

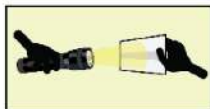


NEED



experiment

What Will Block the Light?



flashlight



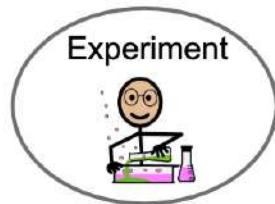
12-in piece plastic wrap



1 dryer sheet



1 sheet felt



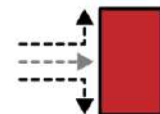
What We Know:

- Things are made of different materials.
- Some things we can see through.
- Some things we cannot see through.



Step 1: Ask a Question

- Which material will block the most light?



Step 2: Make a Guess / Hypothesis

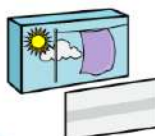
I think...



The plastic wrap will block the most light.



The dryer sheet will block the most light.



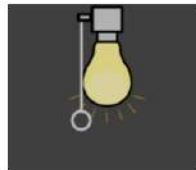
The felt will block the most light.



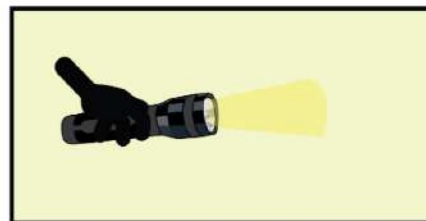


Step 3: Do an Experiment

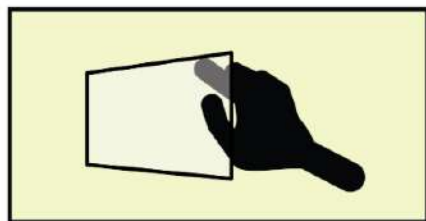
1. Dim light in classroom.



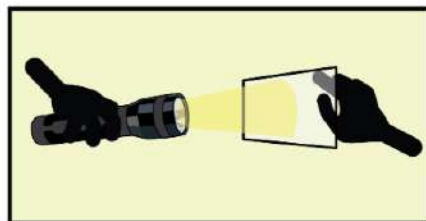
2. Turn on flashlight and shine it on wall.



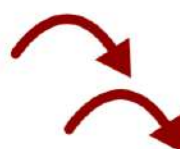
3. Hold plastic wrap in front of flashlight.



4. Observe light that passes through plastic wrap. Record your observations.

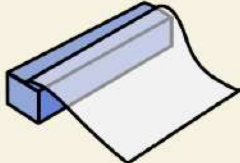













5. Repeat steps 3 and 4 with dryer sheet and felt.





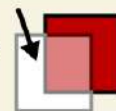
Step 4: Organize Data

Material			
 plastic wrap	<p>Most of the light passes through.</p> 	<p>Some of the light passes through.</p> 	<p>None of the light passes through.</p> 
 dryer sheet	<p>Most of the light passes through.</p> 	<p>Some of the light passes through.</p> 	<p>None of the light passes through.</p> 
 felt	<p>Most of the light passes through.</p> 	<p>Some of the light passes through.</p> 	<p>None of the light passes through.</p> 



Step 5: Find the Conclusion

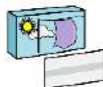
Which of the materials did most of the light pass through?



plastic
wrap



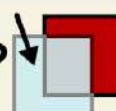
dryer
sheet



felt



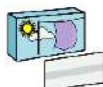
Which of the materials did some of the light pass through?



plastic
wrap



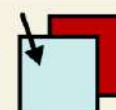
dryer
sheet



felt



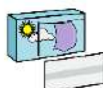
Which of the materials did none of the light pass through?



plastic
wrap



dryer
sheet



felt



Which blocked the most light from shining through?



plastic
wrap



dryer
sheet



felt





Step 5: Find the Conclusion

Was your guess correct?



