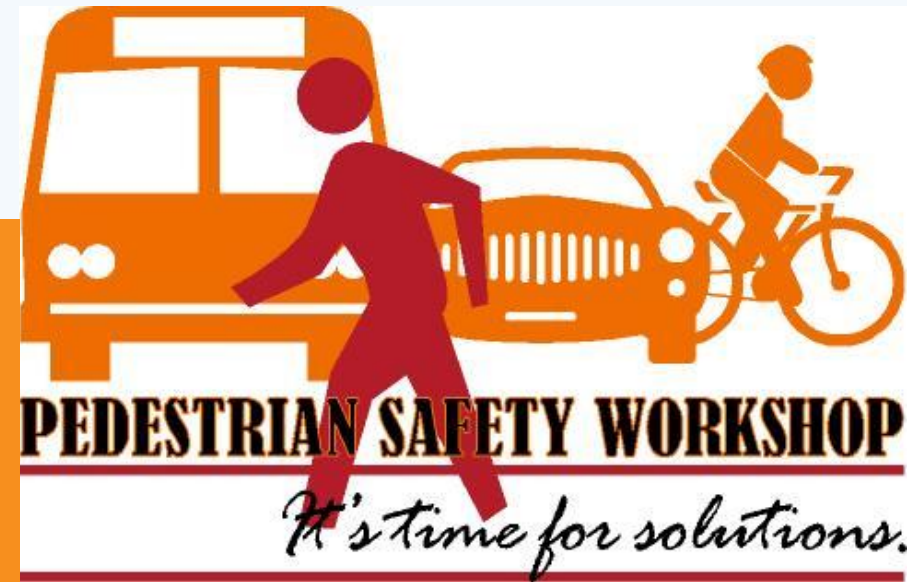


Reflectivity and Pedestrian Safety

heads
up! 

