



Stars Have Stories – *How much do stars shine?* Week Three - At Home Activity

Presented by the UWM Alumni Association and UWM Manfred Olson Planetarium.



Playing with Light

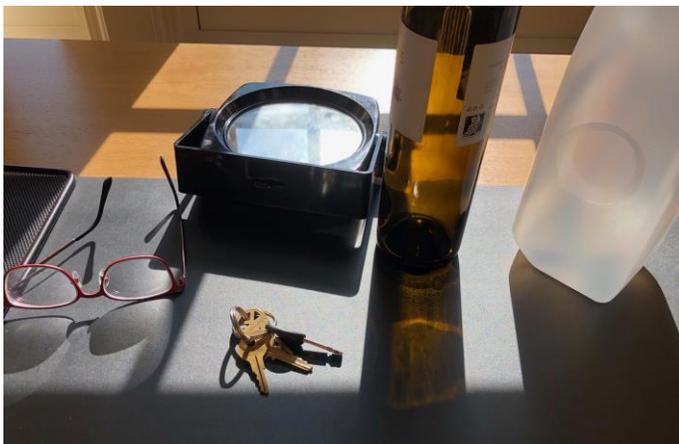
- Given that light is practically all we have to uncover the secrets of stars, let's play with light to see how it behaves with everyday objects!

- Go on a scavenger hunt in your house and look for 10 things that you think might look interesting or different in sunlight or under a bright lamp. Let your imagination go wild! Will you choose clear or colored plastic, clear or colored glass, a glass with water or juice in it (does it matter what kind of juice?), stuffed animal, boxes, thin or thick paper, metal objects like keys or mirrors and more. (Be sure to ask for help if you are looking in the recycling bin or gathering glass or metal objects!)

- Hold each item in the light, either outside in the sun or under a lamp.

- Look carefully at each item! What do you notice? Does the kind of light you use matter – whether that is sunlight or a bright LED lightbulb? Does the angle matter?

Dr. Jean photographed her glasses, a mirror, keys, a dark glass bottle, and a milk jug. She was surprised that her glasses created two shapes on the table, that the mirror has light reflections on the plastic closest to her and away from the Sun, that the shadow of the bottle has interesting patterns, and that the shadow of the milk jug gets progressively darker away from the jug. She also photographed two identical magnets at different angles, and they look very different.



- Choose your favorite three items for playing with light and think of three words that describe the quality of light you see. Are they sharp, fuzzy, dim or bright? Do they reflect light or are they translucent (this is a neat word - look it up if you don't know it)? Are they straight or rounded? What did you find surprising?

- Please email your first name, a picture of your favorite object in light, and/or what you find surprising about it to planetarium@uwm.edu. We would love to see what YOU discovered.

For other fun activities, including virtual tours of the night sky, check the UWM Planetarium website: <https://uwm.edu/planetarium/>

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