

US Postal Stamps

As time permits, pick at least one image that is striking to you.

Red Blood Cells



FOREVER/USA

Macaw Parrot Feather



FOREVER/USA

Arranged Diatoms



FOREVER/USA

Freshwater Protozoans



FOREVER/USA

Diving Beetle Front Foot



FOREVER/USA

Mouse Brain Neurons



FOREVER/USA

Zebrafish



FOREVER/USA

Mushroom Gills



FOREVER/USA

What did you pick?
Why?

Find other internet
images of the same
item(s).

Can you estimate
the magnification of
one stamp image
you have chosen?
Describe your
method.

Human Hair



FOREVER/USA

Moss Leaves



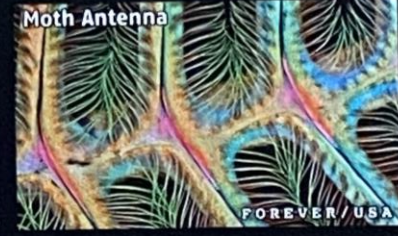
FOREVER/USA

Acorn Barnacle



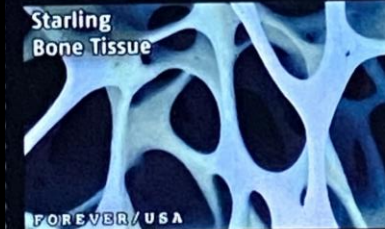
FOREVER/USA

Moth Antenna



FOREVER/USA

Starling Bone Tissue



FOREVER/USA

Moth Wing Scales



FOREVER/USA

Freshwater Snail Tongue



Blue Button Organism



Answers will vary.

Estimating sizes of the items would be easiest if you can find a similar image on the internet that has a magnification listed.

For example: A human hair is visible without a microscope. To see some detail one can use a 10x magnifying glass. Note other pix here.



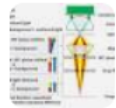
Note that magnifying technologies range from simple magnifying glasses to electron microscopes. See next slide.

Types of microscopes

From sources across the web



Compound Microscope ▾



Phase contrast microscop... ▾



Electron microscope ▾



Transmission electron mi... ▾



X-ray microscope ▾



Petrographic microscope ▾



Scanning electron micros... ▾



Microscopy ▾



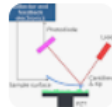
Stereo microscope ▾



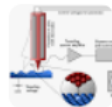
Scanning probe microsc... ▾



Inverted microscope ▾



Atomic force microscope ▾



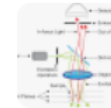
Scanning tunneling micro... ▾



Simple microscope ▾



Fluorescence microscope ▾



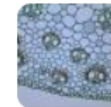
Confocal microscopy ▾



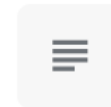
Scanning electron micros... ▾



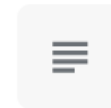
Digital microscope ▾



Bright-field microscopy ▾



Dark-field microscopy ▾



Transmission electron mi... ▾

Magnification!
How does THAT
work?