

**FIRST CLONED SHEEP**

# **DOLLY THE SHEEP**

**BY GROUP 2**



# WHO IS DOLLY?

**"DOLLY THE SHEEP"**

**DOLLY IS A SPECIAL SHEEP, SHE  
IS A GENETICALLY MODIFIED  
ORGANISM AND IS A PRODUCT OF  
CLONING.**

# WHAT HAPPENED IN 1996?

back in the year 1996, the roslin institute conducted an experiment that was trying to develop a better method for producing genetically modified livestock.



# **A lot of people are involved:**

The experiment were carried out at the Roslin Insititute by a team led by professor Sir Ian Wilmut. Because of the experiments nature the team was made out of many different professional people

**SCIENTISTS**



**EMBRYOLOGIST**



**SURGEONS**



**VETS**



**FARM STAFFS**



Dolly was cloned from a cell taken from the mammary gland of a six year old finn Dorset and an egg cell taken from a Scottish Blackface Sheep.

# WHEN WAS DOLLY BORN?

**ON JULY 5TH 1996, THE SCOTTISH  
BLACKFACE SHEEP GAVE BIRTH  
TO DOLLY.**



# FIRST SIGN OF CLONING

The first sign of cloning that the scientist observed was Dolly's white face.

She was genetically related to her surrogate mother, she would have had a black face which she doesn't.





# WHEN WAS DOLLY ANNOUNCED TO THE WORLD?

"on February 22nd 1997"

Dolly was announced to the world and draw a lot of media attention.

# HOW WAS DOLLY CREATED ?

Dolly is the first cloned mammal, produced from an adult mammal in history and was named after dolly parton.

She was created using somatic cell nuclear transfer(an adult cells nucleus gets divided until it develops into an embryo and can be implanted into a surrogate).

THE DNA ANALYSIS OF DOLLY  
SHOWED THAT HER TELOMERES IS  
SHORTER COMPARED TO HOW IT  
IS USUALLY FOR A SHEEP HER  
AGE.

**TELOMERES ARE 'CAPS' IN THE  
END OF DNA MOLECULES THAT  
PROTECT THE DNA FROM  
DAMAGE.**

# **IN 2001**

**Dolly was diagnosed with arthritis**  
  
**after a farm staff noticed her**  
**walking stiffly.**

# **IN 2003**

## **DOLLY DEVELOPED A COUGH**



**She was examined and they found out that  
there's a tumor growing in her lungs.**

**THE SCIENTISTS DECIDED TO EUTHANIZE  
DOLLY BECAUSE THEY DON'T WANT THE SHEEP  
TO SUFFER**



# VALENTINES DAY OF 2003

DOLLY WAS PUT TO SLEEP  
AT THE AGE OF SIX.

**- THE END**