

THE ART OF OBSERVATION

A scientist is a lot like a detective. They both make careful observations and try to notice things that other people miss.

WHAT YOU NEED: Your pocket microscope, this worksheet and a pencil.

WHAT TO DO:

Study this circle through your microscope.
What observations can you make?



LET'S SEE HOW YOU DID:

	YES	NO
Did you notice that the circle looks bigger through the microscope?	☐	☐
Did you notice that the edges of the circle look ragged?	☐	☐
Did you notice tiny dots of ink scattered about the circle?	☐	☐

*If you noticed all three of these you are truly an expert observer!
Otherwise, look again so you can become an expert!*

DO YOU WANT TO SEE A MAGIC TRICK?



Put a pencil dot in the left circle
and look through the microscope.



See? - The dot jumped to the left circle! But did it
really? Let's do some experiments to find out.

Use your microscope to observe each of the letters in the left column of the chart.
In the right column, tell how the letter's position changes.

LETTER	WHAT HAPPENS TO THE LETTER?
H	
D	
W	
R	

Did the microscope have any effect on the position of the letter H above?
Experiment with pencil dots around the H and look again.

AHA! THE MICROSCOPE DOES
THE **SAME THING** TO
EVERYTHING YOU LOOK AT!



CONCLUSION:

WHAT DOES THE MICROSCOPE DO TO EACH IMAGE?
