Name _____

Intervention 8.2.5- Behavior of Waves

Directions - complete each of the following activities to help you understand the 5 main behaviors of waves.

Task 1 - Reflection - https://www.youtube.com/watch?v=aAQYpra4aUs

1. What colors make sunlight?

2. What colors bounce (reflect) off the leaf?

Task 2 - Absorption - https://www.youtube.com/watch?v=VwNKPgo3oxA

3. What colors make white light?

4. What color(s) does a lime absorb?

5. Explain why the green light did not pass through the red gummy bear.

Task 3 - Diffraction - https://www.youtube.com/watch?v=ATl1MV20_Pk

6. What happens when a wave hits an opening?

7. Explain how sound can travel from one open window to another.

Task 4 - Refraction - https://www.youtube.com/watch?v=FOwDgpKTqdY

8. How does light travel in denser materials?

9. Explain how changing the density of materials causes light to bend.

Task 5- Scattering- **https://www.youtube.com/watch?v=twSg2zbjjnA**

10. Which color of light scatters more? Red or blue?

11. Why is the sky blue?

To the right, & on the back of this paper you will make pictures showing how light & sound waves interact when they hit a barrier or obstacle. The pictures need to be **colored** and **neat** so that it is easy to understand.

In each box you should include:

1. A definition of each behavior
2. A **neatly colored** real world example picture for each behavior
3. Explain how the waves are moving in your real world example

Scattering

Definition:

Colored Real World Picture:

Explanation of Picture:

Reflection

Definition:

Colored Real World Picture:

Explanation of Picture:

Absorption

Definition:

Colored Real World Picture:

Explanation of Picture:

Diffraction

Definition:

Colored Real World Picture:

Explanation of Picture:

Refraction

Definition:

Colored Real World Picture:

Explanation of Picture: