

Wednesday 22<sup>nd</sup> April 2020

Good morning all.

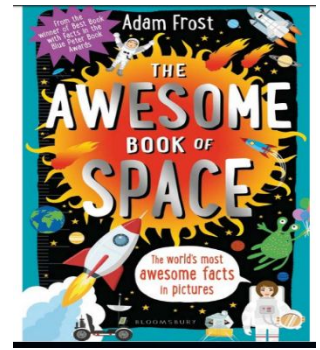
Today we will finish reading The Awesome Book of Space.

**WALT – use retrieval skills to answer questions**

**WALT answer question involving authorial intent**

Read the text from the following pages then answer the questions.

Page 1



## PACK IT IN!

Time to pack. There are no washing machines in space, so if you went for a year, you'd have to take **THIS** many pairs of pants.

JAN					
FEB					
MAR					
APRIL					
MAY					
JUNE					



### COSMIC PONG

Why only 52 pairs? According to cosmonauts on the Russian space station, Mir, they only changed their pants **ONCE A WEEK**. Science Officer Pettit of the International Space Station (or ISS) once wore the same pair of shorts for over **THREE MONTHS**.

Page 2

## PANTS ON FIRE!

What happens to the dirty undies? They become **SHOOTING STARS**. On the ISS, they are dropped into an old supply craft and ejected. Then, they burn up in the Earth's atmosphere.



JULY					
AUG					
SEPT					
OCT					
NOV					
DEC					

### HOME GROWN

Science Officer Pettit of the ISS once grew tomatoes in his old pants. He said: 'I figured there might be a few nutrients in there.' When he'd tried before, the seeds had got too cold and died, but in his magic pants, the seeds sprouted in two days.



# AWESOME G-FORCE

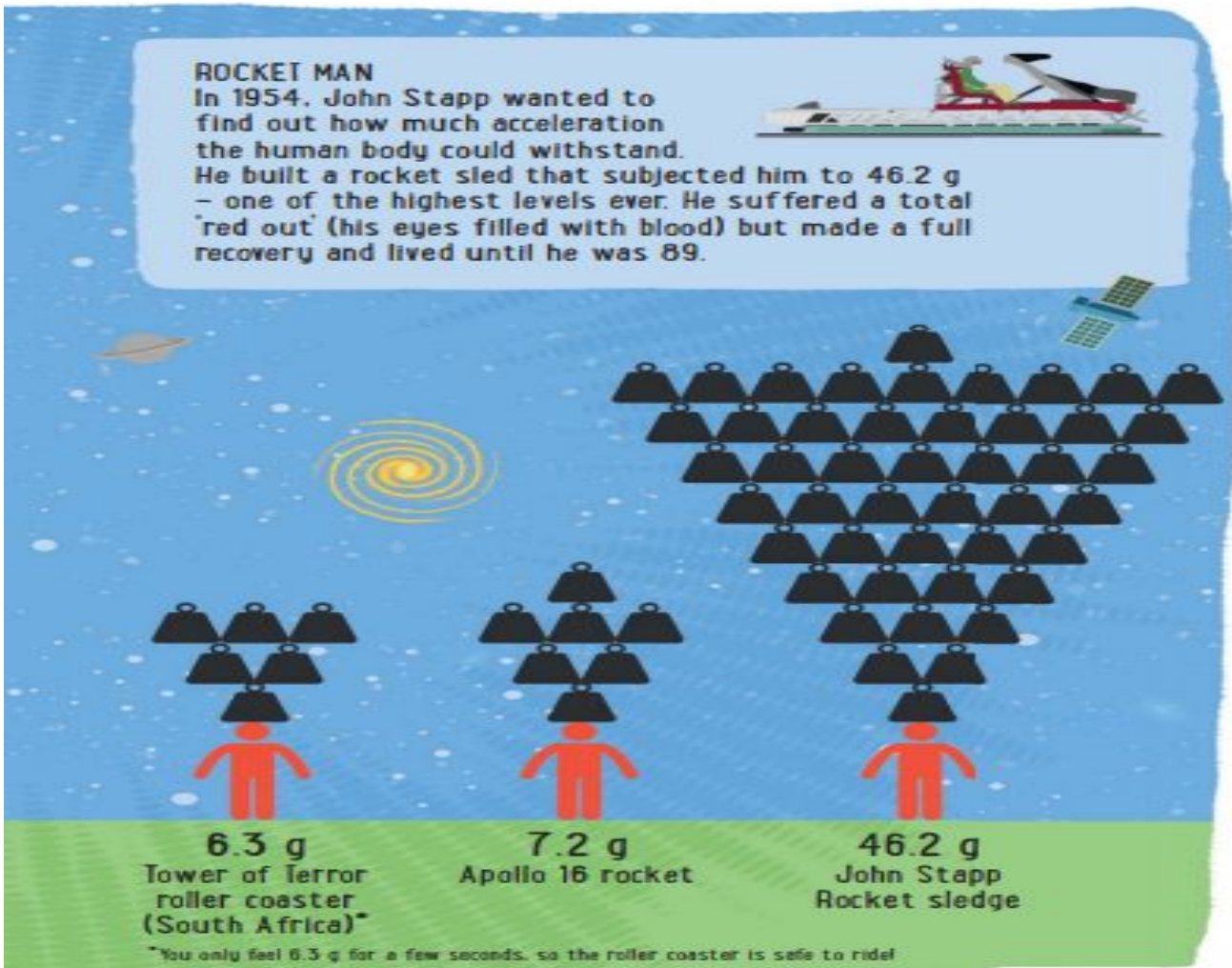
When you take off in your rocket, you'll be subject to **HUGE** levels of G-force (which is measured in 'g's). But how much exactly?