LOOK OUT FOR
EACH OTHER



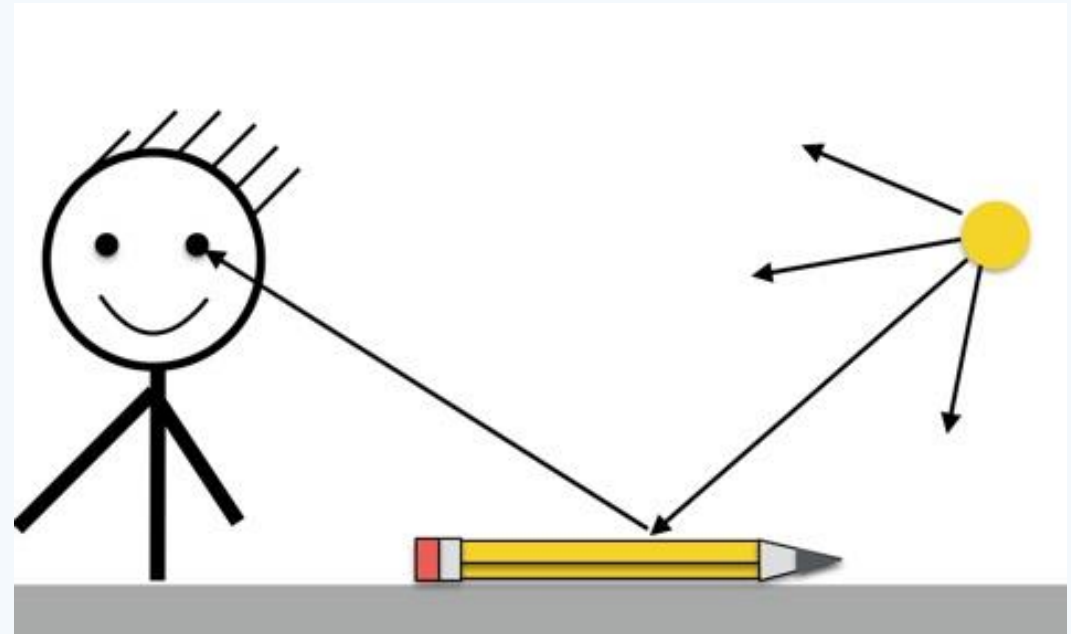


1. Where are some places you have seen reflection?

2. How do you think reflections work?

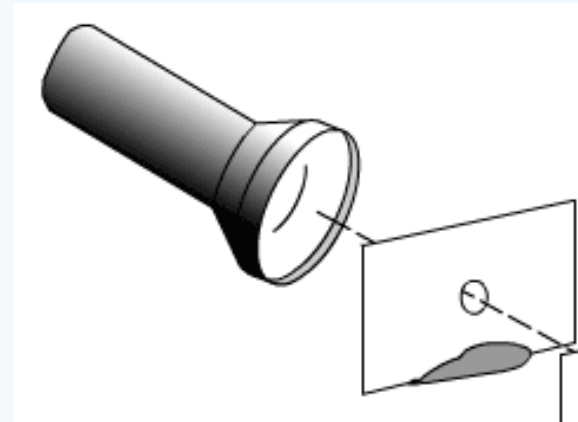
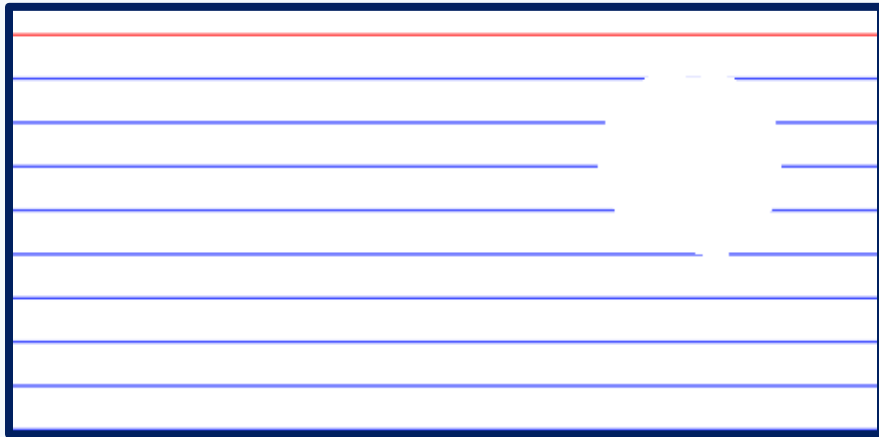
How does Reflectivity happen?

- Light is invisible, so we can't see it until it bounces off something and hits our eyes
- Reflection involves 2 rays: an incoming ray or reflected ray



Create a Reflectivity Tester

1. Grab an index card, a flashlight, and a scissor
2. Take the flashlight and place it face down on the index card
3. Trace a circle from the flashlight and then cut the circle out from the sheet of paper
4. After cutting the circle out of the card, place the tip of the flashlight in the hole



Activity Time:

