

I shine my light only on the ground where it is needed. This means I am full cutoff light fixture.

I help visibility and insure safety by eliminating shadows and dark areas.

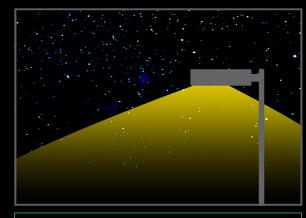
A good example of me is motion detectors, which only turns on light when there is movement. This saves energy and our night sky.

I eliminate glare and other issues associated with light pollution.

Who Am I?

Instructions:

- 1. Print all 24 cards. (2 on each page)
- 2. Cut each card out individually.
- 2. Fold each card along the dotted line provided.
- 3. Secure with either tape or glue. It is recommended that the cards be laminated for multiple usage and durability.



Good Lighting

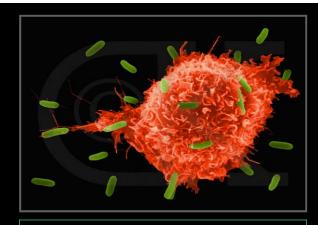
I am the natural, internal 24 hour clock that living creatures posses.

Artificial lights allow animals to stay active throughout night hours, which can cause disruptions to me.

These disruptions can affect our mental abilities, natural instincts, and physical strength.

This leaves most wildlife in danger of being killed by predators, vehicles, collisions, or other irregular accidents.

Who Am I?



Circadian rhythm

I am very attracted to bright lighting and car often become fixated on street lights, porch lights, and other safety lighting.

I only live about one week after becoming an adult. This is a problem if I spend excessive amounts of time and energy around a lamp because it is likely interfering with migration and mating habits.

It is also dangerous because I become easy prey to bats and other nocturnal predators.



Moth

I am caused by:

- Tall buildings in cities and towns that keep their lights on throughout the night.
- Unshielded lighting fixtures on businesses and homes that cause glare and sky glow.
- Hotels and lighted tourist attractions
- Fishing boats, cruise ships, and offshore oil platforms.
- People who are unaware of my adverse effects or who do nothings to improve the situation.

Who Am I?



Light Pollution

I am a nocturnal mammal, but because I ca fly, many people mistake me for a bird.

Some people are scared of me because the believe I want to bite them, but I usually just want to eat bugs, fruit, and seeds.

I am greatly affected by light pollution because my eyes have a very difficult time adjusting from light to dark. This is dangerous for me because I can't see predators or other threatening situations.



Bats

I make it more difficult for all creatures to see because of glare, sky glow, and light pollution.

I'm usually created by unshielded lighting fixtures that are found in almost every living environment.

Many people believe that more light equals better safety, but I'm proof that improper lighting can often make it difficult for the eye to adjust to shadows and dark areas. This creates a less safe environment.

Who Am I?



I typically sleep during the day, and I am mos active during the night.

I have special eyes that allow me to see very well in the dark. To much light during nigh hours is not only making it more difficult fo me to forage for food, but it can also disrup my mating habits.

Bright street lighting can also cause an in crease in mortality due to impaired vision.

Some examples of me include bats, owls, and raccoons.



Nocturnal Wildlife

I am a type of aquatic animal that is known for my pink flesh and annual migration habits.

I'm very popular and have a significant economic value to many people. I am frequently researched because of my rare or endangered status.

I'm affected by the significant increase in unnatural light at night because some of my important behaviors like feeding, schooling, and migration rely on specific amounts of light.

Who Am I?



Salmon

I am the natural environmental area in which specific creature or species lives.

It is proven that the destruction of me is a ma jor factor in the decline or extinction of a wild life species.

There are many different factors that make me suitable for individual species to live in. I can vary drastically in climate, vegetation, weather, and geographical locations.

Some examples of me include the rain fores



Habitat

I like to create nests and lay my eggs on remote and very dark beaches.

Bright coastal lighting makes it difficult for me to find safe areas to nest. It also creates dangerous situations for my babies once they hatch.

