Title.....

You began life as a single cell, when a<sup>1</sup> ......from your dad met an<sup>2</sup> ......from your mom. Your parents made these reproductive cells through a special type of cell division called<sup>3</sup>............ When their reproductive cells combined, your dad and mom each donated half of your<sup>4</sup>......from mom and<sup>6</sup>.....from dad — for a total of 46 chromosomes in each of your cells. The genes on those 46 chromosomes determined your<sup>7</sup>....., from your physical appearance to much of your behavior. The science of genetics tracks the ......of genes and studies how they determine traits. Through genetics, you can understand why your skin is a certain color or why some traits seem to run in you family. Your 9 ...... are found in your<sup>10</sup>......, which is in turn found in your<sup>11</sup>...... Each chromosome consists of hundreds of different blueprints.that contain the instructions for your cells' worker molecules (which are mostly<sup>12</sup>.....). Each type of cell in your body uses the blueprints found in your genes to build the proteins it needs to do its particular job. So what exactly does all that mean? Here it is, plain and simple: DNA determines your traits because it contains the instructions for the worker molecules (13......) that make your traits happen. Scientists are discovering more and more about DNA; they're also developing 14......to read and alter the DNA in cells. Chances are you're already experiencing the impacts of scientists' work with DNA, even if you don't know it. Why? Because scientists use 15.....to alter organisms used in food and medicines. This technology allows them to take genes from one organism and place them into the <sup>16</sup>.....of another, changing the characteristics of the receiving organism. For example, scientists alter the cells of bacteria with human genes, turning them into <sup>17</sup>.....that produce human proteins needed to treat diseases.

## **Questions:**

**1-** Fill in the gaps with the correct word.

Words: DNA, tools, recombinant DNA technology, meiosis, cells, egg cell, proteins (\*2), characteristics, tiny living factories, genetic information, , genes, chromosomes, sperm cell, 23 chromosomes, inheritance, 23

- **2-** Explain the words in bold.
- **3-** Give a suitable title to the text.