Lesson 3: Shadow shapes

• I can describe how shadows are formed.





Quiz time! True or false?

	True	False
Mirrors cannot help light change direction.		
Light rays enter our eyes so we can see.		
Reflective surfaces are light sources.		

Glossary

Shadow – darkness caused by light being blocked

Transparent – letting most or all light through

Translucent – letting some light through

Opaque - letting light pass through



Shadows

Shadows are formed when some rays of light continue to travel in straight lines, while other rays are stopped by an object. When an object is placed in front of a light source, it prevents the light from passing through. This then creates a dark area or shape on a surface. This is called a shadow.





Watch the following video and try making those shadows with your hands.

How To Make Shadow Puppets With Your Hand - YouTube





Prediction Time!

Which object will cast the darkest shadow? Why do think this?



Tinted glass

Plastic folders



I predict that the _____

will cast the darkest shadow because



Opaque, translucent and transparent

Objects that don't let light through them are called **opaque** objects.



Objects that let a little light through are called <u>translucent</u> objects.



Objects that let all or nearly all light through are called **transparent**





Which material will make the darkest shadow?

First, hold your material between a torch and a screen. Then record your observations.

Name of material	Is it translucent, transparent or opaque?	Was the shadow faint, dark or very dark?



Do opaque, translucent or transparent objects make the darkest shadow? Why do think this?

On the one hand,	objects make the darkest shadows because
On the other hand,	objects make the faintest shadow because