DNA

- DNA stands for
  - Deoxyribonucleic Acid
- Where does DNA come from?
  - 1/2 is inherited from your mother
  - 1/2 is inherited from your father
- “Blue print” that tells your body how to grow and develop
- There are two areas of DNA
  - Common
  - Different (highly variable)
Where can DNA be found?

Cell Types:
- Blood
- Tissue
- Saliva
- Teeth
- Hair Roots
- Bones

SAME
Where does DNA come from?

Cell

Nucleus
Where does DNA come from?

Nucleus

Maternal Chromosome

Paternal Chromosome
Where does DNA come from?

Chromosome

DNA
DNA - What it looks like

Double Helix

Units

A = Adenine
T = Thymine
G = Guanine
C = Cytosine
STR
Short Tandem Repeat

AGAT AGAT AGAT AGAT 4 Allele

AGAT AGAT AGAT AGAT AGAT AGAT AGAT 6 Allele

DNA Type = 4, 6
Data Analysis
Analysis of amplified DNA
Amplification
PCR (Polymerase Chain Reaction)
Amplification (making copies)

Solution → DNA → [PCR System]
Isolation of DNA

- Blood
- Tissue
- Saliva
- Teeth
- Hair roots
- Bone

Chemical
# Parentage

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<tr>
<th>Area of DNA</th>
<th>Mother</th>
<th>Sample</th>
<th>Father</th>
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