

Inherited or Environmental Characteristics

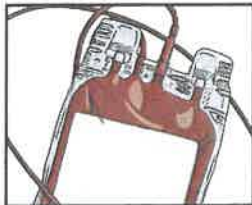
Carefully cut out the pictures, then sort them out to show which characteristics are inherited, which are environmental or which could be both. For example, your blood type is an inherited characteristic but your hair colour could be either inherited or environmental.

Inherited

Environmental

Both

Disclaimer: To ensure the safety of the children in your setting, it is your responsibility to assess whether adult supervision or other appropriate safety measures are required when using scissors.



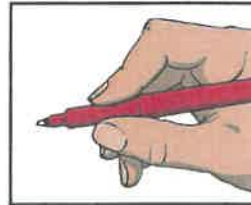
Blood Type

twinkl.com



Fashion Sense

twinkl.com



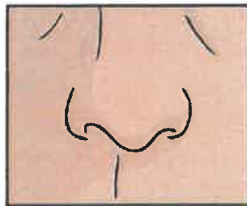
Dominant Hand

twinkl.com



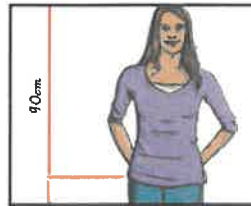
Taste in Films

twinkl.com



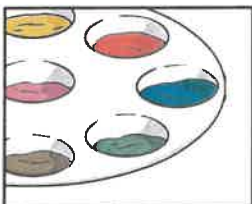
Nose Shape

twinkl.com



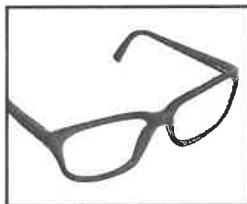
Height

twinkl.com



Favourite Colour

twinkl.com



Eye Sight

twinkl.com



Eye Colour

twinkl.com



Hair Colour

twinkl.com



Taste in Music

twinkl.com



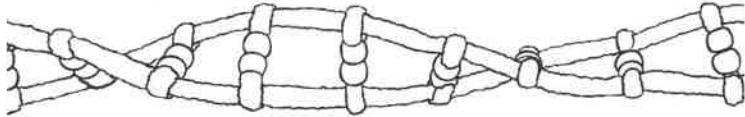
Weight

twinkl.com

It's in our DNA!

Amazing Fact

During the 1800s in the US state of Kentucky, a family called the Fugates produced several generations of blue children, a combined result of intermarriage and a rare skin disorder.



Challenge

Our genes and DNA determine many of our characteristics and appearance from birth.

The environment we live in can also impact on our characteristics and appearance.

Draw a line to match the characteristic to the cause of variation.

natural hair colour
ear piercing
height
the language you speak
blood group
weight
eye colour
detached or attached ear lobe
accent
skin colour
favourite food
length of second toe

genetic
environmental
both

You could also try to find out:

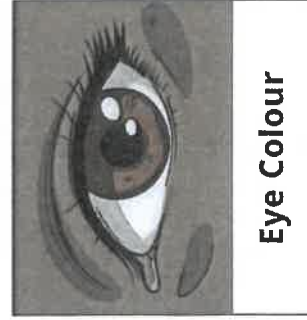
- when the last blue person lived;
- how genes are passed from parents to offspring;
- about any other strange characteristics humans have passed down through generations;
- about some colours you may never have heard of.



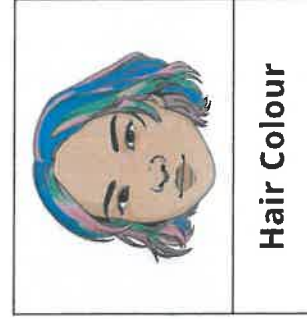
Inherited and Non-inherited Characteristics Activity Sheet

Read the following list of characteristics. Decide if they are inherited characteristics, non-inherited characteristics or both and place them on the appropriate section of the venn diagram. (Be able to explain why you think certain characteristics may be inherited and/or acquired.)

