny surface that reflects light</i>
<b>Light travelling</b>	<i>Light is always moving</i>

# How does light travel?

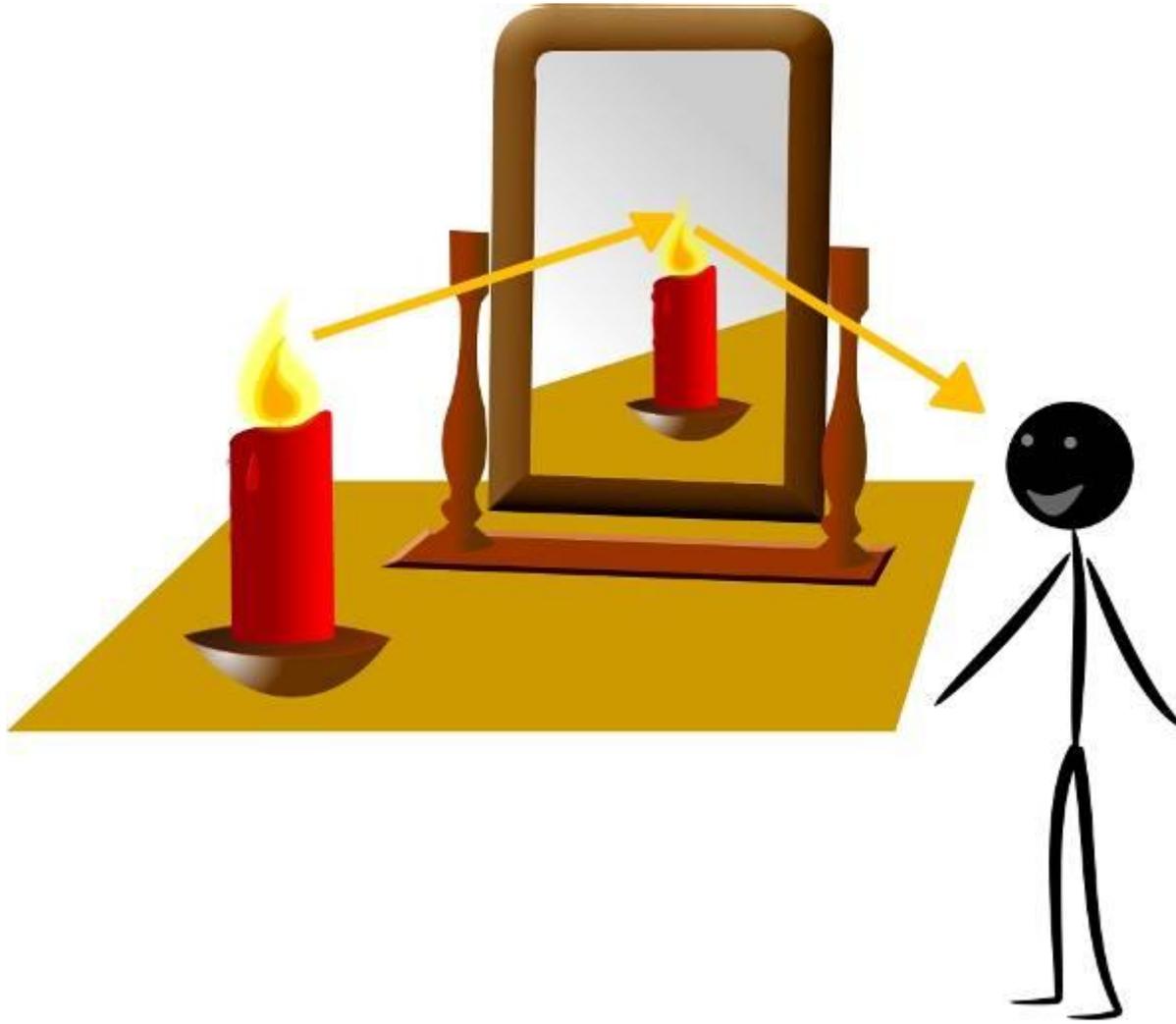


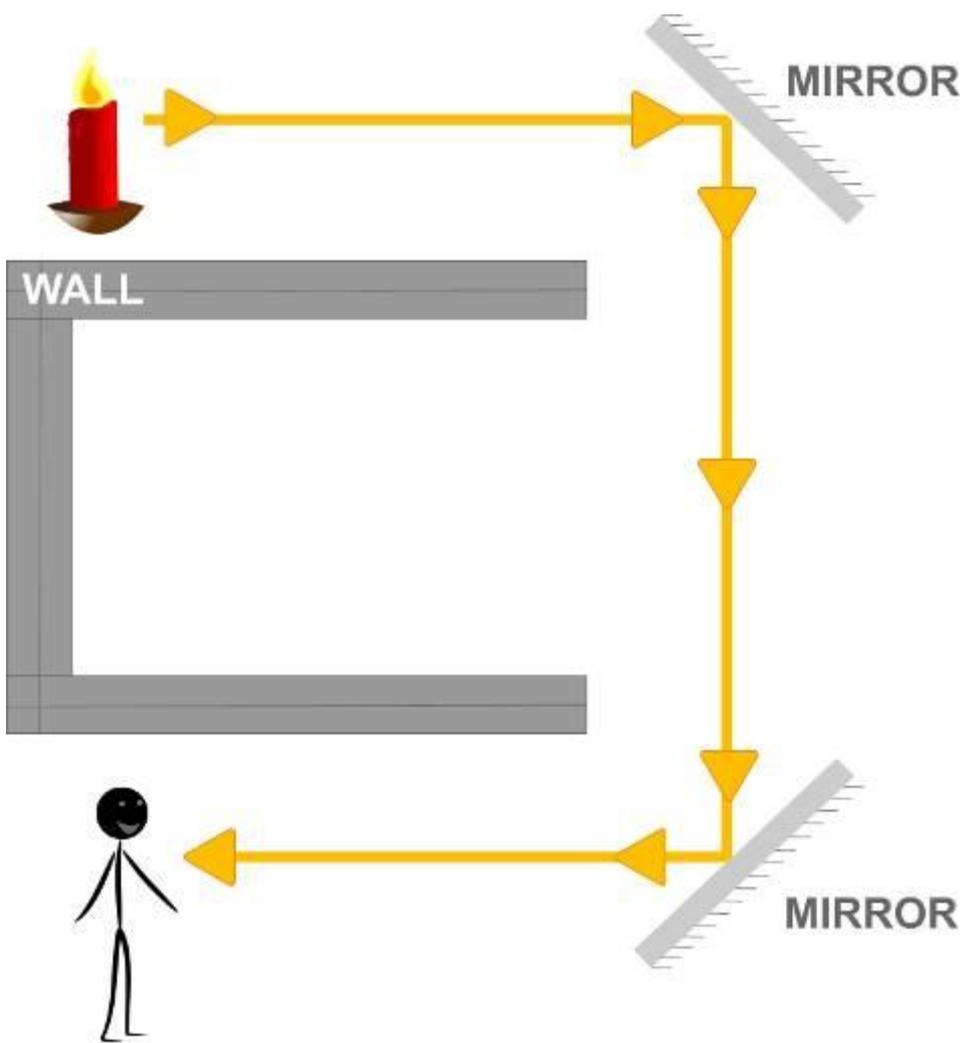


How do we see things?