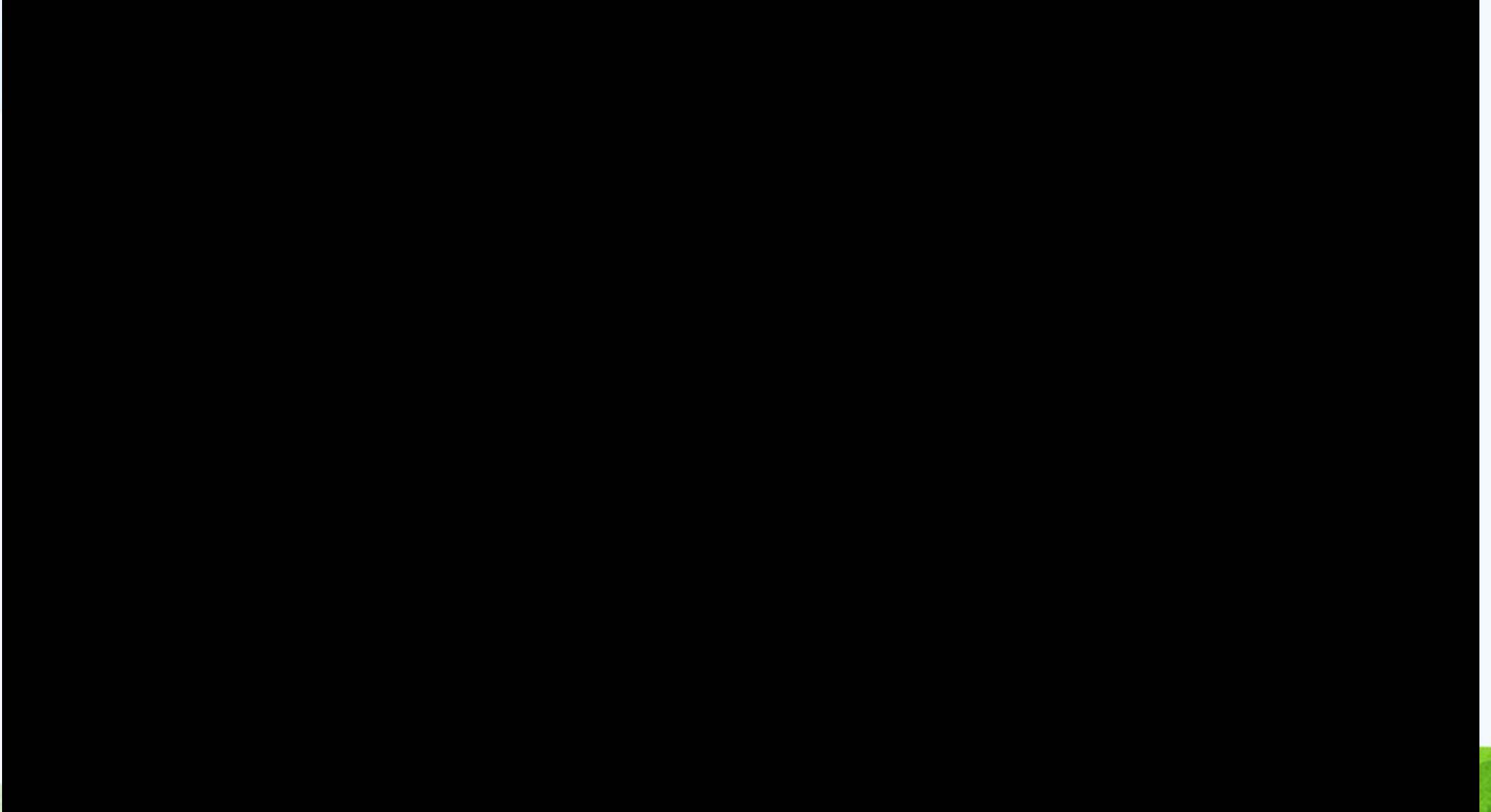
- 1. Rotate around stations and use your reflectivity tester
- **2. What does the reflection look like: bright, dim, or medium?**
- **3. What color is the reflection?**
- 4. Record your observations on the paper given to you



Rank the Surfaces!