yes



no





Step 5: Find the Conclusion

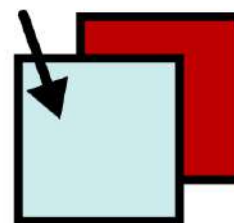
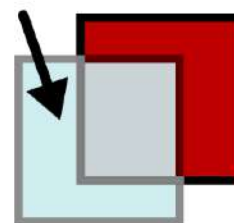
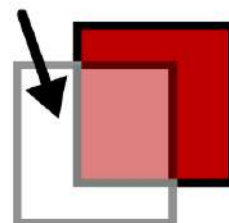
Explanation:

- The plastic wrap, dryer sheet and felt look and feel different. They are made of different materials. Light can move through some materials. Light cannot move through other materials.

The plastic wrap is clear. You can see through it. You shined the flashlight on the plastic wrap. A lot of light shined through. This means light can move through plastic wrap.

The dryer sheet is not clear. You can see through it some, but everything looks blurry. You shined the light on the dryer sheet. Some of the light shined through. Some light was blocked. This means some light can move through a dryer sheet.

The felt is not clear. Some felt is very hard to see through. Some felt you cannot see through at all. You shined the light on the felt. Very little or no light shined through. Felt blocks most or all of the light. This means most light cannot move through felt.



Extension:

- Use different everyday items, such as paper, tissues and a book to compare how light from a flashlight passes through each item. Also, use a flashlight to create a shadow of a small figurine or toy. Place different materials between the flashlight and figurine or toy to see how light passing through the material changes the shadow.

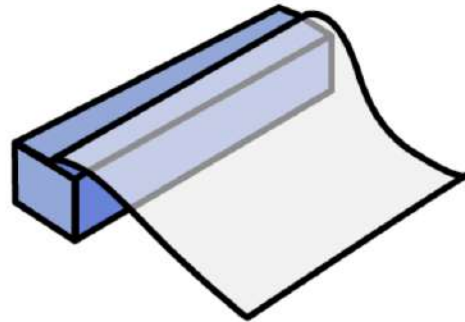




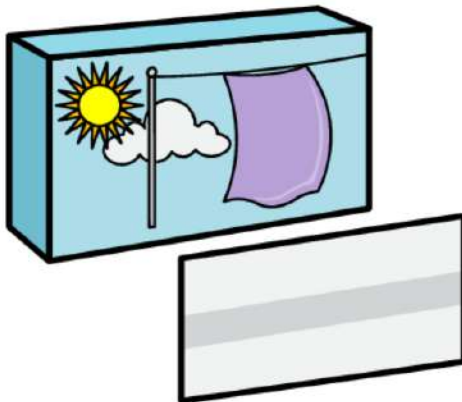
flashlight



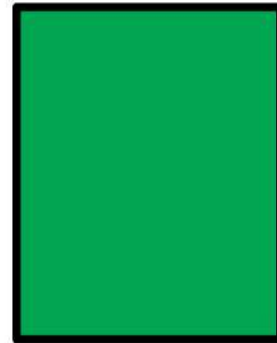
plastic wrap



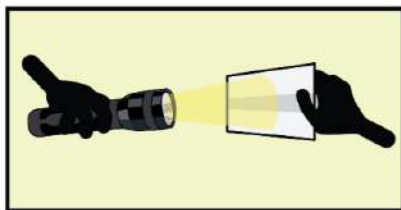
dryer sheet



felt



What Will
Block the
Light?



thick

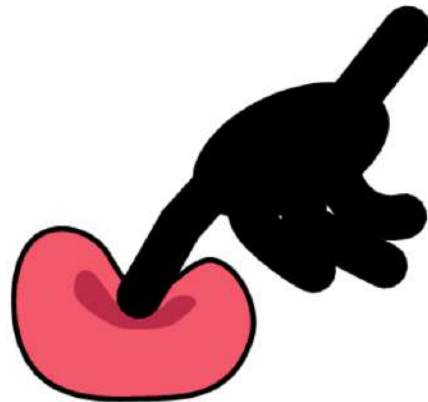




thin



soft



rough



sticky



see-through

