

CLONING



SUSAN HENNEBERG

TABLE OF CONTENTS

Chapter 1	
Meet Dolly.....	3
Chapter 2	
What Are Clones?.....	6
Chapter 3	
History of Cloning.....	14
Chapter 4	
How to Clone.....	20
Chapter 5	
Cloning and Twins.....	24
Chapter 6	
Stem Cells.....	28
Chapter 7	
Helping the Sick.....	34
Chapter 8	
Animal Clones.....	40
Chapter 9	
Should We Clone?.....	44
Chapter 10	
What's Next?.....	47
Glossary.....	50



Dolly and Professor Ian Wilmut





Chapter 1 MEET DOLLY

It was 1996.

A group met in Scotland.

They went to a shed.

A lamb was being born.

They all watched.

Why?

This lamb was special.

Most lambs have a mom.

And a dad.

Not this one.

She was a clone.

A copy.

Her name was Dolly.

DO YOU COPY?

Dolly was named after singer Dolly Parton.

A sheep is a living animal.

How can it be copied?

It is not easy.

Doctors work with *cells*.

They take *genes* out of one cell.

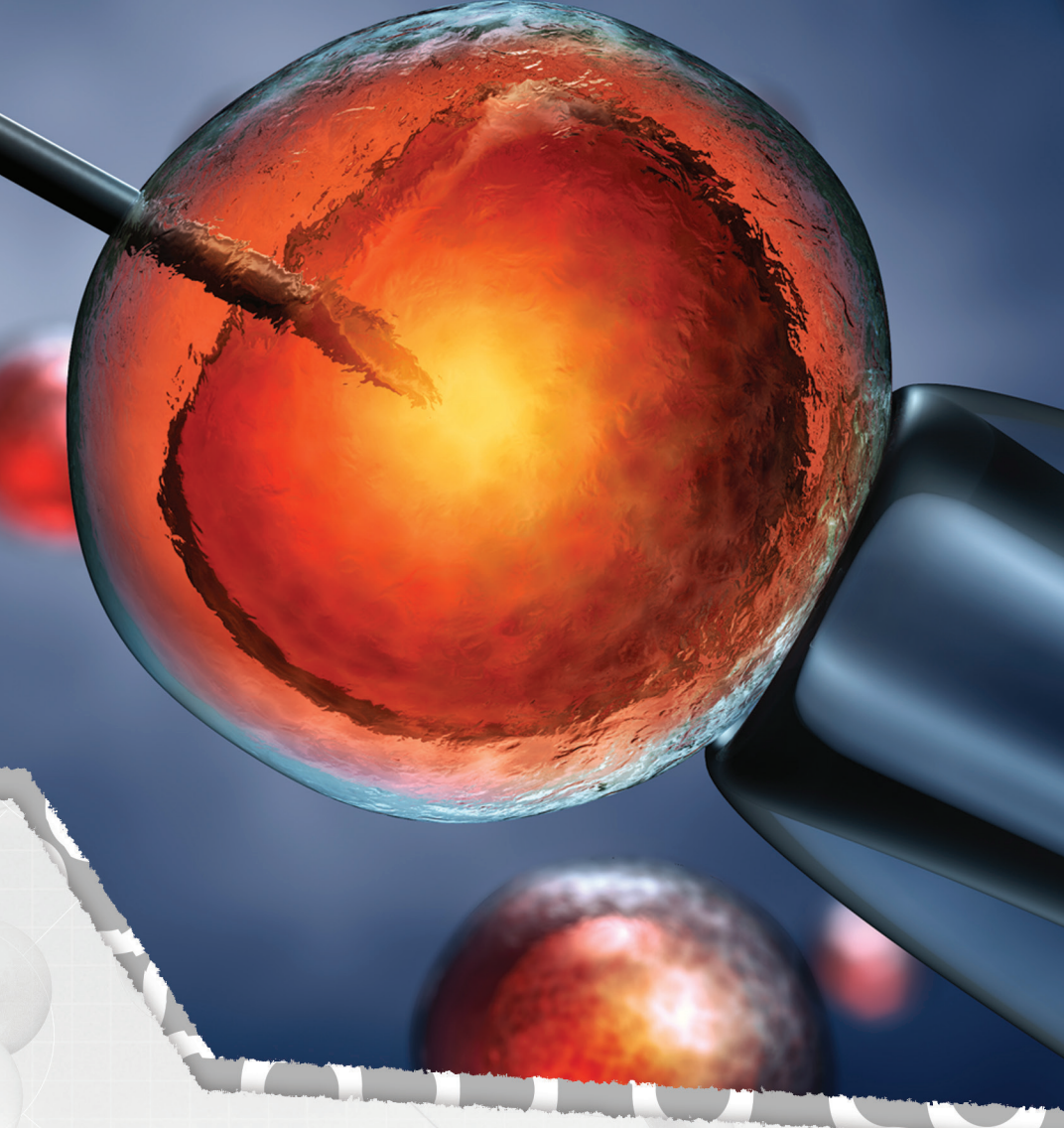
They put them in a new one.