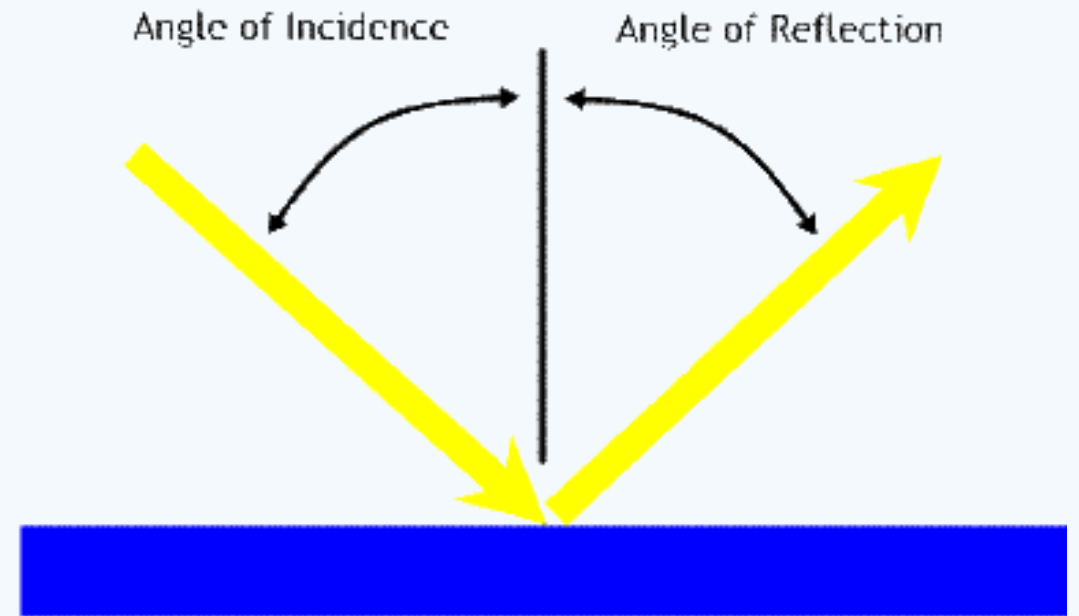
Brightest to Dimmest

“No White At Night”



Angle of Reflection:

- When a ray of light hits a surface, it bounces in a certain way like a tennis ball thrown against a wall
- The incoming angle is called the angle of incidence
- The angle of incidence = Angle leaving surface (angle of reflection)



Angles & Retroreflectivity Activity

1. Test the angles with the retroreflective road signs with your retroreflectivity tester
2. Does the sign behave differently than the mirror? Why?



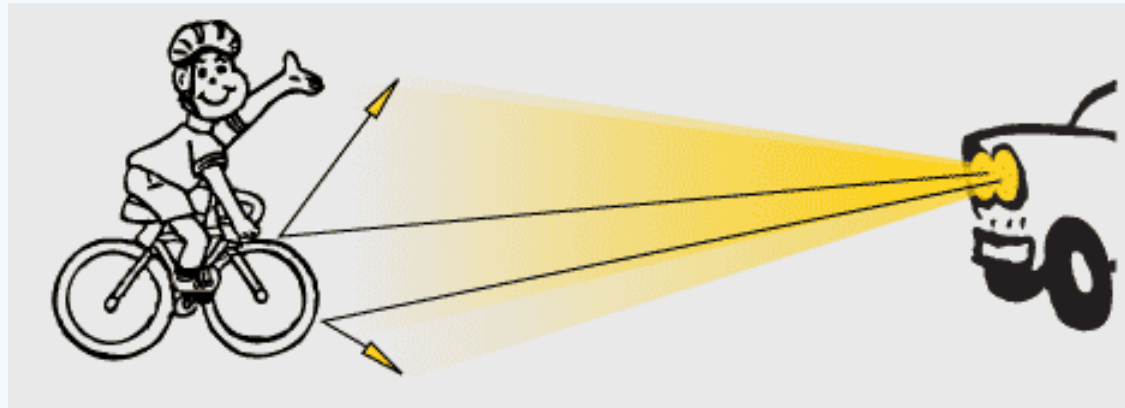
Reflective Surfaces and Angles Explained!

