

MIT | RENDERING DEMO | 04.08.08

1st Topic

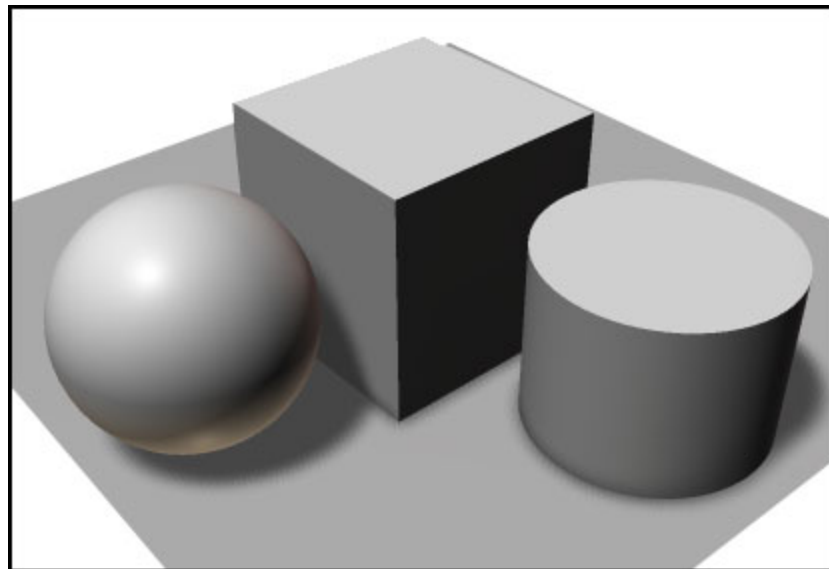
Show examples of primitives in products and how light acts on them.

I am wondering would you want the focus to be more on the tool of Photoshop?
At the moment it is half and half.
Making notation and then using the tool.

GEOMETRIC PRIMITIVES

PRIMITIVES

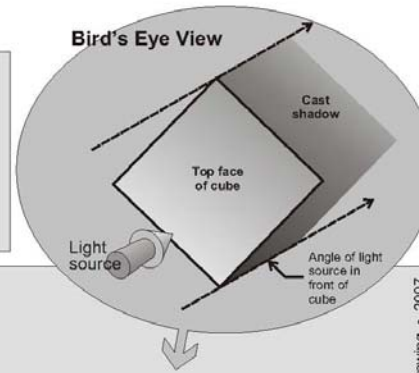
Volumes in a vacuum.



Shaded Cube and Cylinder

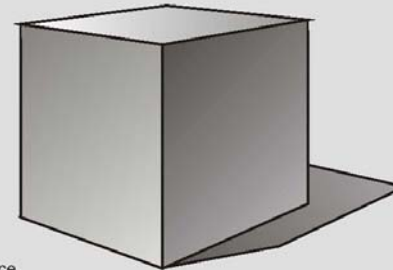
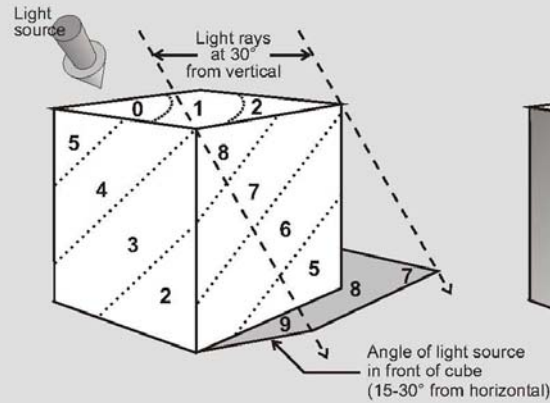
- The forms are lit by a single light source with parallel rays
- Light source shines down at an angle 30° from vertical
- Light source is rotated 30° toward viewer to shine on the front of the form

Type of Light	Value
• Highlight	0
• Light	1 - 3
• Halftone	3 - 6
• Shade	6 - 8
• Reflected light	3 - 5
• Cast shadow	9 - 7



