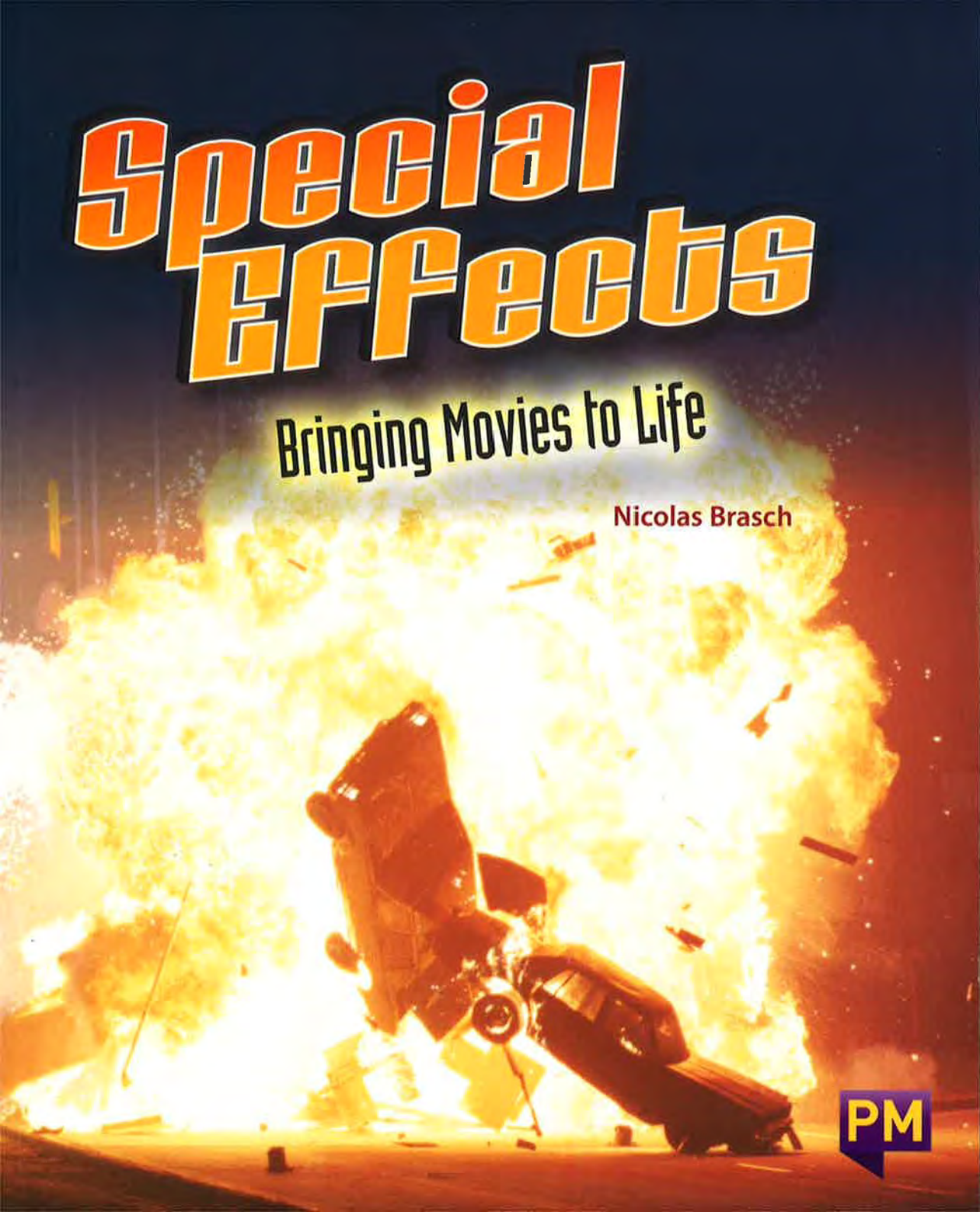
Special Effects

Bringing Movies to Life

Nicolas Brasch



PM

For teachers' inspection ONLY

Special Effects: Bringing Movies to Life

Level 28 **Curriculum Areas** The Arts; Technologies
Running Words 2523 **Text Types** Information Report (Informative) pages 2–25
Description (Informative) pages 26–32

Retelling to encourage critical thinking about the content

Ask each student to retell the information report and description in his or her own words. Record the retellings for futhur discussion and reflection.

Think and Talk About ...

Fact boxes in the book encourage each student to explore the statements further and to share the information with others.

Questions to reinforce meaning and stimulate discussion

Literal

1 How are special effects made in movies today?
2 What is a 3D movie?

Inferential

3 What is artificial help?
4 What are the props on a film set?
5 Why are audiences thrilled and terrified by movies with blood?
6 Why have Walt Disney movies been famous for so many years?
7 Why are some actors in demand for their ability to work with mo-cap technology?
8 Why do people enjoy movies with animatronic figures such as E.T.?