Artificial lighting confuses my hatchlings, so they may crawl away from the ocean and instead find themselves in roadways and other dangerous situations.

Who Am I?



Sea Turtle

I am the result of improper lighting that poorlidirects its light.

I can also be caused by very bright and intrusive lights found on buildings, homes, and street lighting.

I can damage the eye and make it difficult for humans and other animals to see clearly.

In order to preserve the night skies and the night ecosystem, I need to be eliminated.



Glare

I am nocturnal and rely on the night ecosystem to survive.

Bright lights can cause me to become confused and disoriented.

I am one species of the 100 million birds who die each year in collisions with brightly lit buildings and towers.

Bright lights also make it difficult for me to hunt for food because I have special eyes that do not adjust from light to dark easily.

Who Am I?



Owl

I am a type of animal that is known for having scales, laying eggs, and crawling on my belly even if I have legs.

I am usually cold blooded, which means I rely on my environment to keep me warm. During the winter, I can be found hibernating because of the cold weather.

I can eat up to 30 to 50 percent less food than mammals and birds.



Reptile

More than \$1.7 billion is wasted on me each year due to inefficient and intrusive lighting.

I result in almost 38 million tons of carbon dioxide unnecessarily released into our atmosphere each year.

I can be seen from satellite pictures way out in space.

Turning off outdoor lighting and using energy efficient fixtures is a great way to reduce the negative effects of me.

Who Am I?



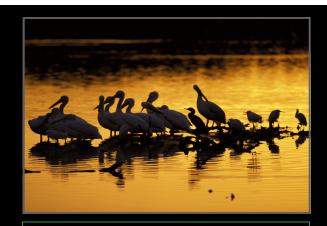
Wasted Energy

I am known for having feathers, wings, and beak with no teeth.

I am bipedal. This means I can walk on two legs.

I lay eggs and then incubate them by sitting on them to keep them warm until they hatch.

A unique characteristic is that I have a four chambered heart. I also have a very small but strong skeleton.



Birds

I am most easily recognized by my jumping skills, my smooth wet skin, and my ability to catch insects with my long tongue.

Scientists have noticed a significant decline in my population size and in my diversity of species. There are many reasons why this is happening, but light pollution affects me by changing the ecosystem in which I live.

Light pollution may affect my ability to reproduce, forage for food, and makes me more easily preyed upon by natural and unnatural predators.

Who Am I?



Frogs

I am the only type of animal that can survive by living only in water.

I breath by using gills instead of lungs

There are over 22,000 known species of me, and up to 300 new ones are discovered each vear.

I have fins to help me swim, scales to protect me, and a streamlined body for moving easily in the water



Fish

I am caused by a collection of unshielded lighting fixtures that shine their light into the sky instead of only on the ground where it is needed.

I prevent people from being able to see the stars at night, and I can be seen from miles away when approaching a city or town.

I can be prevented by using fully shielded lighting fixtures and turning off lights when not in use.

Who Am I?



Sky Glow

I am known for having an exoskeleton, at least three pairs of jointed legs, a segmented body, and most species of me go through a life cycle called metamorphosis.

There are more than 900,000 species of me on the planet. That's more than any other species of wildlife.

I usually have 4 pairs of eyes and 3 working mouth parts.



Insect

I am a four legged, cold-blooded, vertebrate that lays its eggs outside of the body, and usually spends its life in both the water and on land

Some species of me are able to breath through not only their lungs but also through their smooth porous skin.

I can be found all across the world, but most species of me live in the tropics where it is warm.

Who Am I?



How to Play

How to Play

- Distribute one card to each student or to student pairs until there are no cards remaining
- Allow the students to read the back of their cards
- Choose one student to begin.
- 4. This child begins by reading the content on the back of their card. The student finishes by reading the phrase "Who am I?"
- The student who's picture best represents the previous description holds their card in the air and shouts out the answer
- 6. Steps 4-5 are then repeated