#### **VARIATION AND CHARACTERISTICS**

## THINK ABOUT THE FOLLOWING...

• What do you think the word "characteristic" means?

 Have a look at another person in your house.

- Can you identify some of their characteristics?
- Are they the same as yours or different?

### CHARACTERISTICS

• A characteristic is a feature of an organism. It can be something we can see (like hair colour) or something we can't see (like blood group).

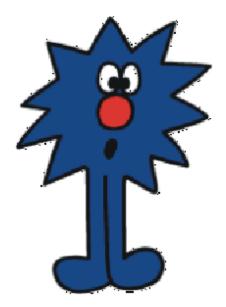
 All humans have different combinations of characteristics, meaning we all look different.

This difference in our characteristics is called variation.

### WHAT CHARACTERISTICS DO THESE TWO HAVE?



**Little Miss Trouble** 



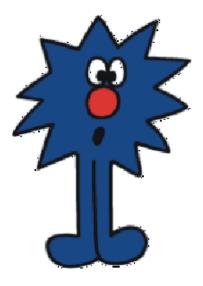
**Mr Sneeze** 

## What if they had a child...?



**Little Miss Trouble** 



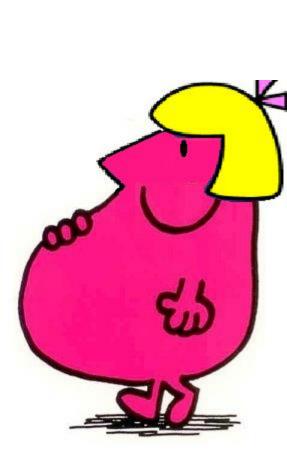


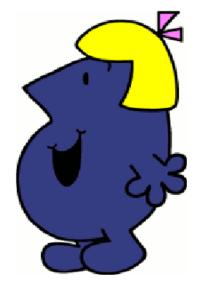
Mr Sneeze

### What if these two characters had a child...?



Mr Greedy





**Little Miss Brainy** 

#### **INHERITED CHARACTERISTICS**

• These are features that we get passed down to us from our parents.

 They are coded by genes – little bits of DNA in our cells' nuclei.

 We get half of our genes from our mother and half from our father because the nuclei of their sex cells fuses together in fertilisation.

# Are all of our characteristics inherited?

#### **ENVIRONMENTAL CHARACTERISTICS**

• Some of our features are determined by how we live and the choices we make, for example what we eat and where we live.

• These are **environmental** characteristics

 Some characteristics can be both, for example height and weight.

#### **INHERITED OR ENVIRONMENTAL?**

- Have a look at the list of characteristics below.
- Decide in pairs whether they're inherited, environmental or both.
- AccentBlood groupHeightNatural hair colourScarsTongue rollingNose shapeEye ColourTattoos
  - Religion Sporting ability Weight

Inherited	Environmental	Both
Blood group	Scars	Height
Natural hair colour	Accent	Weight
Tongue rolling	Religion	Sporting ability
Nose shape	Tattoos	
Eye colour		