

A Black Light Show presented by



The Stuff That Dreams are Made of

What are dreams? Why do we dream? Scientists are still working to understand sleep and dreams. Some researchers think dreams are the brain's way of cleaning out excess information. Others describe dreams as our psyche's method of processing feelings, fears, and hopes in a safe and private environment. Many believe dreams are a byproduct of the brain trying to make sense of peripheral stimuli. No one knows for sure, so dreams are likely caused by these and/or other explanations.

Turn on the Night Light

Nightmares can seem very vivid and real to a child. Always validate your child's reaction to a bad dream and explain that although dreams can be troubling or confusing they are not real and you will always make sure that s/he is safe. While nightmares are unavoidable, adults can reduce a child's exposure to items that trigger bad dreams. Avoid giving your child caffeine and pick relaxing and calming bedtime books. Limit exposure to television or other stimulating media, especially close to sleep times. Always carefully monitor programming (including commercials) for age inappropriate or frightening content.

Terror by Night

Also known as "sleep terrors" or "pavor nocturnes", this syndrome is particularly upsetting for parents experiencing them for the first time. Night terrors are similar to sleep talking or walking because the child appears to be awake, but is actually in a sleep state. Unlike nightmares, children rarely remember night terrors and are difficult to awaken during an episode. Signs of night terrors include: screaming or yelling and sitting up in bed; excessive perspiration, a fast heart rate and rapid breathing; looking at but not recognizing familiar people. As difficult as it is, experts recommend that caregivers resist waking up children during a night terror. Instead, remain calm, and avoid yelling or shaking to wake the child. Stay in the room and try not to restrain the child unless you must to make sure s/he is safe. The episodes usually last between a few minutes and a half hour. If your child experiences night terrors, give family members and babysitters instructions of what to do. Although night terrors can occur at any age, most children outgrow them.

Sweet Dreams

Since children's sleep problems and nightmares demand attention, it is easy to forget that everyone also has good dreams! Sharing your non-scary dreams regularly and asking about your child's can help diffuse the impact of bad dreams. If a child wakes up to realize the pet pony in one dream isn't real, this can help her process that the monster in a nightmare also isn't real. Since preschoolers enjoy silly stories and games, explore the fantastical, delightful, and humorous aspects of your dreams together.

Dream a Little Dream (or a Big One!)

Explain to your child that most people have another kind of dream: a special and personal wish. Dreams express what we want to see, do, accomplish, or learn in life. "Dreaming" while awake inspires new ideas, and having a dream or goal often helps people overcome problems or difficulties. Take the time to ask about, respect, and nurture your child's dreams for the future. Introduce your child to the inspiring stories of historical figures such as athletes, artists, community leaders, scientists, etc. who worked hard to make their dreams come true.

Light to Excite and Delight!

Today's show uses the magical effect of black light. What is black light?

How does it work?

A "Spect-Ocular" Effect

The human eye sees light in a range called the spectrum made up of the colors of the rainbow. Beyond red in the spectrum is infrared light, and beyond violet is ultraviolet (or UV) light. All UV light is invisible. A black light is a fluorescent bulb that has a special phosphor finish. Phosphor is matter that produces light when it encounters radiation. The black light phosphor coating blocks harmful UVB and UVC light and allows only UVA light through, plus a little visible blue and violet light giving it a purple glow. (Regular fluorescent lights also have a phosphor coating, but one that blocks all UV light and emits visible white light.) Although we cannot see UV light, we can see phosphors reacting to the light. The phosphors cause the enchanting black light radiance seen in some clothing and substances.

UV Safety Screening

Sunscreen and sunglasses protect our bodies from the damaging UV rays from the sun. The most dangerous are UVB and UVC which cause burns. (Most UVC is blocked by the earth's atmosphere.) UVA is much less dangerous but people still should limit prolonged exposure. Although the level of UVA light used for novelty black lights is not dangerous, and the light used in today's show is safe for audiences, always avoid shining a black light (or any other light) directly into someone's eyes. (Playhouse performers use special glasses and coverings as a precaution, since they have repeated exposure at close proximity to the lights.) Caution: Be aware that some black lights, like the ones rock hunters use, are much more powerful and not designed for recreational use.

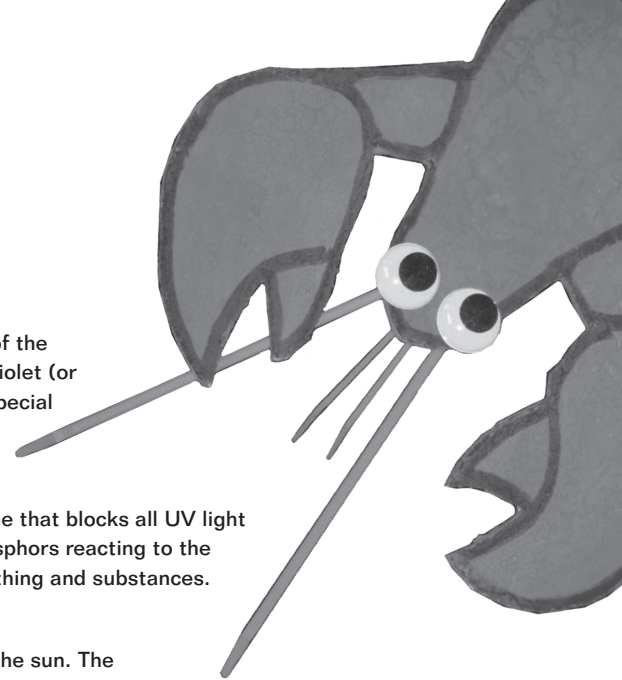
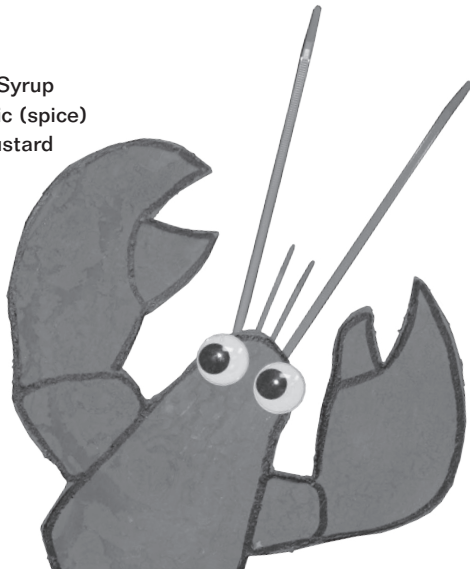
Go for the Glow

Florescent children's toys and some common household items and substances react to black light. Here is a list to get you started:

White clothing
Chenille craft sticks
Highlighter markers
Credit cards (security mark)
Household cleanser

Fingernails and teeth
Amber or opal jewelry
Petroleum jelly
Tonic water (with quinine)
Olive oil

Milk
Honey
Maple Syrup
Turmeric (spice)
Dry Mustard



Recommended Reading

Flying – Kevin Luthardt

Dream Big (an Olivia book) – Ian Falconer

Only in Dreams: A Bedtime Story (Julius!) – Paul Frank Industries

Cat Dreams – Ursula K. Le Guin

The Berenstain Bears and the Bad Dream – Stan and Jan Berenstain

Dreams – Ezra Jack Keats

Grandmother's Dreamcatcher – Becky Ray McCain (contains directions for making a dream catcher)

Sources

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