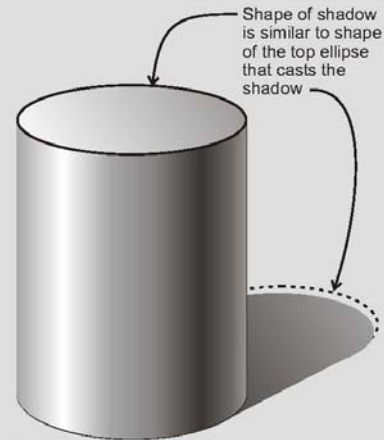
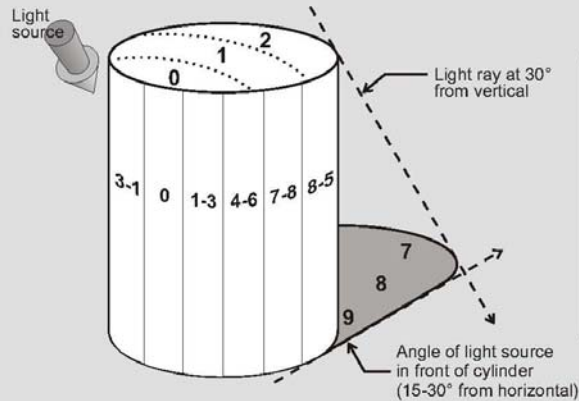
- 10
- 9
- 8
- 7
- 6
- 5
- 4
- 3
- 2
- 1
- 0

Cube lit by a single light source



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Cylinder lit by a single light source



CUBE



Isolating Color, value
The previous slide holds true

CUBE with RADIUS



Flat, subtle value change
around the radius



Note the light rolling
around the radius.
This imparts the
etched, anodized finish.

CYLINDER

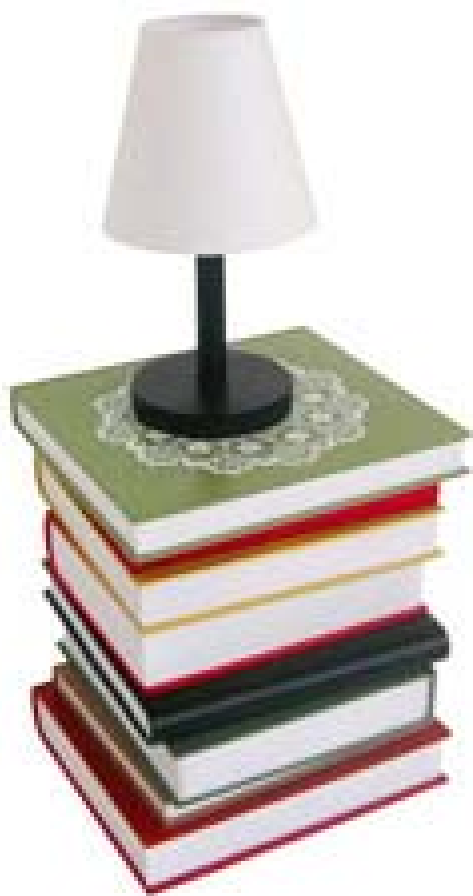


Pure Cylinder



Same form
simply a material
and finish change

CONE



A tapered cylinder



Note how the value tapers as well

PYRAMID

To come

SPHERE

To come

TAURUS



Imparting high gloss finish
Tight crisp Highlight.
Appears appropriately clean.



Imparting matte finish
Soft, even light looking

COMBINATION OF PRIMITIVES

Products formed from primitives



Dark contact shadow
Softer case shadow



High contrast from upper
right corner to lower left.
Dramatic, Strong, Bold

COMBINATION OF PRIMITIVES



Incredible example of a change of finish to a form
How do we know this handle is soft touch?