Applied Knowledge

9 Why do people today expect to view movies with real-life explosions?
10 How has the invention of computers improved movie-making?

Experts in Special Effects

Literal

1 What is Weta Workshop?

Inferential

2 Why has *The Lord of the Rings* trilogy become Weta Workshop's most famous movie series?

Applied Knowledge

3 What type of detail would have been required when building the bigature for Minas Tirith?

Vocabulary

Replace the noun `limit' in this sentence:
There is no limit to what visually breathtaking scenes audiences might see in the future.

Links with other PM Guided Reading Books and Cards

Level 28	Book	Informative Recount/Description	*Amazing Stories of Survival*
Level 28	Card	Procedure	*Stop-Motion Animation*

For teachers' inspection ONLY

Special Effects

Bringing Movies to Life

Nicolas Brasch

Contents

Unimaginable Worlds 2
The Stop Trick 4
Fake Blood 6
Explosions and Pyrotechnics 10
Motion Capture 12
Miniatures 16
Animatronics 18
Chroma-Keying 20
3D Movies 22
Computer-generated Imagery 24
A Spectacular Future 25
Experts in Special Effects 26
Glossary 31
Index 32

For teachers' inspection ONLY

Unimaginable Worlds

Some people enjoy going to the movies to see their favourite actors. Others like dramatic movies or comedies or scary movies. But many people go to the movies because of the special effects. Special effects are the visual illusions, or tricks, that appear in movies, and the methods and techniques film-makers use to create them.

Special effects have been part of movie-making for a long time. The special effects used in movies today are very advanced. They can involve the creation of worlds that are almost unimaginable. Special effects can also make characters do things that actors would not be able to do without **artificial** help. Some special effects are made using computers and software. But they can also be created using machinery and **props** on a film set.



E.T. the Extra-Terrestrial (1982)



King Kong (1933)

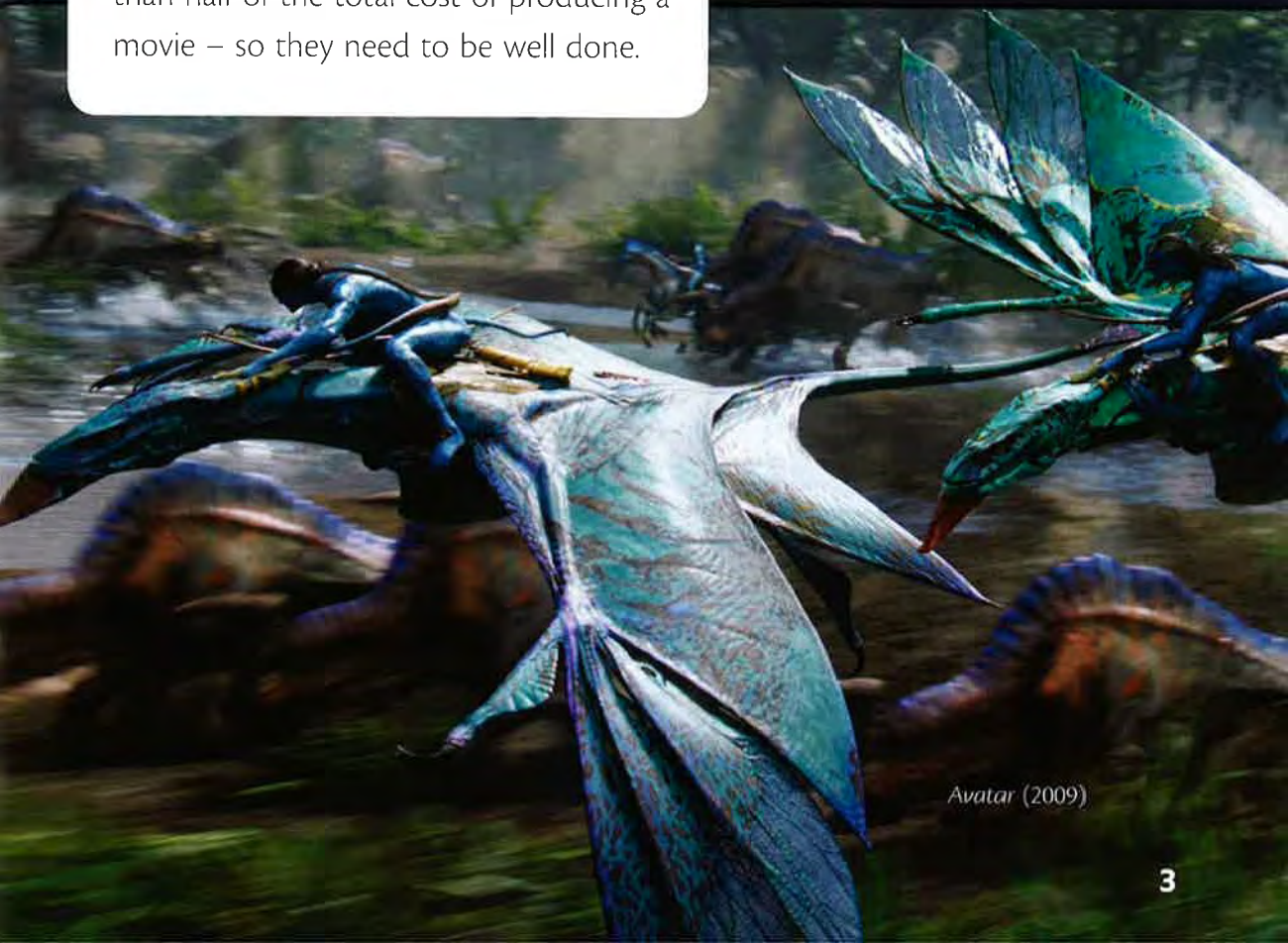
Audiences have long been amazed by the special effects they see on screen.

