Heredity Web quest

<http://learn.genetics.utah.edu/content/inheritance/>

**Directions:**

Click the link, “What is Heredity” Under the Heading “How Inheritance Works” Listen to the information on the slides and answer the following questions.

1. Why do we look like our parents and our brothers or sisters?

2. What is the basis of heredity?

3. Where are our traits?

4. What are genes made up of?

5. Where are these genes stored?

6. Explain one way our environment can alter or change or traits.

7. How many chromosomes are in a complete set in a human?

8. How many complete sets does a human have? Making a total of how many

chromosomes?

9. How are the parents genes passed onto a child?

10. Explain how the mother and the father share their chromosomes with their child.

11. When does this transfer of chromosomes take place?

12. How many sets of chromosomes does the egg cells from the mother contain?

How many are in the father’s sperm cells?

13. What is the name of the single cell that is made after the egg and the sperm cell joins

together? How many chromosomes does it contain?

14. Explain what happens to the zygote to form a child?

15. Explain how chromosomes are shared from the parents to the child. Explain “the rule.”

16. Explain what happens that makes every individual unique?

17. How are some traits passed through many generations?

**Directions:**

Click on the tab that says “What is a trait” Listen to the information on the slides and answer the following questions.

1. Explain what a trait is. Where do we receive our traits?
2. Name, explain and give examples of the following traits:

Physical Traits:

Behavioral traits:

Predisposition to a medical condition:

1. What defines our traits? List the three main examples.
2. What is the name used to describe the two different types of traits? Which type of

thumb do you have Write either H or h to describe your trait.

1. How many alleles does each person have? Name the combinations to describe the

thumb trait.

1. Explain how our traits determined?
2. What is homozygous?
3. What happens to people that have a combination of the alleles?

For example the people who have Hh alleles?

9. What type of thumbs will they have?

1. What is heterozygous?
2. What is the HH allele combination called?
3. What is the hh combination called?
4. How are traits inherited?
5. What is incomplete dominance?
6. What is the difference between single-gene traits and complex traits?
7. What creates the diversity in peoples looks?