COMBINATION OF PRIMITIVES



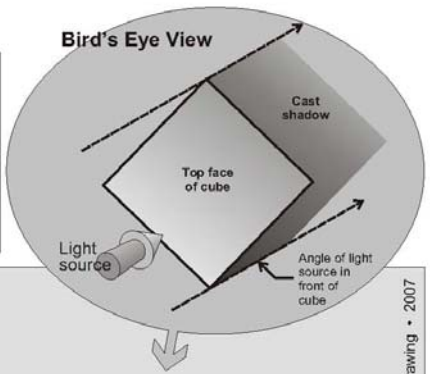
Note subtle value changes

Begin Photoshop demo now. First studying primitives then use the tool.

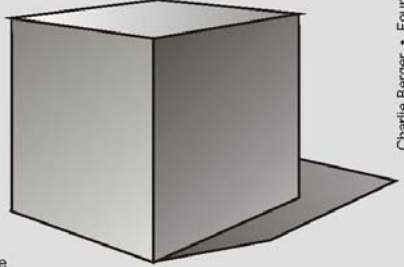
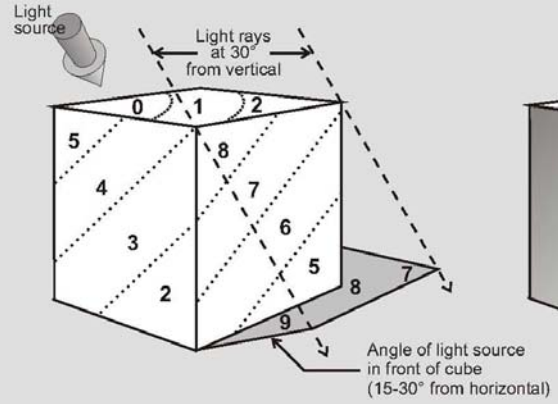
Shaded Cube and Cylinder

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- 8
- 7
- 6
- 5
- 4
- 3
- 2
- 1
- 0

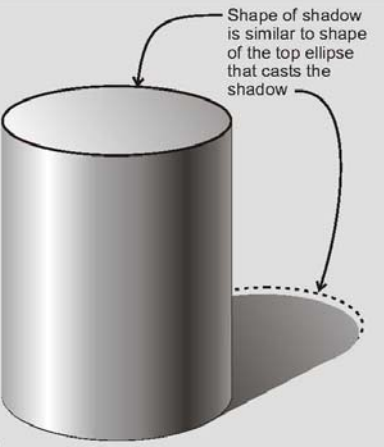
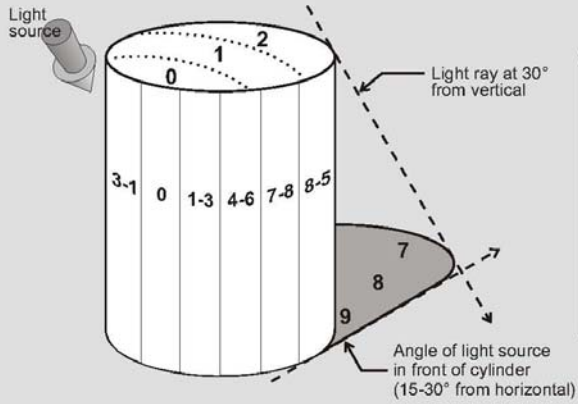


Cube lit by a single light source



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Cylinder lit by a single light source



I will work back and forth from examples in powerpoint and the primitives in the photoshop I will have printouts of this sheet for students. How many are there?

Stress how
important it is to
have reference.
Understand how
to achieve a
look and finish
you desire.

Then begin Top
view demo

INTERFACE

INTERFACE REFERENCE



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INTERFACE REFERENCE



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INTERFACE REFERENCE



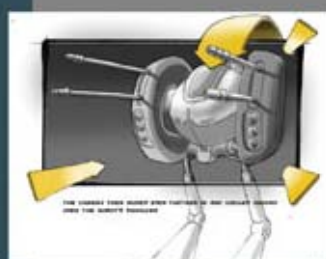
Show
environment
reference.
Talk about
capturing the
gesture, energy
of the space. It
is ok to be
loose, free. It is
a balance of the
line work and
the value added.
Light source.

ENVIRONMENT

ENVIRONMENT REFERENCE



ENVIRONMENT REFERENCE



conceptual:

