TWINS: A CELEBRATION OF LIFE

Created by students of Eastbury Community School



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INTRODUCTION: A Celebration Of Life

 Today, we will dive deeper into the biology behind the miracle of twins, how they came to be, and the characteristics they share.



How Are Twins Born?

There are two main types of twins: Fraternal (dizygotic) twins...



How Are Twins Born?

... and identical (monozygotic) twins.



What do we know about twins as they develop?

- Twins have been shown interacting as early as 14 weeks old (in the womb).
- It is possible for twin consumption to occur.
- Timing of when the egg split highly determines how the twins will form – whether they will be conjoined or separate, etc.





What Should We Test? What Piqued Our Interest?

- We created tests to find whether twins have higher levels of synchronisation.
- We considered how factors such as age can also influence our results.
 - Drawing the line between fiction and reality, we uncover the miracle that twins are.

Remember: "It is not about myth, it is about providing scientific information to back up questions." Our Hypothesis: "As twins grow older, twin synchronisation increases in strength."

Consent and Method:

Gaining consent:

We had to liaise with safeguarding and GDPR officers to ensure parents and Guardians gave consent ahead of the interviews.

Method used:

- Identify sets of twins
- Interview them with various questions
- Complete a memory test
- Compare and contrast the results



Objects used in our memory test:



Here is a video montage of our interviews, and a display of our memory test:





Let's crunch some numbers!



Year 8 Twins:

| Questions | Twin 1 | Twin 2 |
|--|---------------------------------|----------------------------------|
| List 5 different colours | Red, green, blue, purple, black | Red, orange, yellow, green, blue |
| What time do you sleep? | 10:00 pm | 9:30 pm |
| What time do you wake up? | 6:30 am | 6:30 am |
| What is your favourite movie? | All films | Avengers |
| What do you do in your free time? | Video games, Fortnite | TV usually, hang out |
| What is your favourite animal? | Lion | Tiger |
| What is the first planet that comes to mind? | Earth | Mars |
| What do you think your twin would have answered for the last question? | Earth | Uranus |
| What is your dream holiday destination? | Hawaii | Hawaii |
| How many stairs do you think the Burj Khalifa has? | 5000 | Not sure |

Year 10 Twins:

| Questions | Twin 1 | Twin 2 |
|--|---------------------------------|----------------------------------|
| List 5 different colours | Red, green, blue, purple, black | Orange, green, blue, pink, black |
| What time do you sleep? | 10:00 pm | 12:00 am |
| What time do you wake up? | 7:40 am | 6:30 am |
| What is your favourite movie? | Birdbox | Don't Be a Menace |
| What do you do in your free time? | Playing basketball | Basketball, music, video games |
| What is your favourite animal? | Koala | Horse |
| What is the first planet that comes to mind? | Earth | Saturn |
| What do you think your twin would have answered for the last question? | Earth | Earth |
| What is your dream holiday destination? | Maldives | America |
| How many stairs do you think the Burj Khalifa has? | 17 | 200 |

Number of items remembered:

Year 10 Twin 1:

Year 10 Twin 2:

Year 8 Twin 1:

Year 8 Twin 2:

6/10



Conclusion:

- In terms of a comparison:
- The Year 8 twins had 5 answers in common whereas,
- The Year 10 twins only had 5 answers in common in the interview.

The Year 10s had more objects memorised than the Year 8s.

We can therefore allude to the assumption that twins having similar patterns is higher when they were older, which aligns with our hypothesis. But we must take into consideration that we have insufficient evidence to truly reach a concrete conclusion.

Evaluation:

What went well in our investigation:

- ✓ Interviews.
- Controlling communications, i.e., preventing twin interaction beforehand and during the inquiry.
- Things to consider to make our investigation even better:
 - Insufficient data.
 - Limiting avenues for explanation.
 - The diversity of twins

Where do we go from here?

Explore a more diverse pool of twins – gender, race, background, age

Eradicating extraneous variables, such as social impacts and environmental factors

Refining questions to specific habits and matches

Zooming in on more precise details, such as differences between reactions (timings, emotions)