

STUNT SCIENCE WITH STEVE WOLF

TALKING POINTS

KNOWLEDGE

1. What does anecdotal evidence mean?
2. Thirty years after presenting his first assembly, people come up to Steve to tell him how much they loved his shows. Can you provide other anecdotal evidence, from the article, that his assemblies inspire children?

COMPREHENSION

3. Steve says that while technology offers many opportunities to teenagers, mobile phones, games consoles and the internet can divert students' attention away from school and learning. Do you agree? Explain your reasons.
4. A study conducted in the state of Texas found that students who participated in the Science in the Movies assemblies scored up to 33% higher in their science tests than those who did not. What might explain this increase in test scores?

ANALYSIS

5. Think about an assembly you found particularly inspiring. Why did you find it so inspirational? How did it affect you and did it change your opinion in any way?
6. Steve might be described as tenacious. What other characteristics do you think he has that enabled him to become a stunt scientist?

SYNTHESIS

7. Imagine you have been drafted in by Joe Biden's administration to overhaul STEM education. What could be introduced into secondary or high schools to increase numbers of students studying STEM subjects?

EVALUATION

8. When Steve was an intern, he contacted one of the biggest names in special effects at the time, Gary Zeller, and asked whether he could work with him as a "coffee boy". Think about the career path you want to follow. Who could you contact to ask for guidance and/or volunteer experience? How would you go about doing this?

ACTIVITIES YOU CAN DO AT HOME OR IN THE CLASSROOM

THE SPY WHO LOVED ME

In this clip from *The Spy Who Loved Me*, James Bond skis off a mountain, free falls and then opens a parachute before softly landing in the snow below:

https://www.youtube.com/watch?v=RaEU_A405zA

Stunt coordinators like Steve often build small-scale "previsuals" to test the science behind their stunts. Design a parachute, using different materials to find out which work best. Watch this video from TeachEngineering for ideas:

https://www.teachengineering.org/activities/view/design_a_parachute

MOONRAKER

In this clip from *Moonraker*, James Bond is pushed from a plane high in the sky without a parachute:

<https://www.youtube.com/watch?v=87MO-gtYFT8>

Read this Wikipedia article that explains the physics of free falling:

https://en.wikipedia.org/wiki/Free_fall

Physics Classroom has loads of cool activities you can do to experiment with free fall:

<https://www.physicsclassroom.com/Teacher-Toolkits/Free-Fall/Free-Fall-Complete-ToolKit>

CASINO ROYALE

In this clip from *Casino Royale*, James Bond narrowly misses running over Vesper Lynd in his car but ends up crashing instead:

<https://www.youtube.com/watch?v=x-21uPJGXFQ>

Stunt coordinators have to work out how to protect the stuntperson or actor involved in high impact stunts such as falling off buildings or crashing a car, and this might mean using protective padding.

How would you drop an egg from a high point and on to a hard surface without breaking it? Design a carrier, using common materials like milk cartons or showboxes, to house your egg. What happens when you drop the egg when it is encased in your carrier? How would you modify your carrier? Would a parachute or wings help?

<https://sciencing.com/the-science-behind-the-egg-drop-experiment-12750680.html>