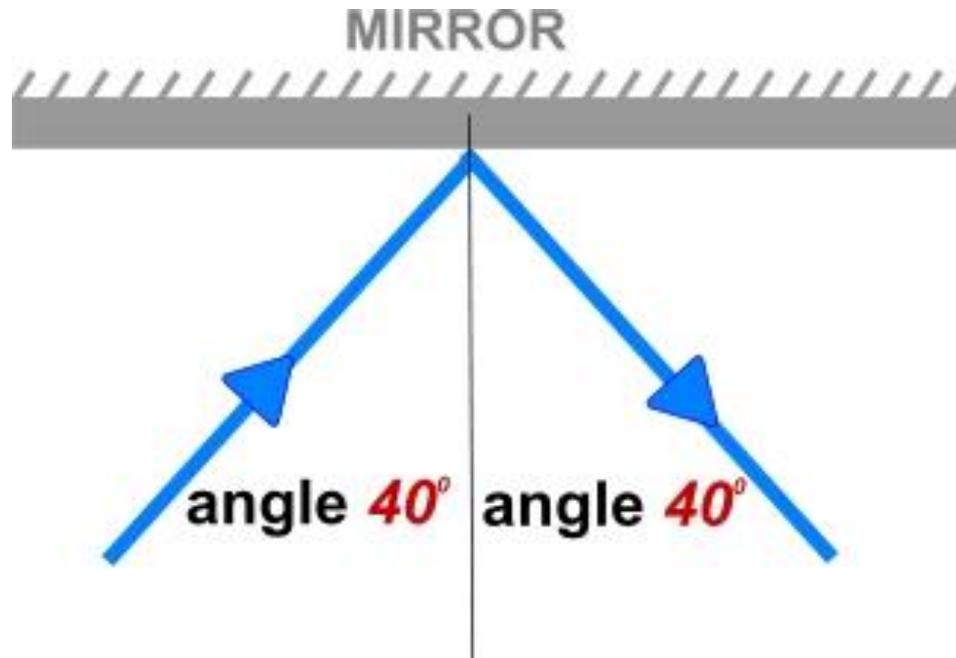
# Reflection





## More reflections

When light is reflected it's direction of travel changes



## Shiny and dull surfaces

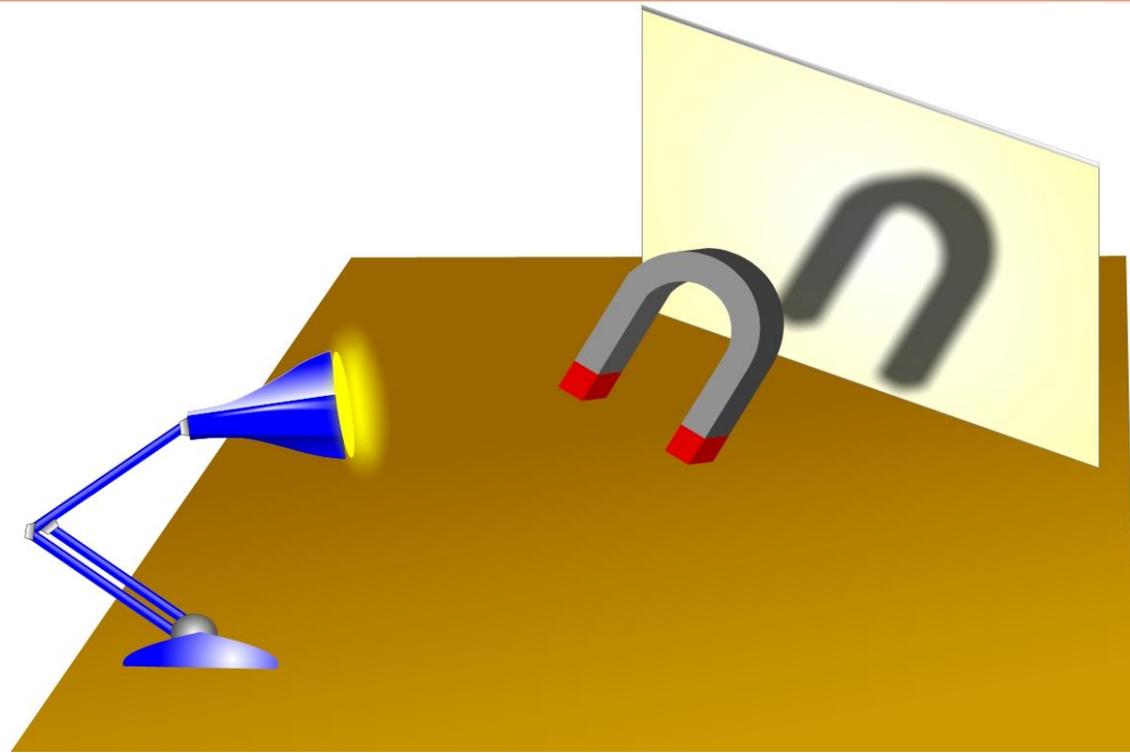
You are going to investigate what types of surfaces reflect light the best, shiny or dull.

