**Names: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

[**Twins: Alike, but Not Alike**](http://www.national-geographic-magazine.co.uk/files/9613/5289/2310/Twins.pdf) ***National Geographic***

**PLEASE ANSWER THE FOLLOWING QUESTIONS AS A GROUP. YOU MAY TURN ONE SHEET IN WITH ALL OF YOUR NAMES INCLUDED.**

1. **What is the difference between a set of fraternal twins and a set of identical twins?**
2. **How do researchers use identical versus fraternal twins to look at disease?**
3. **What is epigenetics?**
4. **Who was Francis Galton?**
5. **Who is Thomas Bouchard?**
6. **Why are twins such good subjects for questions such as, “Why are some people happy and others sad?, and “Why are some people outgoing and others shy?”.**
7. **What were the results of the 1990/2000 University of Minnesota Twin Study (Bouchard) on the following:**
   1. **IQ (what percent heritable)**
   2. **Height (what percent heritable)**
8. **Autism Diagnosis is heritable. What is the percent likelihood a sibling will be diagnosed if their identical twin is diagnosed?**
9. **What are some results of Twin Studies? Why are they important?**

**Items for discussion only:**

* **How alike and different are your siblings (if you have any)? Do you think this is due to your genetic makeup or your environment?**
* **So, does a child’s environment matter? Why or why not?**
* **How do epigenetics change the entire conversation of heredity? What are some examples of how epigenetics works?**
* **Think of a type of family that would be the opposite from yours in many ways. If you were switched at birth, and raised by that family, how would you be different? How would you be the same?**
* **As a group, please come up with at least one more discussion question together.**