Science Creates Outreach Newsletter



WEEK 9: INHERITANCE





The rats of New York City are very adaptable. They eat pizza, hot dogs — even salads.

Credit/reference: Gary Hershorn/Getty

Parents:

For primary learners, work through our full 'inheritance' lesson plan with your child. It is based around the national curriculum learning objectives found in the year 'Evolution and inheritance' topic. Download here-Science Creates Outreach

For secondary learners, the contents can be discussed in more depth using the <u>original online article</u>. **

CITY RAT, COUNTRY RAT

Have you read the story 'City Mouse, Country Mouse'? Well, this is almost the real version! The rats that live in New York live all over the city. They are found in train stations, playgrounds, on the street, underground and on rooftops. They eat 'human food' like pizza, hot dogs - even salads, and behave differently to the rats that live out in the countryside.

Some scientists in North America are studying the rats that live in New York City and comparing them to rats that live in other places.

They have noticed changes in the behaviour of the rats too, for example, the places they sleep. They are trying to figure out if these behaviours are learnt while the rat is alive, or are inherited from their parents.

Characteristic

Colour of eyes

Colour of hair

Shape of nose

Tongue rolling

Hairline shape

Colourblindedness



★ Try it at home - What have you inherited?

What do you need?

- Paper
- Pencil
- A mirror (optional)

Why am I learning this?

Learning about inheritance helps us learn more about ourselves, our families and biology.

If you want to learn more about the science behind this, check out our lesson on our website - <u>Science Creates Outreach</u>

Instructions:

- 1. First, print or draw the table from the inheritance lesson plan here.
- 2. Next, look carefully at your own face in a mirror and answer the characteristics questions about yourself in the table e.g. your hair colour, if

your earlobes are attached or detached, can you roll your tongue? (if you don't have a mirror, ask someone else to look at you and help answer)

- 3. Then, look at the members of your family and begin to answer the same questions, making notes in the table. Top tip you could look at photos or video call them if they are not with you
- 4. Fill in as much of the table as you can.
- 5. Finally, analyse the data. This means, make some conclusions and gather your thoughts about the answers. Did you inherit your hair colour from your Dad? Did your sister inherit her freckles from your Mum? Can you see any characteristics inherited from your grandparents to your parents or even down to you?





Soutreach WEEK 9: INHERITANCE



Behaviour Brother Characteristics Colour Different Eves Father Grandfather Grandmother Hair Identical Inheritance Mother Offspring **Parents** Produce Same Shape Sister

Read, Watch, Ask



Have a read of our <u>lesson</u> to learn more about inheritance.



What is inheritance? Watch here to find out.*



Got any questions about todays topic? Email us at info@sciencecreates-outreach.co.uk and we'll answer them!



... Inheritance was first recorded scientifically by Aristotle back in 304BC, in the time of the Ancient Greeks. He noticed that children often looked like their parents but it wasn't understood in any more detail for hundreds of years until the 1600s.



Competition Time

For this week we are pairing up with the University of Bath who are running a competition all about the future of transport. There is a prize for the best invention!

Cars, planes and ships pollute our planet. Che of the gases produced is carbon dioxide which causes global warming. Global warming means the carrivis slowly getting hotter, making it harder for plants and animals to survive. Can you invent a way of transporting people or goods that keeps the planet cle in.

The inventions can be drawn, painted, made of Lego®, crafted from lolly sticks of yardboard (or anything else you have in the house!).

Your competition entry should:

- include a short description of your invention
- include 182 in the subject line
- Le consiled to csct@bath.ac.uk

The deadline for this competition is 20th July 2020.

Last week's winner!

We had some lovely and creative painted rocks this week. Congratulations to our winner, Kayla, age 4. This little cat rocks!