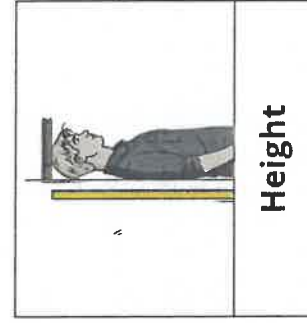
Characteristics:



Eye Colour



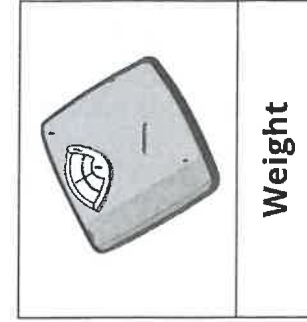
Hair Colour



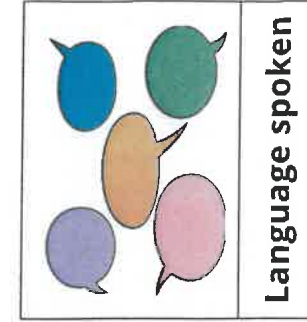
Height



Widow's peak



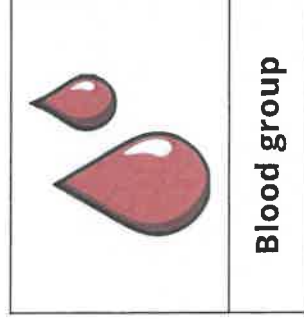
Weight



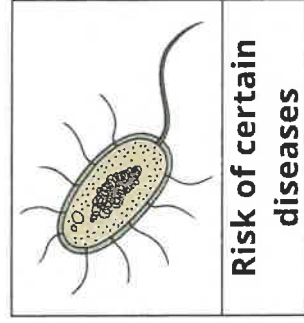
Language spoken



Skin tone



Blood group



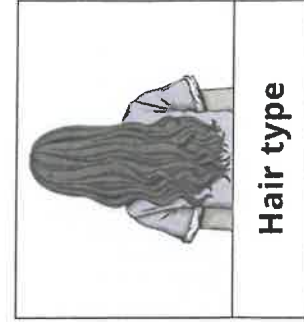
Risk of certain diseases



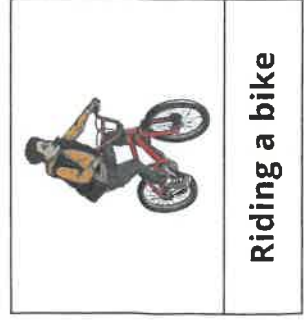
Athletic ability



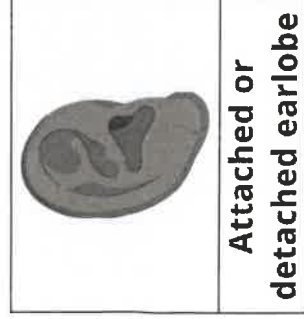
Tattoos



Hair type



Riding a bike



Attached or detached earlobe



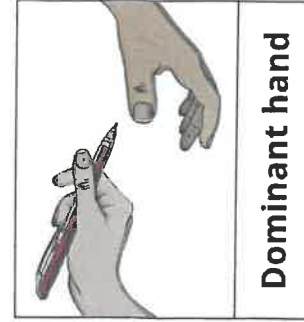
Tendency to have freckles



Playing an instrument



Favourite colour



Dominant hand

Inherited Characteristics

Non-inherited Characteristics

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:

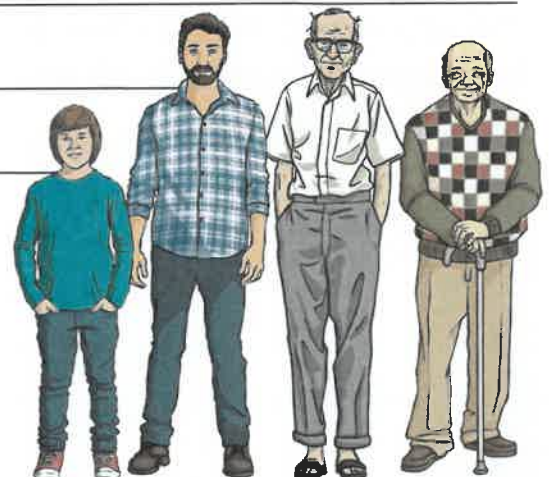
- His blood type is AB-.
- Likes to ride bikes.
- Has 4 dogs.
- Is left-handed.
- Has brown hair that is starting to turn grey.
- Can roll his tongue.
- Likes reading non-fiction books.
- Has no brothers or sisters.
- Has green eyes.

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

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?

• _____

• _____

• _____

• _____

• _____

