Lighting Small Objects

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Background

- During the lockdown, the weekly challenges from Dallas and Plano often have me photographing subjects around the house.
- Some of these required additional light and started learning a few things and became more elaborate as a went.
- I ended up assembling a "studio" and learned some lighting skills.
- My eventual setup is more elaborate than is necessary to duplicate these techniques and setups.
- This does not cover natural light techniques.













Lesson 1 Move away from the background



Shadow

- Too close to wall
- Light almost in line with Camera



No Shadow

- Moved away from the wall
- Light to side to cast shadow out of field of view

Lesson 2 Diffuse and Control the Light



The Basic Requirements

- A room with controllable lights. Totally off is good.
- Light sources
- Light shaping and control
 - Baffles white and black
 - Light shaping tools snoots, barn doors
 - Diffusers
 - Reflectors
- Backdrop
- Camera and lens
- Tripod
- Table or a stand
- Objects

My Room and Photo Gear

- An unused media room. Total darkness is possible. Can keep things setup.
- Backdrop stand with black and white backdrops
- A table and chair
- Black plexiglass for reflections. (Mirrors give double reflections.)
- D850 or Z7 camera and mostly 105mm macro lens. (longer lenses allow you to isolate the subject.)
- Tripod with center post and an easy to fine tune head (Arca Swiss D4)
- Tethering the camera to a laptop allows for immediate viewing in Lightroom. (*Tethering Tools*)



My Lights and Control

- Lume Cube 2 kit.
- Light stands.
- Black and white baffles made from mat board and foam core taped to back to stand it upright.
- Diffuser made from a cut mat with freezer paper taped over the opening.
- Stand with arm to hold diffuser.

The Lume Cube 2 Pro Kit

https://lumecube.com/products/lume-cube-2-0-professional-lighting-kit-2-lights-all-diffusers-and-modifiers







Lesson 3 - Lighting Glass















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Types of Light

Direct Lighting - Front



Direct Lighting – Side Diffuse Lighting - Side



Direct Lighting – Dide



Soft Bounce Lighting





Focus Stacking

- May be required
- Take shots at different focal points
- Combine in software





27 Shots

10 Shots

Other Considerations

• Color Balance

Set your camera to the color temperature of the source. A custom white balance may be required. (Lume Lights are Daylight).

Using warming gels need to balance with tungsten lights and set camera to tungsten.

• Processing

Use your normal workflow.

You need to darken black backgrounds and lighten white backgrounds

Conclusion and Questions