

Inherited Characteristics Through the Generations

We are learning to track characteristics through different generations of families.

Great Grandfather:

- Had brown hair when he was younger but it is grey now.
- Likes reading books.
- Has green eyes.
- Has 4 dogs.
- Is left handed.
- His blood type is AB-.
- Likes walking.
- Can roll his tongue.

Grandfather:

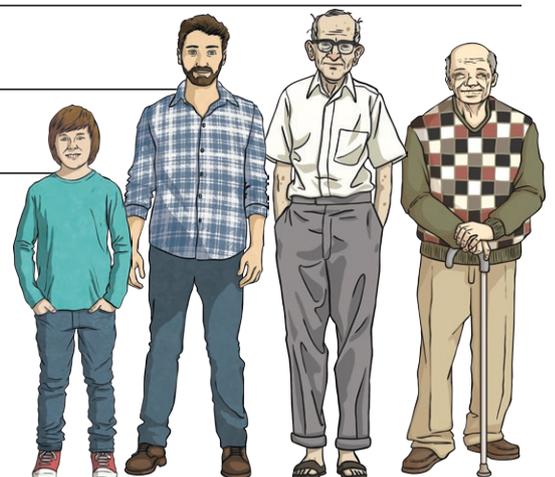
- His blood type is AB-.
- Likes to ride bikes.
- Has 4 dogs.
- Is left handed.
- Has brown hair that is starting to turn grey.
- Can roll his tongue.
- Likes reading non-fiction books.
- Has no brothers or sisters.
- Has green eyes.

Father:

- Is very physically fit.
- Has green eyes.
- Has 4 dogs.
- Can roll his tongue.
- Is left handed.
- Enjoys watching movies.
- Has brown hair.
- Has 1 brother and 1 sister.
- His blood type is AB-.

Can you use this information to predict some possible characteristics of the son?

- _____
- _____
- _____
- _____
- _____



Inherited Characteristics Through the Generations **Answers**

Great Grandfather:

- Had brown hair when he was younger but it is grey now.
- Likes reading books.
- Has green eyes.
- Has 4 dogs.
- Is left handed.
- His blood type is AB-.
- Likes walking.
- Can roll his tongue.

Grandfather:

- His blood type is AB-.
- Likes to ride bikes.
- Has 4 dogs.
- Is left handed.
- Has brown hair that is starting to turn grey.
- Can roll his tongue.
- Likes reading non-fiction books.
- Has no brothers or sisters.
- Has green eyes.

Father:

- Is very physically fit.
- Has green eyes.
- Has 4 dogs.
- Can roll his tongue.
- Is left handed.
- Enjoys watching movies.
- Has brown hair.
- Has 1 brother and 1 sister.
- His blood type is AB-.

Can you use this information to predict some possible characteristics of the son?

- **He is likely to have brown hair.**
- **He is likely to have green eyes.**
- **He is likely to be left handed.**
- **He is likely to have the blood type AB-.**
- **He will probably be able to roll his tongue.**

The influence of the son's female relative will also effect the son's genetic characteristics. Environment influences all the other traits and therefore we cannot make reliable predictions about them.

Inherited Characteristics Through the Generations

We are learning to track characteristics through different generations of families.

Great Grandmother:

- Her blood type is O+.
- Love swimming.
- Has 5 daughters.
- Has grey hair but when she was younger it was blonde.
- Lives in Glasgow.
- Is right handed.
- Has dimples in her cheeks.
- Has blue eyes.

Grandmother:

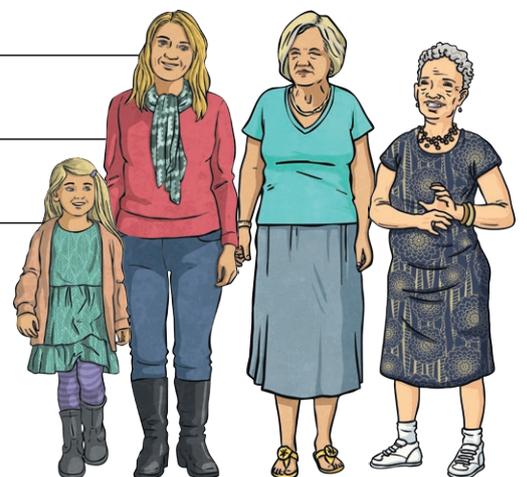
- Has dimples in her cheeks but none on her chin.
- Loves watching soaps on TV.
- Has blue eyes.
- Is right handed.
- Has 4 sisters.
- Has 2 daughters.
- Lives in Edinburgh.
- Has blonde hair which is beginning to turn grey.
- Her blood type is O+.

Mother:

- Lives in Inverness.
- Has blue eyes.
- Likes visiting the cinema to watch films.
- Is right handed.
- Has blonde hair.
- Has 1 sister.
- Her blood type is O+.
- Has dimples in her cheeks.
- Has 3 daughters.

Can you use this information to predict some possible characteristics of the daughter?

- _____
- _____
- _____
- _____
- _____



Inherited Characteristics Through the Generations **Answers**

Great Grandmother:

- Her blood type is O+.
- Love swimming.
- Has 5 daughters.
- Has grey hair but when she was younger it was blonde.
- Lives in Glasgow.
- Is right handed.
- Has dimples in her cheeks.
- Has blue eyes.

Grandmother:

- Has dimples in her cheeks but none on her chin.
- Loves watching soaps on TV.
- Has blue eyes.
- Is right handed.
- Has 4 sisters.
- Has 2 daughters.
- Lives in Edinburgh.
- Has blonde hair which is beginning to turn grey.
- Her blood type is O+.

Mother:

- Lives in Inverness.
- Has blue eyes.
- Likes visiting the cinema to watch films.
- Is right handed.
- Has blonde hair.
- Has 1 sister.
- Her blood type is O+.
- Has dimples in her cheeks.
- Has 3 daughters.

Can you use this information to predict some possible characteristics of the daughter?

- **She will have blonde hair.**
- **She will have blue eyes.**
- **Her blood type will be O+.**
- **She will have dimples in her cheeks.**
- **She will be right handed.**

The environment influences all the other traits and therefore we cannot make accurate predictions about them.