For teachers' inspection ONLY

Some special effects can make a movie less expensive to produce. For example, if a scene needs to be shot in the rain, hiring a rain machine is cheaper and easier than moving the entire cast and crew to a place where rain is expected or, alternatively, waiting around a film location until it starts raining. However, some special effects can make up more than half of the total cost of producing a movie – so they need to be well done.

Think and Talk About...

Special effects are carried out on the set, during filming. Visual effects are carried out after filming is complete, often on a computer, in a phase called "post-production".



Avatar (2009)

For teachers' inspection ONLY

The Stop Trick

The very first special effect used in a movie was called the "stop trick". The stop trick involved stopping the camera in the middle of a scene, rearranging the actors or props, then restarting the camera. When the scene was viewed later by an audience, something would appear to change, as if by magic. For example, an object in a scene might disappear suddenly.

Today, the stop trick would be considered a simple editing task – one that could be done after filming, on a computer, or even a smartphone, with very simple software. But, back in the earliest days of movie-making, special effects were all done on the film set.

French **director** and special-effects **pioneer** Georges Méliès (say: *mel-yez*) discovered the stop trick for himself by accident while filming a street scene in Paris in 1896. His camera became jammed and stopped filming, but the scene continued. When his camera started working again, it resumed filming. When Méliès watched the film, he realised that stopping and restarting a camera deliberately could create some interesting effects within a scene.



special-effects pioneer Georges Méliès in 1890

For teachers' inspection ONLY



George Méliès used the stop trick to make an actress "disappear" in his movie *The Vanishing Lady* (1896).



Think and Talk About ...

In 1895, the Lumiere brothers from France invented a device called the *cinématographe*. It consisted of a camera, a printer and a projector.

For teachers' inspection ONLY

Fake Blood

Audiences have long been thrilled and terrified by movies with blood. The techniques for showing blood on screen are different, depending on whether the movie is shot in black and white, or in colour.

Before the introduction of colour to films, film-makers could not rely on the colour red to create the effect of blood, so it was important that the consistency, or thickness, of the fake blood looked realistic. The famous twentieth-century film director Alfred Hitchcock tried several substances before deciding that chocolate sauce resembled blood better than anything else. Chocolate sauce is still used to mimic blood in black-and-white movies today.



Film-makers made fake blood look real in the black-and-white movie *The Horror of Dracula* (1958).



Ingredients in fake blood need to be safe enough for an actor to put in his or her mouth.

For teachers' inspection ONLY

The introduction of colour to films brought new challenges for special-effects teams when creating fake blood. Often, fake blood that looked realistic in a laboratory was too bright when filmed under movie lights.

Film-makers discovered that realistic-looking fake blood could be made using ingredients that were poisonous. However, poison could not be used if the blood was to be seen coming from an actor's mouth. As a result, peanut butter became a common ingredient. Peanut butter helped to give the fake blood a realistic colour when mixed with other ingredients. So it was not only safe, but it tasted good, too!

15
16
17
18
19
20
21
22
23
24
25
26
27
PM Level 28
29
30

PM

For teachers' inspection ONLY

Explosions and fake blood! Aliens from outer space and life-sized dinosaurs! Characters that disappear by magic and entirely fictional worlds! Special effects have been an important part of the film industry since it began. Today, the technologies used to create these visual illusions are very advanced.

Take a behind-the-scenes look at the techniques used to make special effects, and the people who use their creativity and expertise to bring movies to life.

NELSON CENGAGE Learning
For learning solutions, visit **cengage.com.au**

Text Types:
Information Report (Informative)
Description (Informative)

ISBN: 978-0170373067
9 780170 373067