Things can go wrong.

It took a long time to make Dolly.

277 tries.

She was the first cloned *mammal*.



Most sheep live for 10 years.
Dolly lived only six.
But she was a success.
She made big news.
Cloning took off after that.

Chapter 2

WHAT ARE CLONES?

A **clone** is a copy.
A living copy.
What does this mean?
Think of a plant.
It has a stem.
And roots.
Cut the stem.
New roots grow.
A new plant is made.
Just like the first one.





Now think of people.

Some are twins.

Identical twins.

They come from the same cells.

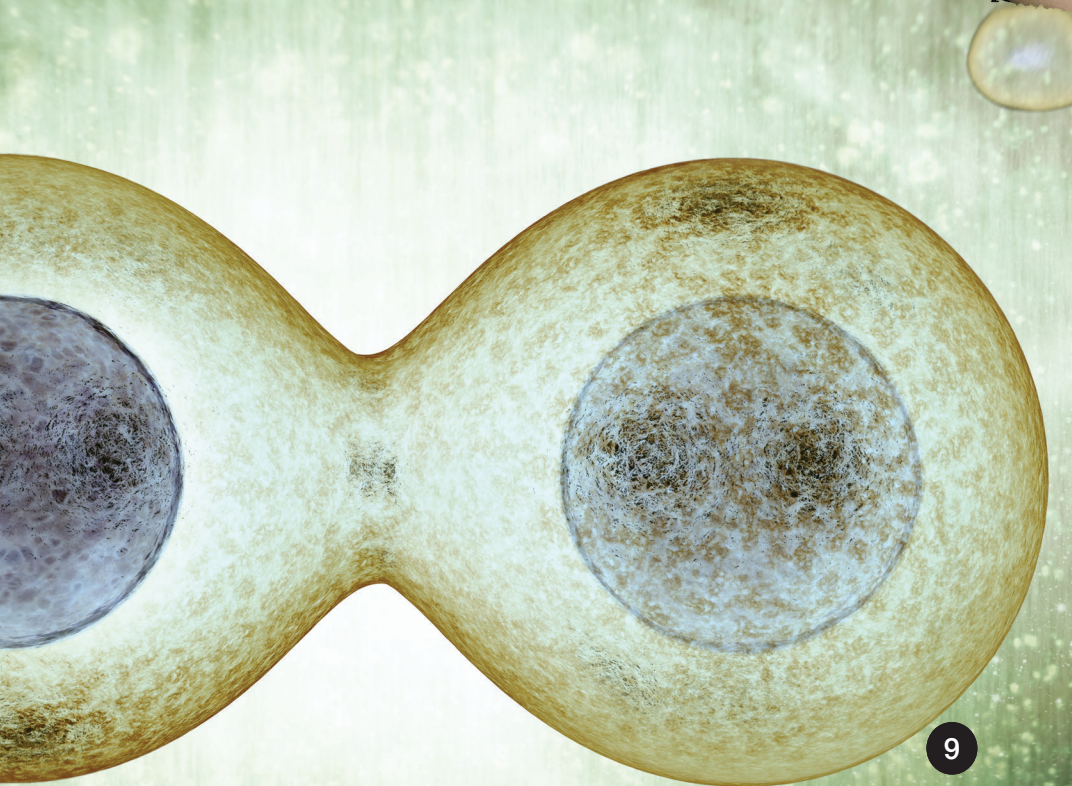
The cells split.

They make two babies.

Each is the same.



Twins in womb



CLONING

Who is Dolly?

What is a stem cell?

Is a twin the same as a clone?

Can a person be cloned?

Can your pet live forever?

 **SADDLEBACK**
EDUCATIONAL PUBLISHING
www.sdlback.com

LEXILE 50L

ISBN: 978-1-68021-034-7



90000

9 781680 210347

red rhino
books®