## DEFINITION

G-force = amount of force or acceleration acting on your body (or anywhere else).

## KEY





**Questions:**

1. How many pants would you take into space for the year?
2. Which astronaut wore the same pair for pants/shorts for over three months?
3. Why do you think that it is said that the pants become shooting stars?
4. **'I figured there might be a few nutrients in there'** Why do you think that science officer Petit used this statement to explain why tomatoes grew in his old pants?
5. What is the definition of G-Force?
6. What might the level of G-Force acting on your body on a fast roller coaster?
7. What did John Stapp want to investigate?

**Challenge:**

Research some of the rides at Thorpe Park.

<https://www.thorpepark.com/explore/theme-park/rides/>

<https://www.youtube.com/watch?v=zjHWW2I9AfY>

Create a page that details some of the ride and whether you think that it has a low, medium or high G-Force.



Do you think that the roller coaster – Swarm – has a low or high G-Force?

Take a ride and see. <https://www.youtube.com/watch?v=oNfuYSE2UU4>

The next ride is one that I enjoyed thoroughly.

It has a low G-Force at first .... Until the very end.

<https://www.youtube.com/watch?v=KHv6hKvEzMg>

## Answers:

1. How many pants would you take into space for the year?

**52 pairs.**

2. Which astronaut wore the same pair for pants/shorts for over three months?

**Officer Petit**

3. Why do you think that it is said that the pants become shooting stars?

**They burn up as they fall through atmosphere. They would then look like shooting stars from Earth.**

4. **'I figured there might be a few nutrients in there'** Why do you think that science officer Petit used this statement to explain why tomatoes grew in his old pants?

**This was a humorous comment. As they hadn't been washed, they might have so much dirt and grime that would grow the plants.**

5. What is the definition of G-Force?

**Amount of force acceleration acting on your body or anywhere else.**

6. What might the level of G-Force acting on your body from a fast roller coaster be?

**Approximately 6.3g**

7. What did John Stapp want to investigate?

**How much acceleration the human body could withstand.**