1. Regular objects bounce the angle of reflection back at one point

Ex: A tennis ball when thrown comes back up at one point

2. Retroreflective surfaces allow the angle of reflection to bounce back at many difference points

Ex:



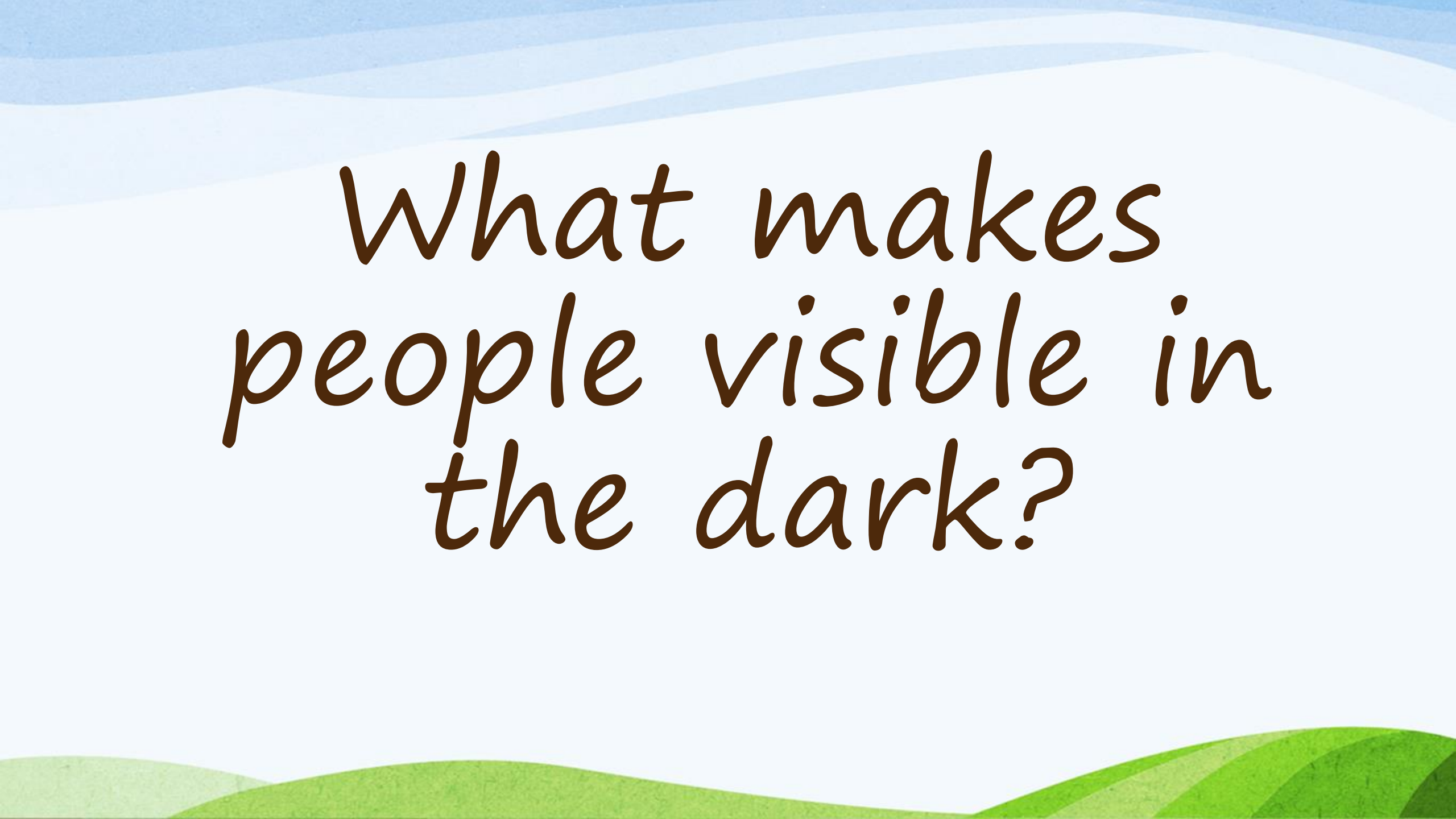
How is reflectivity and visibility relevant to everyday life?




Rule 3: Help yourself to be seen



What can you see in the dark
while outside?



What makes
people visible in
the dark?



Do you have any
stories to share
about being out in
the dark?

1. What would be ideal clothing to wear in the dark?

2. Did this impact what you will do in the future when you are outside?

3. What did you learn about reflectivity?

