**Wave Behavior Video**

https://api.playposit.com/go/share/96214/1246811/0/0/Wave-Behavior

Write the 6 types of wave behaviors and sketch the arrows seen in the video.

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**Reflection – waves bounce off an object.**

What is produced when sound waves are reflected? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Smooth surfaces reflect light waves to create \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

**Transmission – waves travel in the same direction through an object.**

Draw waves from the sun transmitting through the window.

**Absorption – waves are taken into the object instead of bouncing off or traveling through.**

What makes something appear white?

What makes something appear black?

What makes a lady bug red? What happens to all the other colors of light?

Why does a carpeted room have less echoes than a room with hardwood floors?

**Refraction – waves pass across a boundary between two substances and changes speed.**

What causes the wave to change speed as it changes mediums?

Draw refraction.

**Diffraction – waves pass through a gap and spread back out after passing through.**

Give an example of how this is used in the real world. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Scattering – waves depart from the expected path and spread out in different directions.**

Why is the sky blue?

What’s so special about blue? Why not a different color?

**Main Idea: What determines how a wave behaves?**