**Environmental Science A Name\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**Period\_\_\_\_\_**

**A Closer Look at Paper Fibers**

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| **What you'll need:**   * photocopier paper * notebook paper * paper towel * newspaper * brown paper bag * facial tissue * microscope |  |

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| The main component of paper is cellulose fiber. Each fiber is finer than a human hair. Wood chips are broken down into individual fibers to make a mushy substance called pulp, which in turn is made into paper.  In this activity you will view some different types of paper under a microscope and observe the fibers that interlace to form the sheet.  **Procedure:**  1. Use the recording sheet below to record your data. | | | |
| **Type of Paper** | | **Characteristics of Paper (example: thickness, softness, smoothness, etc.)** | **Description of Fibers** |
| photocopier paper | | (example: smooth, thin, strong) | (example: short or long? tightly or loosely woven?, etc.) |
| notebook paper | |  |  |
| paper towel | |  |  |
| Newspaper | |  |  |
| brown paper bag | |  |  |
| facial tissue | |  |  |

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| 2. Tear off a small piece of each kind of paper. The torn edge allows you to see a thinner section of the paper.  3. Position the torn edge under the microscope.  4. Observe the fibers. |

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|  |  | **Interpreting your data:**  1. Describe what you see. Record descriptions of the fibers for each type of paper on your recording sheet.  2. Viewed under the microscope, how are the paper fibers alike and how they are different?  3. What factors might explain the differences you observed in the fibers?  4. Think about the end use of each paper sample. How might the fiber characteristics influence how the different kinds of paper are used by consumers? |

Draw your observations here