Answer Key for Features of the Sun Activity

- Each image in this answer key includes markings which point out (using arrows or circles) noteworthy features on the image.
- Each noted feature includes a letter code (“A”, “B”, etc.)
- The page after the image provides the key to the letter codes on the image on the preceding page.
- Each key has two parts:
  1. What the student should notice during the “Explore” part of this activity
  2. The name of the feature, which the students should identify during the “Explain” portion of this activity.
Key for “Visible (Red) Light View of the Sun – March 29, 2001”

Explore phase

A – Students should note the presence of dark spots at various locations. Keen observers might also note that spots have a darker central area and a lighter outer part; this is more noticeable on larger spots.

B – Keen observers may notice lighter-colored areas in a few places; sometimes near spots, sometimes not.

Explain phase

A – Sunspots

B – Facula (plural is faculae)
Ultraviolet View of the Sun – September 19, 2010
Key for “Ultraviolet View of the Sun – September 19, 2010”

Explore phase

A – Brighter areas

B – Students should notice various odd-shaped protrusions extending outward from the edge of the Sun’s disk.

C – Students might notice a “fuzzy glow” or diffuse bright areas beyond the edge of the Sun’s disk at various places around the circumference.

Explain phase

A – Active Regions

B – Prominence

C – The Sun’s Atmosphere (or corona – upper atmosphere)
Ultraviolet View of the Sun – September 14, 1999
Key for “Ultraviolet View of the Sun – September 14, 1999”

Explore phase

A – Loop extending well beyond the disk of the Sun

B – Brighter areas

C – Students might notice a “fuzzy glow” or diffuse bright areas beyond the edge of the Sun’s disk at various places around the circumference.

Explain phase

A – Solar Prominence

B – Active Regions

C – The Sun’s Atmosphere (or corona – upper atmosphere)
Ultraviolet View of the Sun – November 4, 2003
Key for “Ultraviolet View of the Sun – November 4, 2003”

Explore phase

A – Very, very bright area
B – Brighter areas
C – Students might notice a “fuzzy glow” or diffuse bright areas beyond the edge of the Sun’s disk at various places around the circumference.
D – Darker areas
E – Small loops

Explain phase

A – Solar Prominence
B – Active Regions
C – The Sun’s Atmosphere (or corona – upper atmosphere)
D – Coronal Holes
E – Coronal Loops
Solar Eclipse – February 16, 1980
Key for “Solar Eclipse – February 16, 1980”

Explore phase

A – Students should notice a “fuzzy glow” or diffuse bright areas beyond the edge of the Sun’s disk at various places around the circumference.

Explain phase

A – The Sun’s Corona (upper atmosphere)
Solar Eclipse – November 3, 1994
Key for “Solar Eclipse – November 3, 1994”

Explore phase

A – Students should notice a “fuzzy glow” or diffuse bright areas beyond the edge of the Sun’s disk, mostly in two “wings” on the left and right side.

Explain phase

A – The Sun’s Corona (upper atmosphere)
Solar Eclipse – August 11, 1999
Key for “Solar Eclipse – August 11, 1999”

Explore phase

A – Red areas at various places around the edge of the Sun’s disk
B – Fuzzy white glow at various places around the edge of the Sun’s disk
C – Shapes in the red areas

Explain phase

A – Chromosphere (Sun’s lower atmosphere)
B – Corona (upper atmosphere)
C – Solar Prominences
Visible (Red H-alpha) Light View of the Sun – July 18, 2000
Key for “Red H-alpha View of the Sun – July 18, 2000”

Explore phase

A – Lighter colored areas
B – Short, dark lines and “squiggles”
C – Small, dark dots

Explain phase

A – Active regions
B – Solar filaments
C – Sunspots
Key for “Ultraviolet View of the Sun – April 20, 2012”

Explore phase

A – Bright loops or curves

B – Brighter areas

C – Students might notice a “fuzzy glow” or diffuse bright areas beyond the edge of the Sun’s disk at various places around the circumference.

Explain phase

A – Coronal loops

B – Active regions

C – The Sun’s Atmosphere (or corona – upper atmosphere)