

SCIENCE @ THE LIBRARY

MICROSCOPES

To view a tiny part of an object at 10 to 30 times its normal size.

MATERIALS:

1 microscope
assorted prepared glass slides
assorted small objects

WHAT TO DO:

Take a prepared glass slide and gently slide it under the two metal clips and the flat viewing surface of the microscope. Center the object to be viewed. Turn on the light switch which is at the left of the main neck of the microscope.

Using both eyes, look down into the microscope to see what you can see. The slide specimen may need adjustment to be centered and seen under the scope.

With the help of an adult, gently twist the black cylinder which is slightly below the two eyepieces through which you were previously looking. This cylinder has a 1X and 3X on it. At the 1X it is relying just on the magnification of 10 times from the upper eyepieces. When rotated to the 3X, it now is 3 times the 10X, to make it magnify at 30 times the original. You will not see as large an object, but you will see it in much greater detail.

Try other prepared slides, looking at both 10X and 30X to get used to focusing on the objects.

Try placing other thin things such as feathers, a scrap of cloth, a piece of leaf, a strand of your hair, a scab or piece of skin on the lighted area and looking at it. Smaller and thinner objects which allow the light to pass through it, will be easier to view.