Test each of the surfaces to record whether it reflects a light beam from a torch and whether you can see yourself in the surface or not.

Surface	Dull or shiny	Light reflected from torch	I can see my face reflected
Mirror			
Polished metal sheet			
Sheet of perspex			
Sheet of paper			
Piece of polished wood			
Shiny painted surface			
Dull painted surface			

Can you draw any conclusions from your results?

# Shadow Investigation

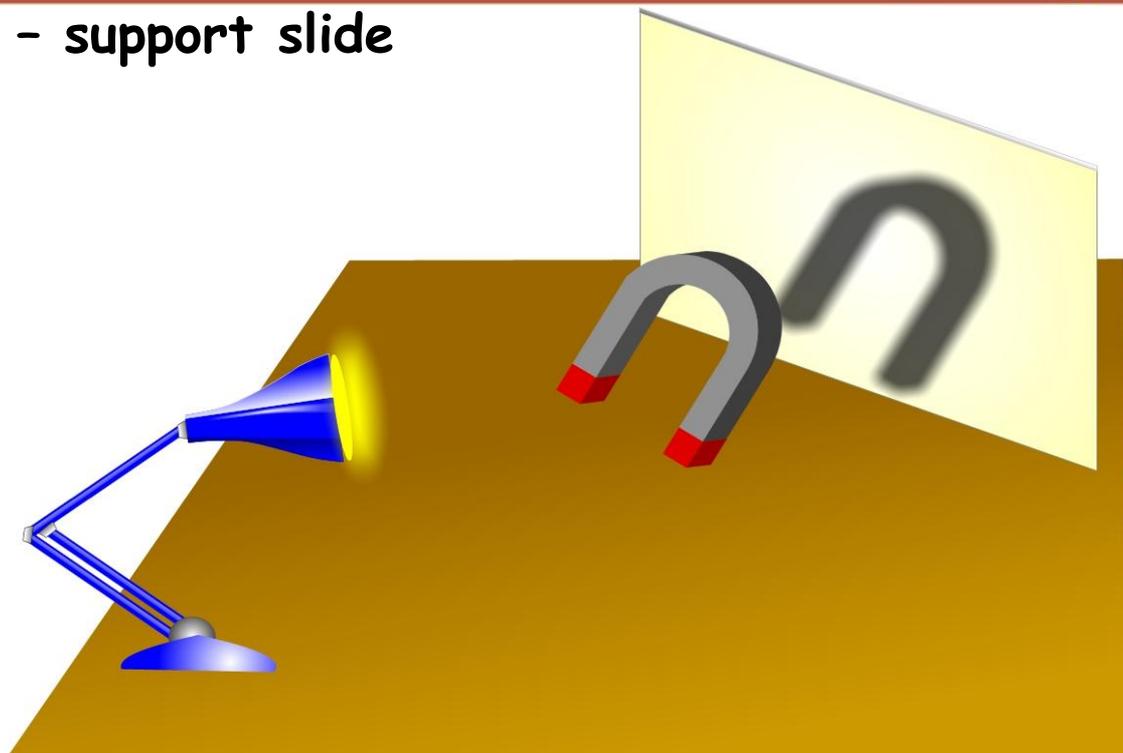


How can we change the size and position of the shadow?

Plan how you are going to investigate this?

What will you change

## Shadow Investigation - support slide



How can we change the size and position of the shadow?

What happens to the size of the shadow when you move the figure nearer to the light?

What happens to the shadow when you move the figure further from the light?

Does moving the screen have the same effect?

Does moving the light make a difference?

## Shadow Investigation - extension slide

Measure the distance between the figure and the screen and the height to the shadow.  
Record the results in a table

Distance between figure and screen	Height of shadow

Plot your results on a line graph of Distance between figure and screen vs. height of shadow.

Are there any patterns in the results you have?

Concept Map

