

# Science 10/17/18

EQ: Can we predict how much light an object transmits?

CW: Activity 7.2 Measuring light transmission

HW:7.2 Transmission of light part 1. Pg. 83

# Agenda

- Academic Language
- Activity 7.2

# Academic Language

- Reflecting
- Scattering
- Transmitting

Why do you think there is a difference in what we can see through each of these objects?

# Activity 7.2 pg. 80

- We will compare our naked-eye observations of transmission with measurements taken by instruments

Objects	Light Sensor Reading (Lux)
Control	
1	
2	
3	
4	
5	
6	
1	
2	
3	
4	
5	
6	

your objects

other table

In the following space, create a data table for recording the other group's data.

Data from other table

Objects	Light Sensor Reading (Lux)
1	
2	
3	
4	
5	
6	



Use the following table to order the objects you gathered by how much light they transmitted, most to least, according to the reading on the light sensor.

**Objects we collected in order of most (1) to least (6) light transmitted and measured by a light detector**

5	
6	

<https://cf.nearpod.com/neareducation/new/Webpage/368528769/iconoriginal.pdf?AWSAccessKeyId=AKIAINYAGM2YWP2OWQBA&Expires=2147483647&Signature=iZHsh0%2B0gr%2FbfikEefpCb%2BISmt8%3D>

# Prediction (pg. 80)

- Each group will get a bin with objects
- Write the bin number next to the prediction data table
- Without looking through the objects, predict how much light they will transmit
- List them in order of most (1) to least (6)
- You have three minutes to complete this task

# Trade Bins with assigned

. . .

- Each group will get a bin with objects
- Write the bin number next to the prediction data table
- Without looking through the objects, predict how much light they will transmit
- List them in order of most (1) to least (6)
- You have three minutes to complete this task



# Data

1. Set up light sensor and light source (Fair Test)
2. Make first recording as control
3. Test your six objects and record reading in data table pg. 81
4. Trade bins with same table as before
5. Test and record objects. (You will need to extend data table)

# Return bins to their original table

Put objects in order from most to least on pgs. 81 and 82 (Your groups and your traded group)

<b>Transmission: Most to Least</b>	<b>Item</b>	<b> (Lux)</b>
<b>1</b>		
<b>2</b>		
<b>3</b>		
<b>4</b>		
<b>5</b>		
<b>6</b>		

# Light box with transparency



# Light box with clear plastic



# Answer making sense questions

na 82

# Open Ended Question

**Compare your data with your partner group. Which lists matched up better, the lists made with your eyes, or the lists made with the sensors?**



How did measurement devices help with this investigation?



**Collaborate!**

**How did measurement devices help with this investigation?**

# Open Ended Question

**Why do you think measurement devices are used in scientific investigations?**

Please use your iPad to take a picture of your data on pg. 81



Upload your pictures of your data here

**Collaborate!**

**Upload your pictures of your data here**

What are some measurement devices found around your home?



What are the good things?  
**Collaborate!**

**What are some measurement devices found around your home?**



What objects/devices around your home use transmissions of light? How do they use it?

**Collaborate!**

**What objects/devices around your home use transmissions of**